

DOCTORAL DISSERTATION

BLENDING IS TRENDING:  
APPLYING BLENDED LEARNING TO MEET  
EFL STUDENTS' LANGUAGE NEEDS IN  
LISTENING AND SPEAKING SKILLS  
DEVELOPMENT

Simon Krisztián

2016



Doctoral Programme in English Applied Linguistics and TEFL/TESOL

Doctoral School in Linguistics

Faculty of Humanities

University of Pécs

Simon Krisztián

**Blending Is Trending:**

**Applying Blended Learning to Meet EFL Students'  
Language Needs in Listening and Speaking Skills  
Development**

**Supervisor: Horváth József, PhD, habil**

Pécs, 2016

## Témavezetői nyilatkozat a dolgozat benyújtásához

Alulírott dr. habil. Horváth József nyilatkozom, hogy Simon Krisztián doktorjelölt *Blending Is Trending: Applying Blended Learning to Meet EFL Students' Language Needs in Listening and Speaking Skills Development* című doktori értekezését megismertem; nyilvános vitára bocsátását támogatom.

Dátum: 2016. december 7.



Témavezető aláírása

## Doktori értekezés benyújtása és nyilatkozat a dolgozat eredetiségéről

Alulírott

név: Simon Krisztián

születési név: Simon Krisztián

anyja neve: Magyar Mária

születési hely, idő: Kaposvár, 1988. november 29.

*Blending Is Trending: Applying Blended Learning to Meet EFL Students' Language Needs in Listening and Speaking Skills Development* című doktori értekezésemet a mai napon benyújtom a Pécsi Tudományegyetem Nyelvtudományi Doktori Iskola Doctoral Programme in English Applied Linguistics and TEFL/ TESOL Programjához (Angol Alkalmazott Nyelvészeti Doktori Program).

Témavezető neve: dr. habil. Horváth József

Egyúttal nyilatkozom, hogy jelen eljárás során benyújtott doktori értekezésemet

- korábban más doktori iskolába (sem hazai, sem külföldi egyetemen) nem nyújtottam be,
- fokozatszerzési eljárásra jelentkezésemet két éven belül nem utasították el,
- az elmúlt két esztendőben nem volt sikertelen doktori eljárásom,
- öt éven belül doktori fokozatom visszavonására nem került sor,
- értekezésem önálló munka, más szellemi alkotását sajátomként nem mutattam be, az irodalmi hivatkozások egyértelműek és teljeseek, az értekezés elkészítésénél hamis vagy hamisított adatokat nem használtam.

Dátum: 2016. december 7.



doktorjelölt aláírása

## Table of contents

Introduction .....	1
Outline of the dissertation .....	2

### PART 1: LITERATURE REVIEW

<b>I. The field of e-learning.....</b>	<b>5</b>
Introduction .....	5
<b>1. Theoretical framing.....</b>	<b>6</b>
1.1 Constructivism in connection with behaviorism and cognition in e-learning .....	6
1.2 Applying constructivism to language learning .....	7
<b>2. Defining e-learning .....</b>	<b>9</b>
2.1 Reasons for the lack of a concise definition in the literature .....	9
2.2 Working definition of e-learning .....	10
2.3 An overview of the e-learning framework.....	10
<b>3. The development of e-learning .....</b>	<b>12</b>
3.1 Historical perspective.....	13
3.1.1 Pre-Internet era.....	13
3.1.2 The defining development of the Internet era: Web 2.0 .....	14
3.1.3 Open access.....	15
3.1.4 Massive open online courses (MOOCs) .....	17
3.1.4.1 Defining MOOCs.....	18
3.1.4.2 The educational potential of MOOCs.....	20
3.2 Delivery perspective .....	22
3.2.1 The role of online learning.....	23
3.2.2 Computer-assisted language learning (CALL) .....	24
3.2.2.1 Applying CALL.....	25
3.2.2.2 The changing relevance of CALL in e-learning .....	26
3.2.3 Blended learning .....	27
3.2.3.1 Core issues in blended learning .....	28
3.2.3.2 The educational implications of blended learning in distance and face-to-face contexts .....	30

3.2.4 Mobile-assisted language learning (MALL).....	32
3.2.4.1 The development of mobile-assisted learning.....	32
3.2.4.2 The place of mobile assisted learning in language education.....	33
3.2.5 Ubiquitous learning.....	35
3.2.6 Augmented and virtual realities.....	36
3.3 Device perspective.....	37
3.3.1 Ownership.....	37
3.3.2 Disadvantaged and unmotivated groups.....	38
3.3.3 Private sphere.....	39
3.4 The future of the e-learning paradigm.....	40
3.4.1 The relevance of e-learning 2.0.....	41
3.4.2 The possibility of e-learning 3.0.....	44
<b>II. Factors influencing content development in e-learning.....</b>	<b>46</b>
Introduction.....	46
<b>4. Individual differences.....</b>	<b>47</b>
4.1 Variables connected to language learning in the e-learning frame.....	47
4.1.1 Age.....	48
4.1.1.1 The digital native and digital immigrant dichotomy.....	48
4.1.1.2 Digital literacy and digital divide.....	49
4.1.2 Motivation.....	51
4.1.2.1 Generating motivation.....	52
4.1.2.2 Maintaining motivation.....	52
4.1.2.3 Evaluating motivation.....	53
4.1.3 Learning and cognitive styles.....	55
4.1.4 Autonomy.....	57
4.2 Variables related to e-learning.....	58
4.2.1 Gender.....	58
4.2.1.1 Connections between ICT and gender.....	59
4.2.1.2 Gender differences in ICT at various levels of education.....	60
4.2.2 Willingness to use technology.....	63
4.2.2.1 Technology acceptance.....	63
4.2.2.2 Technology related anxiety, resistance and obsession.....	65

4.2.2.3 Addressing how e-learning can support willingness to use technology ..	66
4.2.3 Online interaction .....	68
4.2.3.1 The effects of online and face-to-face interaction on learner development .....	68
4.2.3.2 Social networking affecting academic and identity development .....	70
4.2.4 Twenty-first century skills .....	72
<b>5. Current trends in language teaching in e-learning .....</b>	<b>73</b>
5.1 Learning approaches .....	73
5.1.1 Learning framing .....	74
5.1.1.1 Technical scaffolding .....	74
5.1.1.2 Problem-based learning .....	75
5.1.1.3 Project-based learning .....	76
5.1.2 Technological framing .....	77
5.1.2.1 Adaptive learning .....	78
5.1.2.2 Gamification .....	79
5.2 Current trends in language development in e-learning .....	81
5.2.1 An overview of learning and technological frame applications in language development .....	81
5.2.2 Assessment .....	86
5.2.2.1 Test qualities .....	86
5.2.2.2 The growing rationale for using peer assessment .....	88
<b>Conclusion to the literature review .....</b>	<b>90</b>

## **PART 2: EMPIRICAL STUDIES**

<b>6. Phases of the research .....</b>	<b>92</b>
6.1 Overview .....	92
6.2 The rationale for blending in the research projects .....	94
6.2.1 Blending in practice .....	95
6.2.2 Benefits of blending .....	95
6.2.3 Limitations of blending .....	96
6.2.4 Blended learning in the research projects .....	97



6.3 Overview of the e-learning platforms, websites and applications used in the studies .....	99
---	----

**7. Research phase one: Exploration.....103**

<b>7.1 Study 0: Exploring the e-learning needs of English majors .....</b>	<b>103</b>
7.1.1 Introduction .....	103
7.1.2 Context .....	103
7.1.3 Research questions .....	103
7.1.4 Participants .....	104
7.1.5 Data collection instruments .....	104
7.1.6 Findings .....	104
7.1.7 Conclusion.....	104

**7.2 Study 1: Exploring blended learning conversion in listening and speaking skills development..... 105**

7.2.1 Introduction .....	105
7.2.2 Context .....	105
7.2.3 Research questions .....	106
7.2.4 Participants .....	106
7.2.5 Data collection instruments .....	106
7.2.6 Procedure.....	108
7.2.6.1 Implementing blending .....	108
7.2.6.2 Addressing language development .....	109
7.2.7 Findings.....	113
7.2.7.1 Students' self-assessment.....	114
7.2.7.2 Findings of the student satisfaction questionnaire .....	115
7.2.8 Conclusion.....	123

**7.3 Study 2: Piloting online vocabulary development and testing using *Edmodo* ..124**

7.3.1 Introduction .....	124
7.3.2 Theoretical frame .....	124
7.3.3 Context .....	125
7.3.4 Research questions .....	125
7.3.5 Participants .....	126
7.3.6 Data collection instruments .....	126

7.3.7 Procedure.....	126
7.3.8 Findings.....	127
7.3.8.1 The findings of the online vocabulary tests .....	127
7.3.8.2 The findings of the vocabulary profiles analyses.....	129
7.3.9 Conclusion.....	130

## **8. Research phase two: Application .....131**

### **8.1 Study 3: Addressing blending from the perspective of MA teachers .....131**

8.1.1 Introduction .....	131
8.1.2 Context .....	131
8.1.3 Research questions .....	132
8.1.4 Participants .....	132
8.1.5 Data collection instrument .....	132
8.1.6 Procedure.....	133
8.1.7 Findings.....	134
8.1.7.1 Participants' understanding of e-learning .....	134
8.1.7.2 Participants' blended course design.....	135
8.1.7.3 Challenges participants faced.....	137
8.1.7.4 Feedback participants received .....	138
8.1.8 Conclusion.....	139

### **8.2 Study 4: Addressing structured vocabulary development and practice .....140**

8.2.1 Introduction .....	140
8.2.2 Theoretical frame .....	140
8.2.2.1 Required vocabulary size and depth .....	141
8.2.2.2 Applying corpus linguistics to vocabulary development.....	142
8.2.3 Context .....	144
8.2.4 Research questions .....	145
8.2.5 Participants .....	145
8.2.6 Data collection instruments.....	145
8.2.6.1 Online platforms.....	145
8.2.6.2 The vocabulary tests.....	146
8.2.7 Procedure.....	149

8.2.7.1 Vocabulary item selection .....	150
8.2.7.2 Vocabulary instruction .....	151
8.2.7.3 Vocabulary test development .....	152
8.2.7.4 Assessment of the vocabulary tests .....	152
8.2.8 Findings .....	154
8.2.8.1 Analysis of the online vocabulary tests .....	154
8.2.8.1.1 Results of the first online vocabulary test .....	154
8.2.8.1.2 Results of the second online vocabulary test .....	155
8.2.8.1.3 Results of the third online vocabulary test .....	156
8.2.8.2 Analysis of the final (in-class) vocabulary test .....	157
8.2.8.3 Students' vocabulary profiles .....	159
8.2.8 Conclusion .....	160
<b>9. Research phase three: Evaluation .....</b>	<b>161</b>
<b>9.1 Study 5: Student satisfaction in the redesigned blended learning <i>Listening and Speaking Skills</i> course .....</b>	<b>161</b>
9.1.1 Introduction .....	161
9.1.2 Context .....	161
9.1.3 Research questions .....	161
9.1.4 Participants .....	162
9.1.5 Data collection instruments .....	162
9.1.6 Procedure .....	164
9.1.7 Findings .....	165
9.1.7.1 Findings of the needs-analysis questionnaire .....	165
9.1.7.2 Findings of the online student satisfaction questionnaire .....	167
9.1.8 Conclusion .....	173
<b>9.2 Study 6: Teacher challenges in correspondence blended skill development .....</b>	<b>174</b>
9.2.1 Introduction .....	174
9.2.2 Context .....	174
9.2.3 Research questions .....	175
9.2.4 Participant .....	175
9.2.5 Data collection instrument .....	175

9.2.6 Procedure.....	176
9.2.7 Findings.....	177
9.2.7.1 The participant’s blended learning design .....	177
9.2.7.2 Level of student engagement in the participant’s blended course .....	178
9.2.7.3 Further challenges for blended correspondence courses.....	179
9.2.8 Conclusion.....	180
<b>10. Conclusion and directions for further research.....</b>	<b>182</b>
10.1 Evaluating the outcomes of the six studies.....	182
10.2 Limitations of the studies.....	185
10.3 Pedagogical implications .....	186
10.4 Future directions for research .....	190
<b>References.....</b>	<b>192</b>
<b>Appendices .....</b>	<b>220</b>
<b>1. Research phase one: Exploration .....</b>	<b>220</b>
1.1 <b>Study 1:</b> Exploring blended learning conversion in listening and speaking skills development .....	220
Appendix A: Supplementary tables to Study 1.....	221
Appendix B: Supplementary documents to Study 1 .....	243
1.2 <b>Study 2:</b> Piloting online vocabulary development and testing on <i>Edmodo</i> .....	250
Appendix C: Supplementary tables to Study 2.....	250
<b>2. Research phase two: Application .....</b>	<b>257</b>
2.1 <b>Study 3:</b> Addressing blending from the perspective of MA teachers.....	257
Appendix D: The interview items sorted into corresponding research question units.....	257
Appendix E: The transcriptions of the interviews conducted in the study .....	258
2.2 <b>Study 4:</b> Addressing structured vocabulary development and practice.....	281
Appendix F: The final vocabulary test using the <i>Vocabulary Knowledge Scale</i> in the 2015/2016 fall semester .....	281
Appendix G: Categorized lists of the vocabulary items used in the <i>LSSI</i> course in the 2015/2016 fall semester .....	283
Appendix H: Supplementary tables to Study 4.....	289
<b>3. Research phase three: Evaluation .....</b>	<b>298</b>

3.1 <b>Study 5:</b> Student satisfaction in the redesigned <i>Listening and Speaking Skills</i> course .....	298
Appendix I: Supplementary tables to the needs-analysis questionnaire.....	298
Appendix J: Supplementary tables to the student satisfaction questionnaire ....	307
3.2 <b>Study 6:</b> Teacher challenges in correspondence blended skill development...307	
Appendix K: The interview items sorted into corresponding research question units.....	315
Appendix L: Interview transcription .....	316
<b>A doktori disszertáció magyar nyelvű tézisei.....</b>	<b>321</b>

### **List of tables**

<b>Table 1:</b> Representation of the three research phases and the corresponding studies .....	4
<b>Table 2:</b> A comparative representation of the CALL period descriptions of Warschauer (1996) and Bax (2003) in Dudeney and Hockly (2012, p. 534).....	13
<b>Table 3:</b> OER and MOOC platforms based on their business models.....	19
<b>Table 4:</b> The development of the e-learning paradigm.....	42
<b>Table 5:</b> A possible frame for e-learning 3.0 .....	45
<b>Table 6:</b> Summary of the Dörnyei and Ottó model of L2 motivation based on Dörnyei (2005, pp. 84-85) .....	51
<b>Table 7:</b> Summary of how learning and e-learning differences affect motivation in the Dörnyei and Ottó model of L2 motivation (1998) .....	54
<b>Table 8:</b> Summary of Lee et al.'s (2005, pp. 3-6) discussion of cognitive styles based on the literature.....	56
<b>Table 9:</b> A thematic representation of gender differences in ICT in the literature .....	61
<b>Table 10:</b> A sample of current trends in language teaching involving e-learning .....	83
<b>Table 11:</b> Representation of the three research phases and the corresponding studies ..	93
<b>Table 12:</b> The platforms and websites used in the studies.....	102
<b>Table 13:</b> A sample exercise for argumentative and discussion skill development adapted from Tompos and Neville (2012, p. 12).....	111
<b>Table 14:</b> The findings of the first and second rounds of skills self-assessment.....	114
<b>Table 15:</b> Students' vocabulary level scores, test scores, completion times and overall test scores of the participants.....	128
<b>Table 16:</b> The results of the two testing of 12 items in the online vocabulary tests.....	128
<b>Table 17:</b> Word level tokens in students' reflective essays .....	129

<b>Table 18:</b> The slightly modified <i>Vocabulary Knowledge Scale</i> marking options used in the final vocabulary test.....	149
<b>Table 19:</b> The distribution of the vocabulary items used during the semester .....	150
<b>Table 20:</b> The overall number of word-class items in the whole vocabulary set .....	152
<b>Table 21:</b> List of the item types used in the various questionnaire sections.....	163
<b>Table 22:</b> Comparison of the skill self-assessment completed at the start (four-point) and at the end of the semester (six-point).....	172
<b>Table 23:</b> Summary of the proposed framework for blended <i>Listening and Speaking Skills</i> courses .....	189

### List of figures

<b>Figure 1:</b> The interconnectedness of fields within the e-learning framework .....	11
<b>Figure 2:</b> The search results for ‘game design’ on the OER commons website.....	17
<b>Figure 3:</b> Visual representation of the interconnectedness of the studies.....	94
<b>Figure 4:</b> Sample of an online listening task on <i>Edmodo</i> .....	110
<b>Figure 5:</b> Example for a mind map scaffolding created on the <i>MindMup</i> website adapted from Szabó and Collins (2010, p. 154; 2011, p. 208) .....	112
<b>Figure 6:</b> Example for a completed mind map on the <i>MindMup</i> website .....	112
<b>Figure 7:</b> Sample of an online vocabulary test on <i>Edmodo</i> .....	113
<b>Figure 8:</b> Example for <i>Quizlet</i> ’s feedback on the features students used for practice..	146
<b>Figure 9:</b> Example for <i>Edmodo</i> ’s pie chart statistics for the individual test items .....	146
<b>Figure 10:</b> Example for the matching question type in the online vocabulary tests.....	147
<b>Figure 11:</b> Example for the gap filling question type in the online vocabulary tests ...	147
<b>Figure 12:</b> The two sides of a sample flashcard from the first NGSL + AWL set on <i>Quizlet</i> .....	151

### List of abbreviations and acronyms

<b>AWL:</b> Academic Word List	<b>LMS:</b> learning management system
<b>BNC:</b> British National Corpus	<b>LSS:</b> Listening and Speaking Skills
<b>CAL</b> computer-assisted learning	<b>MAL:</b> mobile-assisted learning
<b>CALL:</b> computer-assisted language learning	<b>MALL:</b> mobile-assisted language learning
<b>COCA:</b> Corpus of Contemporary American English	<b>MOOC:</b> massive open online courses
<b>CS:</b> computer science	<b>NGSL:</b> New General Service List
<b>FD:</b> field dependent	<b>OER:</b> Open Educational Resources
<b>FI:</b> field independent	<b>VR:</b> virtual reality
<b>FL:</b> foreign language	<b>VKS:</b> Vocabulary Knowledge Scale

## **Acknowledgements**

This dissertation is the product of long journey and would not have been possible without the contribution, support and encouragement of a great number of wonderful people. They all inspired my work and had it not been for their guidance, insight and kind words, this project would have not reached its final stage in such a smooth manner.

I am grateful for the detailed advice, comments as well as the eye-opening discussions to my supervisor, Horváth József. His contributions helped me overcome the numerous challenges I faced during the various research, analysis and writing processes.

In my PhD studies, I had the privilege to learn from and work with great specialists of the field like Nikolov Marianne, Horváth József, Fodor Mónika, Lugossy Réka, Lehmann Magdolna, Szabó Gábor, Andor József, Martsa Sándor and Csomay Enikő. I am indebted to all of them as they not only shaped my understanding of applied linguistics but were also open to my ideas and provided valuable support. They are all valued inspirations in my continued work.

I would like to thank my students and interviewees who were kind enough to participate in the studies. Their input, answers and general presence made data collection a joy and drove me to reach my teaching goals.

Of course, my PhD studies would not have been the same without a group of great friends who turned these years into one of the most amazing times in my life. Special thanks go to Szvath-Vecsera Dóry, whose comments were invaluable in the finalization process.

My biggest thanks go to my greatest supporter, idol and personal superhero, my mother. Without her immense support, encouragement and inspiring words, the whole process of writing this dissertation would not have been as productive and enjoyable as it turned out to be.

Finally, I send my thanks to the loving memory of my grandfather, who similarly to my mother always believed in me and continues to inspire me.

## Abstract

The dissertation aims to establish a solution for university-level listening and speaking skill development courses that is compatible with students' expectation of e-learning and the developing international trends. Blended learning was the guiding frame for my studies. The underlying reason for this can be found in the core concept of blending: a combination of face-to-face and online elements.

The dissertation presents six studies that apply quantitative, qualitative and mixed methods to identify key areas in blended delivery on the teacher and learner sides as well. Two groups of BA students (N=36) and a number of tutors (N=6) participated in the studies at the Institute of English Studies at the University of Pécs. The studies were conducted between the 2014/2015 spring and 2015/2016 fall semesters. With such a limited sample, the findings cannot be generalized on larger scales; however, they represent applicable results in the context where they were carried out.

Identifying blending possibilities was structured around the phases of exploration, application and evaluation with two studies in each stage. To properly design an appropriate blended learning frame for the *Listening and Speaking Skills (LSS)* courses, the studies followed a piloting-application design. Study 1 explored blending possibilities in the *LSSII* seminar and assessed student satisfaction, which was applied in the design of Study 5 for *LSSI*. Online vocabulary testing was piloted in Study 2 and Study 4, building on the results, presented a way for structured online vocabulary instruction, practice and testing. Study 3 analyzed teachers' responses in structured interviews concerning their first blended courses. Study 6 compared how tutors' views in Study 3 correspond with another teacher's blended correspondence course design.

The studies have revealed key aspects and possibilities of blended applications in the full time and correspondence programs. The findings have been used to redesign the *Listening and Speaking Skills I and II* courses to simultaneously provide scaffolding for students' language and digital development. Based on the results, blending has been shown to offer relevant solutions in both programs as the combination of face-to-face and online elements allows for flexible teaching approaches concerning in- and out-of-class settings.



## **Introduction**

E-learning is a constantly developing field that has had a lasting impact on education and continues to challenge the notion of learning in general. It is commonly referred to as a paradigm shift in learning approaches. While this is arguably a valid approach, it also limits the complexity of how education as a field evolves. Labeling e-learning a paradigm shift would equal a model that develops only when new technologies and learning frames arise and are adapted. It proposes a one-way relationship that primarily accounts for the tutor side of the educational model and leaves out the students. However, paradigm shifts are more defined by the interplay of the learning approaches, tutor-pupil relationships and in the case of e-learning the technological dimension. Hence these aspects affect each other in an interconnected manner and changes occur in a progressive rather than a stepwise pattern. In this sense, e-learning is rather similar to communicative language teaching as a candidate for paradigm shift.

E-learning is currently in its 2.0 stage. This means that the exploration of possibilities is not defined by hardware and software experimentations primarily but is related to meeting educational goals. A defining aspect in this development is the networking dimension that is of key importance in the current model. Relating this stage to the above paradigm means that Web 2.0 enabled mass access to online resources, which presented possibilities to readdress the teaching-learning dimension and teacher-student roles. Hence, the technological, learning and tutor-pupil dimensions are shaping the educational paradigm in an interconnected manner and represent a model that is drastically different from the previous norms.

The dissertation sets out to identify and explore ways where the e-learning 2.0 paradigm can be applied for language skill development. The technological dimension is growingly present in everyday life as access to various devices has grown beyond a simple convenience issue and has become a socializing factor. Adapting this approach means that e-learning is not only a field that affects education in general but one that can build on the technological background of the students to prepare them for lifelong learning. In this sense, language development presents a catalyst area.

## Outline of the dissertation

The dissertation is divided into two parts: the literature review and the studies, altogether ten chapters, where the first five are the structured discussion of relevant literature and the second half is made up of the empirical studies. As e-learning is a field with a vast literature behind it, a number of key aspects were selected for discussion.

The first major section of the literature review focuses on e-learning as a field of study and research. It begins with a theoretical framing in the form of constructivism. Next, various interpretations are contrasted and a working definition is presented, followed by how e-learning functions as a framework. Subsequently, the development of e-learning is analyzed through historical, delivery and devices perspectives. These areas cover how various technological developments contributed to the current 2.0 stage, how online, computer-assisted, blended, mobile and ubiquitous learning can be realized as well as the roles of the devices. The final segment analyzes the evolution of e-learning and identifies a possible 3.0 stage.

The second section of the literature review applies the theoretical background to identify factors influencing content development in e-learning. These are presented through the analysis of individual differences connected to language learning and also e-learning contexts. The chapter also presents current trends in language education through learning and technological frames, followed by a contrastive analysis of language development studies. Finally, it concludes with how assessment is realized in e-learning contexts.

The second part of the dissertation presents the empirical studies. The overall goal of these projects is to devise a solution for turning face-to-face and correspondence *Listening and Speaking Skills* courses at the Institute of English Studies at the University of Pécs into blended courses. To achieve this goal, six studies were conducted along the exploration, application and evaluation phases (see Table 1 on p. 4). The studies were motivated by two main issues. First, the decreasing scores in the English department's filter test, the *Proficiency Exam*. Second, students presented a list of language development needs that were not possible to address during the face-to-face sessions due to time limitations. Hence a blended approach was applied to make use of the added online element.

The first stage of the studies explored possibilities of blending in language skill development. Here the results of a questionnaire study conducted in 2012 (Study 0) were also included as its findings already pointed to the need for a focused e-learning component. Study 1 represents the pilot phase of the blended *Listening and Speaking Skills* course which was followed by Study 2 as a subproject that targeted vocabulary development during the same seminar.

The application phase consists of two projects. Study 3 is a structured, contrastive interview-study that analyzed the e-learning understanding, course design, student feedback and emerging challenges of first-time blended learning tutors in the English teacher MA program. Addressing the teacher side of the educational model is of key importance and finding discrepancies can potentially limit student resistance and contribute to successful e-learning implementation. Study 4 is a corpus-based follow-up to Study 2 and it explored focused vocabulary development.

The final stage evaluated how successful blending was and what further possibilities there are in its application. Study 5 represents a follow-up project to Study 1 as it incorporated the findings of the pilot phase in redesigning the blended *Listening and Speaking Skills* course. The appropriateness of the finalized version of the course is discussed based on the findings of a student satisfaction questionnaire. Study 6 is related to the correspondence program and involved an interview study with a fellow tutor. These findings were contrasted with Study 3 to determine what remaining challenges affect the blended delivery of the *Listening and Speaking Skills* course in the correspondence program.

Overall, the results of the six studies indicate that blending is possible, motivating and effective in the face-to-face and correspondence programs. Its success is strongly related to teachers' required theoretical background, proper and engaging e-learning solutions as well as addressing student needs, language skills and educational goals.

**Table 1:** Representation of the three research phases and the corresponding studies

<b>Phase</b>	<b>Participants</b>	<b>Research questions</b>	<b>Data sources</b>	<b>Methods of analysis</b>
<b>Exploration</b>	<b>Study 0 (2012)</b> 21 BA and 8 MA students	<b>RQ1:</b> What do the English majors think of e-learning? <b>RQ2:</b> How can their e-learning habits be characterized? <b>RQ3:</b> How do they envision e-learning?	questionnaire completed by the students	qualitative content analysis
	<b>Study 1 (2015)</b> 15 BA students	<b>RQ1:</b> How can a blended approach scaffold students' listening and speaking skills development? <b>RQ2:</b> What kind of tasks did students find the most and least useful? <b>RQ3:</b> What are the implications for the correspondence program?	questionnaires completed by the students	qualitative content analysis  descriptive statistics
	<b>Study 2 (2015)</b> 15 BA students	<b>RQ1:</b> How can a blended approach scaffold students' vocabulary development? <b>RQ2:</b> What is the level of students' active and passive vocabulary knowledge? <b>RQ3:</b> What are the implications for further vocabulary development?	vocabulary tests completed by students	descriptive statistics
<b>Application</b>	<b>Study 3 (2015)</b> 5 university teachers	<b>RQ1:</b> How do the participants understand e-learning? <b>RQ2:</b> How did they design their blended learning courses? <b>RQ3:</b> What challenges did the blended learning courses pose to teachers? <b>RQ4:</b> What was the feedback for the blended learning courses?	semi-structured and structured one-to-one interviews	qualitative content analysis
	<b>Study 4 (2015)</b> 20 BA students	<b>RQ1:</b> How does vocabulary instruction using e-materials contribute to students' vocabulary development? <b>RQ2:</b> What kind of measurable changes have taken place in the students' vocabulary?	vocabulary tests completed by the students	descriptive statistics
<b>Evaluation</b>	<b>Study 5 (2016)</b> 17 BA students	<b>RQ1:</b> What is participants' assessment of the blended approach? <b>RQ2:</b> How do participants assess their own skill development? <b>RQ3:</b> How feasible is a blended approach in face-to-face seminars? <b>RQ4:</b> What further challenges are there for face-to-face blended projects?	questionnaire completed by the students	qualitative content analysis  descriptive statistics
	<b>Study 6 (2016)</b> 1 PhD student	<b>RQ1:</b> How did the participant understand blended learning? <b>RQ2:</b> How did the participant design the course for blended instruction? <b>RQ3:</b> What was the level of student engagement? <b>RQ4:</b> What further challenges are there for correspondent blended projects?	structured one-to-one interview	qualitative content analysis

# **PART 1: LITERATURE REVIEW**

## **I. The field of e-learning**

### **Introduction**

E-learning is a complex field present in every discipline today. It encompasses various educational approaches ranging from fully online to blended, mobile and virtual environments. This section presents the development of e-learning and establishes a framework for subsequent chapters through three main areas: theoretical framing, defining e-learning and the development of the field.

The first major issue addressed is where e-learning can be situated as a field. It is argued that constructivism is the fitting theoretical frame. The underlying reasons for this are that it incorporates the redistribution of teacher and student roles and changes in the learning environment that affect knowledge construction. Subsequently, constructivism is related to language learning.

The second area is concerned with how e-learning can be defined. This is a problematic issue as there is no consensus in the literature. For this reason, national and international approaches were analyzed to find common points. The section introduces a working definition argued to be valid in the 2.0 phase and illustrates the e-learning frame in applied in the dissertation.

The final part covers the largest area which is the development of e-learning. This is presented through three main points including the historical, delivery and gadget perspectives. The first addresses the field's development starting from the pre-Internet era, the significance of Web 2.0, how open access and resources affected education and where massive open online courses fit into the paradigm. The delivery perspective covers the different ways of content distribution including computer-assisted, blended, mobile and ubiquitous learning as well as virtual realities. The third approach considers the roles of devices based on ownership, disadvantaged groups and private sphere. The section concludes with an analysis of the e-learning frame's development.

# 1. Theoretical framing

## 1.1 Constructivism in connection with behaviorism and cognition in e-learning

According to the literature, the theoretical framing of e-learning is constructivism either as the general theory of constructivism or social constructivism (see Friesen, 2009, p. 81; Holmes & Gardner, 2006, p. 76; Lehmann & Chamberlin, 2009, p. 21; McCarty, 2007, p. 94;). Given that constructivism provides a solid foundation for the changes in the delivery and creation of learning materials and participants' roles, it is well suited for the e-learning construct.

Looking at constructivism from the perspective of psychology, Kubovy, Epstein and Gepshtein (2003) argue that in this theory “the conceptual world is constructed or assembled from the raw material of sensory input and stored knowledge” (p. 93). The second half of their description bears similarities with the claims of schema theory, which in reading relates to information networks stored in our minds (Grabe, 2009, p. 77). As schemata are inherently personal and are structuring patterns of stored knowledge, the sensory input material that Kubovy et al. (2003) mention relate to how learning materials need to be designed to make use of the already existing knowledge of the students. However, such an approach entails negotiation in terms of meaning and constant monitoring to assess whether the intended learning is taking place or modifications are needed.

Keengwe and Onchwari (2008) call attention to how Brooks and Brooks (1999) argue that constructivist educational contexts require teachers to take on the role of a guide (p. 53). This means a more project-oriented approach to learning which can be used as a frame in project- and problem-based approaches (see sections 5.1.1.2 on p. 75 and 5.1.1.3 on p. 76). Here, instructors and students have roles defined by a common goal, which can be the acquisition of a skill or knowledge mastery. Thus, role boundaries are less defined functionally and more based on profile. This is in line with how Holmes and Gardner (2006) illustrate e-learning. In their figure, e-learning is present as the overlap of a Venn diagram consisting of socio-constructivism, behaviorism and cognitivism (p. 79). While this overall approach is theoretically plausible and Holmes and Gardner (2006) argue that these are present in a combination (pp. 78-79), their distribution needs addressing as the interactions of these fields

represent a pattern that is present in e-learning as well. Overall, behaviorism has a smaller role than the other two components and is mostly used in drill and practice tasks and tutorials (Holmes & Gardner, 2006, p. 81), which limits its use to the single user environment (p. 88).

The merits of cognitivism and constructivism are applicable to multi-user and learning community settings (Holmes & Gardner, 2006, p. 88). This view is also present in Ferguson (1995), who highlights the role of students as active processors of learning and argues that a cognitive approach is more concerned with problem-based learning as opposed to behaviorism (p. 59). Thus, a cooperative approach to learning is well suited for cognition as it promotes the merits of cooperative learning, such as peer support and the sharing of ideas (Lazarowitz, 1995, p. 219). However, this group aspect is not limited to the face-to-face learning settings. In fact, there is much potential in enlarging or using new group settings especially for meaning construction.

## **1.2 Applying constructivism to language learning**

Addressing language learning from a constructivist point of view, Ziglari and Parviz (2012) emphasize students' negotiated collaborative meaning making (p. 2131). They add that teaching this way is not limited to "T-S, but [involves] T-S, S-T, and S-S [as well]" (p. 2131). This goes back to Keengwe and Onchwari's (2008, p. 53) points about the changed roles as teachers are not the single authoritative figures and role reversals are also possible in this setup. Furthermore, constructivism also shows similarities with the Vygotskian approach to learning whereby meaning is constructed socially (Vygotsky, 1978). Extending this concept with the two key Piagetian principles in which "[l]earning is an active process" and "should be whole, authentic, and real" (Daloğlu, Baturay, & Yildirim, 2008, p. 188), enables to view constructivism both as the process and result of learning.

Richardson (2005, p. 6) inspects how teachers' authoritative knowledge plays a significant role in students' meaning construction that affects not only knowledge transmission but also grades. However, an approach where the instructor's authoritative knowledge is overstressed cannot scaffold constructive learning in a meaningful way as according to Candy (1991), "knowledge cannot be taught but must be constructed by the learner" (p. 252). Complementing this point with a psychological approach put

forward by Eysenck (2004, p. 509), states that in constructivism language learning is not different from other educational areas. Support for this issue can be found in Taber's (2015, p. 125) claim that argues for students' need for knowledge construction in science education. Thus, constructivism can provide a frame for learning which enables active and social meaning construction in language learning.

E-learning represents an extension of the constructivist classroom through the addition of online possibilities in the form of Web 2.0 solutions that complement face-to-face sessions. Sturm, Kennel, McBridem and Kelly (2009, p. 371) emphasize social constructivism as a suitable theoretical background for not only online but also distance learning. The reasons for this can be found in the framework of constructivism itself. Through a combination of face-to-face and online activities, knowledge and meaning construction can be extended from the limits of traditional classroom settings. However, for meaning construction and schematization to take place, task and activities need to be relatable.

In terms of authenticity, language education has considerable advantage over other subjects, as language knowledge can act as a catalyst to various academic and professional contents. Of course, it can be argued that the studying of grammar rules can also lead to anxiety and demotivation. However, language mastery represents a possible skillset that can be more universally applied. Related to this point is Luzón and Ruiz-Madrid's (2010) emphasis on how authenticity can contribute to connecting meaning making with potential knowledge uses (p. 162). Thus, the discovery and exploitation of such possibilities can potentially increase learners' motivation. Furthermore, content and language integrated learning (CLIL) lessons can be structured around constructivism to improve the overall authenticity of other subjects and decrease the anxiety students may experience. The underlying reason for this is that students would use their foreign or second language knowledge as a common ground, which as Dalton-Puffer (2007, p. 1) explains, is the basis of CLIL. Furthermore, CLIL is also a major aspect in Medgyes's (2014, p. 183) action plan for training language teachers in a changing educational paradigm.



## **2. Defining e-learning**

### **2.1 Reasons for the lack of a concise definition in the literature**

E-learning is gaining presence in educational fields of study and also in everyday life. This has transformed the term to somewhat of a commonplace used in settings where the framework does not justify this categorization. The reason for this is that e-learning is not a 21<sup>st</sup> century phenomenon but rather a continuation of a number of theories in psychology and learning framing (Simon, 2014, p. 110). These have been integrated to various contexts ranging from content development to individual differences. For this reason, there is no concise definition of e-learning that the field generally agrees on.

E-learning can be seen as an evolving term which, in a visual manner, can be illustrated as a continuum or a Venn-diagram (see section 2.3 on p. 10 of how the e-learning framework is understood in the dissertation). The continuum scenario refers to a differentiation based on e- and traditional materials, which represent the two ends. Papp's (2005) definition fits this category well, as he emphasizes that if materials are mostly presented electronically, they qualify as e-learning, despite being connected to a network or not (p. 53). In Komenczi's (2009, p. 114) and Sun, Tsai, Finger, Chen and Yeh's (2008, p. 1183) approach, the role of ICT technologies is emphasized, whereas Garrison (2011, p. 2) argues for the importance of communication in defining e-learning. Similarly, Clark and Mayer (2011, p. 8) focus on the device aspect of content delivery.

Depicting e-learning in the form of a Venn-diagram shows the intersections of various fields, thus, emphasizing the possibility of a change in education. Kőfalvi (2006, p. 33) argues that it is a paradigm shift supported by information communication technology (ICT) from both the methodology and content perspectives. This is in line with Becker, McCaleb, and Baker's (2015) point who highlight the necessity of a paradigm shift for "appropriate and intentional implementation of technology tools for engaging students to use higher-order thinking skills" (p. 74). However, at times the continuum and Venn-diagram approaches are complementary as the paradigm shift appears in Sun et al.'s (2008, p. 1183) frame as well. Conole and Oliver (2007) argue that e-learning is "most commonly used to represent the broader domain of development and research activities on the application of technologies to education" (p. 4), thus covering both the implementation and research aspects of the field in their

definition. It was important to include Hungarian authors (like Papp, 2005; Komenczi, 2009 and Kőfalvi, 2006) in presenting e-learning interpretations not only because the studies conducted in the frames of this dissertation all took place in Hungary, but to illustrate that the abundance of definitions and approaches is present both on the national and international levels in the literature.

## **2.2 Working definition of e-learning**

The e-learning definition used in the dissertation is the same which was put forward in Simon and Kollárová (2015), namely:

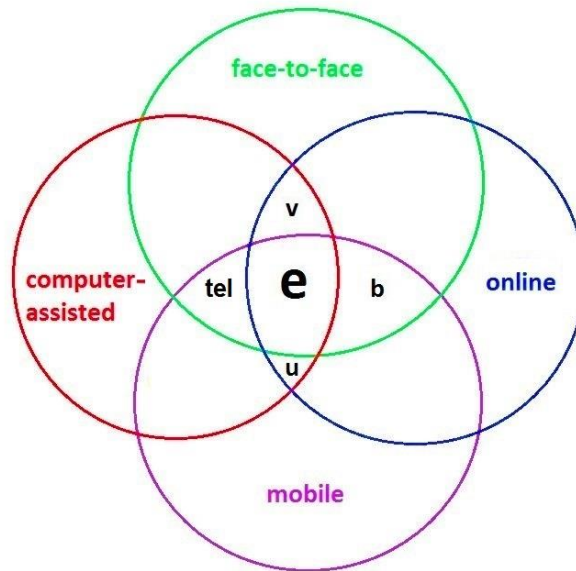
e-learning concerns learning situations where participants are connected via a network to which they all have access and where the construction of knowledge is supported by ICT technologies and where the learning environments are either developed or adapted to engage the learners in their own learning beyond the limits of face-to-face sessions. (pp. 194-195)

The rationale behind using this definition is that it seeks to bring the disputed aspects in the literature to a common ground, namely the role of technology, delivery and access. Teacher and student roles are not detailed as, based on the previous discussion of the constructivist framework, as there are situations where they are interchangeable and complementary. The definition also takes into account features that Khan (2005, p. 3) focuses on in the case of environments, resources, technologies and materials. The importance of this approach is that it makes the above definition suitable for applications in the e-learning 2.0 as well as possible future frameworks (see section 3.4 on p. 40).

## **2.3 An overview of the e-learning framework**

Throughout the literature review there are a number of references to the e-learning framework. As this provides the backbone for further discussion, it is important to address after defining the field how it is understood as an overarching frame for computer-assisted, online, blended, mobile, ubiquitous and virtual learning in the dissertation.

Figure 1 illustrates interconnectedness of the e-learning framework through a Venn-diagram. It is made up of four domains including face-to-face, computer-assisted, mobile and online environments. E-learning is at the center as the utilized theoretical frame. The intersections represent established and developing fields. Blended and technology enhanced learning belong the former while virtual and ubiquitous learning to the latter category.



**Figure 1:** The interconnectedness of fields within the e-learning framework

**Legend:** **e:** e-learning, **b:** blended learning, **v:** virtual learning, **u:** ubiquitous learning, **tel:** technology enhanced learning

Blended learning is at the meeting point of face-to-face, online and mobile environments. Technology enhanced learning (TEL) can be found in the intersection of computer-assisted, face-to-face and mobile learning. TEL refers to situations where technological elements such as devices or programs are included in otherwise face-to-face instruction. However, in some researchers' views TEL encompasses a number of areas such as social networking and learning management as well (see Lytras, Gašević, Ordóñez de Pablos, & Huang, 2008, p. xii). While the inclusion of learning management systems (LMS) seems feasible to TEL, it would elevate TEL from a complementary to a learning approach. For this reason, the present framework considers LMSs not to be limited to one specific field as they can be utilized in computer-assisted, blended and mobile learning as well. Moreover, social networks are also removed from

the present TEL model as due to the networking aspect of Web 2.0, they can be largely related to the learners' private sphere (see section 3.3.3 on p. 39).

Virtual learning and ubiquitous learning represent developing areas in the e-learning framework. The former is at the intersection of computer assisted, face-to-face and online learning. It is a solution that can be applied to both classroom settings and virtual field trips in the form of simulations. Advancements both in hardware and software development point toward a possible larger role for virtual learning. Moreover, gamification as virtual environments and leisure activities continues to develop into a significant aspect of digital natives' technological socialization. Lastly, to emphasize the device plurality of ubiquitous learning it is argued to involve online, mobile and computer assisted approaches at the same time. Similarly to virtual learning evolving as a response to the technological background of digital natives, ubiquitous environments also represent a growing trend that is connected to how various gadgets are used in everyday life.

Other combinations of these fields are also possible. Only those have been addressed that provide a background to differentiating the various fields within e-learning. Of course, this does not imply that for example face-to-face, online and mobile learning have no connections. However, they only represent marginal differences from the discussed areas. Furthermore, there are a number of publications which follow some form of hierarchical system (see So, 2010). However, in the present dissertation the various e-learning areas are viewed as equal parts of the overall framework where e-learning is the overarching theoretical frame, not a superior field.

### **3. The development of e-learning**

Various 2.0 classifications of e-learning areas are rather frequently found in recent studies. The rationale behind this is a departure from a 1.0 state. Its foundation can be found in the advances and possibilities Web 2.0 brought (see section 3.1.2 on p. 14) which affected other areas as well. This chapter analyzes the development of e-learning through historical, delivery and device perspectives and provides an overview of the current and a possible future state of the field.

### 3.1 Historical perspective

The history of e-learning can be divided into two distinct eras based on the emergence of the Internet. These represent two diverse approaches to the idea of e-learning and span decades of technological developments. The first was focused more on local and distance solutions and as such worked with closed systems. The second approach is related to the emergence of the Internet which showcased a development that meant taking the exact opposite route. Thus, the focus was changed to openness and inclusion.

#### 3.1.1 Pre-Internet era

Dudeny and Hockly (2012, pp. 533-34) argue, based on Warschauer (1996) and Bax (2003) that there were three computer-assisted language learning (CALL) periods covering the about 15 years up to the end of the 1990s. What is striking about these categorizations is that the development of the field follows the same pattern as it was outlined by Holmes and Gardner (2006, p. 88) how e-learning user participation expands through the behaviorism-cognitivism-constructivism approaches (see Table 2).

**Table 2:** A comparative representation of the CALL period descriptions of Warschauer (1996) and Bax (2003) in Dudeny and Hockly (2012, p. 534)

Periods	Descriptions		Corresponding psychological theories
	Warschauer (1996)	Bax (2003)	
period 1	behavioristic CALL	restricted	behaviorism
period 2	communicative CALL	open	cognitivism
period 3	integrative	integrated	constructivism

Three inferences can be drawn from the aforementioned development. One, language learning does not make CALL largely different from the overall field of e-learning in terms of background theories. Two, technological advances show strong correlations with said psychological approaches. However, this connection does not necessarily equal preference but can rather be attributed to what solutions were available at the time of implementation. Finally, as Dudeny and Hockly (2012, p. 536) note, Warschauer's (1996) and Bax's (2003) categories only cover the pre-Internet

periods of CALL. This juxtaposition is supported by Jarvis and Achilleos' (2013, p. 1) claims by relating the early stages of CALL to behaviorism. Furthermore, they argue that CALL is largely connected to social constructivism (p. 3). Such an analogy reflects a development along similar stages as presented by Warschauer (1996) and Bax (2003).

### **3.1.2 The defining development of the Internet era: Web 2.0**

Web 2.0 represents the key development of the Internet era. It marks a stage largely different from previous approaches to content development, delivery and access. O'Reilly (2007, p. 18) details how the 1.0 and 2.0 frameworks are different and lists several aspects ranging from services to websites that support this claim. The overall differentiation can be distilled into Dudney and Hockly's (2012) explanation, where they emphasize the transition from a "static, expert-produced resource" to a "more creative, consumer-driven space" (p. 538). This change has resonated in e-learning and set the stage for new educational solutions.

Web 1.0 showed a more rigid approach to information access. Although this can be understood as a possible limitation, there is supporting evidence in the literature that Web 1.0 approaches have been successful in building a connection between the in-class and the outside world and giving authenticity to learning (see Ruthven, Hennessy & Deaney, 2005, p. 29; Smeets, 2005, p. 344). The positive effects of hypermedia have also been identified as contributing to cognitive ability development (see Yeh & Lo, 2005, p. 3). However, an important finding was mentioned by Smeets (2005, p. 353) concerning teachers' computer use being complementary and not adapting to educational needs. Moreover, Chen, Lee, and Chen (2005, p. 237) voice the solid claim that an overabundance of hyperlinks can cause information overload and argue instead for an adaptive system based on item response theory.

The emerging pattern from the above studies suggests that the biggest limitation of Web 1.0 was lacking individualization and differentiation which restricted its use and adaptability as a learning tool. Supporting this view is Lin, Young, Chan and Chen (2005, p. 156) who claim that the primary target of web-based learning was the academic and professional audience, not ordinary users. This point is in line with Wang and Chiu's (2011, p. 1791) summary of Cuene's (2005) argument that Web 1.0 is about exploring and 2.0 about sharing content. Bennett, Bishop, Dalgarno, Waycott, and

Kennedy (2012) also share this position by stressing that Web 2.0 is concerned with “active participation, user generation of content and collaboration” (p. 532). Thus, the conclusion that can be drawn from these comparisons is that Web 2.0 is a conceptually and technologically different approach to content creation and sharing, in which users have equal opportunities to contribute.

### **3.1.3 Open access**

The content aspect of Web 2.0 resulted in establishing a new form of information access both in terms of creators and communities. These contributions shaped the evolution of the Internet and led to some researchers highlighting the World Wide Web’s role as a promoter and sustainer of democracy (Oral, 2008, p. 438). Others argue that it was created for “robustness, decentralization and openness” (Weller, 2007, p. 158). These changes in the roles of the Internet resulted in developments in all scientific fields from which education is discussed in this chapter.

Richards (2005, p. 60) lists a number of challenges that teachers face in applying information communication technologies (ICT) to reach educational goals. These are required time, computer skills, possible uses and integration possibilities (p. 60). Central to these arguments are open source systems, open educational resources and massive open online courses. These initiatives are cornerstones of the Web 2.0 approach that significantly impacted the non- and for-profit paradigms of e-learning and education.

Open source solutions occupy a peculiar position in e-learning. According to Cheng-Chao (2005, p. 1), the popularity of such systems is due to the following five points: no fees, freely editable, customizability that allows further development, the collective support online groups provide and various educational software solutions. Building on the fact that e-learning by definition requires a certain level of equipment, this is a significant development in terms of content creation and delivery. However, such openness gives rise to issues like copyright and intellectual property.

Concerning the legal background, Lindberg (2008) explains that open source is a “construct for cooperation and trade in intellectual property” (p. 155). This is highly important as such a legal contract removes the dividing boundaries between the content

producer and the consumer that are present in commercial settings. It also facilitates a closer relationship.

Creative Commons is a further initiative that shares a number of similarities with open source. Aliprandi (2011, p. 15) explains that the legal construct of Creative Commons is situated between fully copyrighted and public domain. The idea behind this approach is that the original creator can maintain authoring rights while the product can reach a large number of people in the distribution process.

Awareness of what kinds of materials are available and the rights granted by the licensor can determine the baseline of e-learning settings. This is especially the case when financial resources are scarce. Open Educational Resources (OER) represent the next stage in open access that continued the open source development and eventually contributed to the creation of massive open online courses (MOOCs). According to the Organization for Economic Co-Operation and Development(OECD) definition of OER, it covers “learning content, software tools to develop, use and distribute content, and implementation resources such as open licenses” (2007, p. 10). Thus, OER does not refer to only the end-products but similarly to open source entails the whole process.

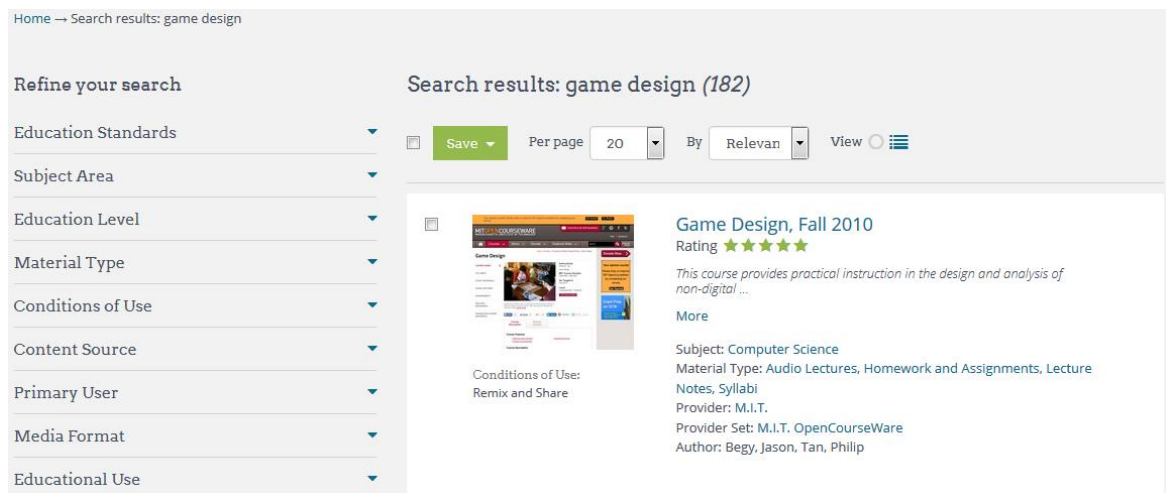
Highly notable undertakings in the OER movement include MIT’s *OpenCourseWare* and the Carnegie Mellon University’s OER solution called *Open Learning Initiative (OLI)* discussed in Johnstone (2005, p. 17). Both *OLI* and MIT’s *OpenCourseWare* are freely available at the date of writing this chapter and showcase various levels of institutional involvement. Furthermore, the OER movement is also supported by commercial companies such as Apple with their podcast-based OER service *iTunesU*. However, with recent updates the platform has more in common with MOOCs as it includes features like videos lectures and lecture slides as well. Assessing how beneficial such podcasts are for students, McKinney, Dyck and Luber (2009) conducted a control group study with psychology students which showed very promising results concerning the applicability of such materials (p. 621).

Similarly to dual licensing in the case of open source, there are a number of business models associated with OER as well. According to de Langen (2013), based on the shared motives of stakeholders and participants, the following models are possible: freemium, efficiency, subsidizing and platforming (pp. 57-58). One could argue based on the aforementioned models that OER are turning into a for-profit approach to



learning, contrary to their original purpose. However, as shown in Table 3 (see section 3.1.4.1 on p. 18), most OER solutions are still non-profit. In fact, the OER commons website, available at <https://www.oercommons.org/>, is dedicated to finding such materials and institutions (see Figure 2 for an example of game design courses on the website).

Overall, open access is an approach that is still present in today's educational paradigm together with MOOCs for a good reason. OER present learning materials in the forms of courses, notes, resources, slides, podcasts and videos that can be applied to reach a number of learning goals. Furthermore, open access enables students and teachers alike to turn to these solutions not only free of charge but at their preferred time windows. Thus, open access and MOOCs embody the purest realization of the content sharing aspect of Web 2.0 in terms of education.



**Figure 2:** The search results for ‘game design’ on the OER commons website

### 3.1.4 Massive open online courses (MOOCs)

Although the acronym associated with massive open online courses (MOOCs) is quite transparent, it relates to a development in theoretical and applied educational technology that has challenged researchers' understandings of the field itself. It is presented as the last part of the historical development of e-learning because it is the final major change that took place at the time of writing this dissertation which is both related to the Web

2.0 paradigm and open access. Thus, MOOCs can be understood as the continuation of the free software, open access and OER development chain. In the following the different approaches to MOOCs in the literature are explored together with how they can benefit higher education as well as their limitations.

#### **3.1.4.1 Defining MOOCs**

MOOCs are largely understood as open courses with large numbers of participating students. However, they have been defined from various perspectives in the literature. These include, for example, arguments about their place in the development of higher education (Margaryan, Bianco, & Littlejohn, 2015, p 77), emphasizing their role the online sphere (Alraimi, Zo, & Ciganek, 2015, p. 28) and labeling MOOCs simply as “the latest stage in distance education” (Zhou, 2016, p. 194). The common point in all of the aforementioned categorizations is a clear distancing in terms of educational level and technological delivery.

Although in terms of content delivery, MOOCs are closest to OER courses, they differ in a number of significant aspects. One similarity is that they enjoy the support of prestigious universities as Alraimi et al. (2015, p. 29) express. However, a major distinction can be found in how the MIT *OpenCourseWare* and *OLI* courses follow a syllabus based on actual face-to-face lessons while MOOCs use short video lectures structured around larger, weekly units. Due to the millions of people that showed interest in them (Alraimi et al., 2015, p. 28), their potential to upset the current educational paradigm has also been addressed (Yuan & Powell, 2013, p. 5). To discuss the relevance of this claim, it is important to look at how MOOCs would occupy this position.

Regarding the basic classification of MOOCs, Alraimi et al. (2015, p. 28) call attention to Hew and Cheung’s (2014) model establishes a division between xMOOCs which are “structured similar to a traditional course with all content predefined by the instructor” and cMOOCs where “course materials and content [are] derived from students during the course”. Yuan and Powell (2013) illustrate the development of MOOCs in a detailed chart, where they argue that OER are directly related to open education and were influenced by open source software, open content and MIT

*OpenCourseWare* (p. 6). As they explain in their diachronic chart, the two major influences from OER were *OpenUniversity/OpenLearn* and the cMOOCs (p. 6).

Table 3 shows the categorization of the major OER and MOOC platforms concerning their business models. Overall it can be said the most well-known OER websites and also the open source software are non-profit oriented. While *edX* and *Khan Academy* are free to use, *Udemy* and *Udacity* follow a course-based and monthly payment method. *FutureLearn*, a site similar to self-paced MOOCs has been classified as a for-profit solution because the courses can be accessed freely, however, a Statement of Participation is granted at a cost. Finally, *Coursera*'s business model is a combination of the above sites.

**Table 3:** OER and MOOC platforms based on their business models

OER platforms		MOOC platforms	
Non-profit	For-profit	Non-profit	For-profit
MIT <i>OpenCourseWare</i>	<i>FutureLearn</i>	<i>edX</i>	<i>Coursera</i>
<i>OpenUniversity/</i>			<i>Udacity</i>
<i>OpenLearn</i>			<i>Udemy</i>
<i>OLI</i>			
<i>Khan Academy</i>			

As has been argued above, the literature generally differentiates between xMOOCs and cMOOCs. Although distinctive in their approach to content, they share partly the same development stage from a technical standpoint. However, in terms of psychological background theories, MOOCs occupy the threshold area between behaviorism and cognitivism. This does not entail that there is no aspect to MOOCs in which social cognitivism and constructivism could take place. Any MOOC that includes learner participation in the knowledge building area through forums, discussion groups and in assessment via peer involvement can be argued to be more in based on social cognitivism than pure behaviorism. However, if learners are limited to watching video lectures and completing quizzes, that MOOC can be group as more behavioristic.

Overall, xMOOCs are more based on behaviorism in their approach while cMOOCs build more on the social aspect. Pope's (2014) claim about MOOCs being

nothing more than “just content—the latest iteration of the textbook” (p. 1) can be understood as a characterization of xMOOCs, while Stevens’ (2013) supporting argument for cMOOCs being “best suited to a communicative and socially-driven endeavor such as language-learning” (p. 9) points at the change MOOCs are currently undergoing.

Concerning the next stage in MOOC evolution, a number of approaches can be found. Sharma (2014), argues that MOOC 2.0s would not employ a top-down approach. The 2.0 add-on is becoming more common in the ICT field; however, its validity is often questionable as it already takes place in a Web 2.0 environment with an established differentiation of xMOOCs and cMOOCs. As there is no other usage of it in the literature concerning MOOCs, it can be concluded that this was an educational experiment and not a trend setter. However, the growing involvement of learners that was a cornerstone in the MOOC 2.0 frame is an emerging pattern in newer MOOCs. Receiving the distinguishing iMOOC label, Teixeira and Mota (2014, p. 43) argue that these focus primarily on learners and activities. Furthermore, they highlight their connections to cMOOCs (p. 35) which supports Stevens’ (2013) claim about this type being suitable for language learning. As this field is more social and driven by the acquisition of language skills, the rising level of interaction in MOOCs is a plausible emerging development.

#### **3.1.4.2 The educational potential of MOOCs**

MOOCs are developing to integrate learners more into the process of knowledge construction. To determine the potential of MOOCs in higher education, this section looks at the completion rates in these online courses and how professionals who were behind establishing them in the first place assess their development from 2008. Teixeira and Mota (2014) explain that the Connectivism and Connective Knowledge course in 2008 was responsible for the MOOC term (p. 34). Thus, the success of MOOCs can be examined in an eight-year period.

Thille, Mitchell, and Stevens (2015) emphasize that MOOCs have not performed according to the initial expectations (p. 1). Stober (2015) points to low completion rates which, as Alraimi et al. (2015) address, might not even reach 10% (p. 28). Based on these statistics, one could argue that they evidence the failure of MOOCs. That

*Coursera*, as one of the major MOOC platforms, started the introduction of on-demand content delivery can also be seen as a continuation of this trend. In order to better understand the situation, it is important to assess not only what worked and identify what needs improvement but also to analyze students' reactions.

Despite the forums and discussion groups, MOOCs are essentially characterized by individual and isolated learning as there is no personal contact with the tutors and peers. However, students resolved the issue by organizing face-to-face study groups. Christoph, Goldhammer, Zylka and Hartig (2015) looked at the achievement of such learners in MOOCs and found a high number of social variables supporting learning in such contexts (pp. 66-67). This finding is important not only in the sense that it underpins the social evolution of MOOCs argued in the previous section but also shows that the intentions of MOOC creators and learners' goals might not meet.

Alraimi et al. (2015) raise two important points in connection with MOOC completion and their potential place in higher education. Based on studies Alraimi et al. (2015) identified “[c]uriosity and job advancement” (p. 28) as key motivational determiners in MOOC participation. Furthermore, they argue that this educational method “offer[s] tremendous promise for distance education and can potentially disrupt higher education” (p. 29). In connection with completion, Stober (2015) calls attention to the importance of a sound academic foundation and argues that its absence can limit the potential of MOOCs for larger student bodies (p. 1). These issues show a detailed picture of what MOOCs did not achieve to be. They are not an alternative to higher education in the general sense and they require level-appropriate academic knowledge. However, it is also important to address what higher education as a field gained through MOOCs.

In terms of more beneficial applications of online learning in the form of MOOCs in higher education, Thille et al. (2015) list awareness raising (p. 1) as an important factor. A well detailed insight into the achievements of MOOCs is provided by Salisbury (2014, pp. 1-2), who summarizes his views along five points that address the different areas MOOCs affected from awareness raising to implementation, delivery and connections to the institutions. The essence of these points is also found in Pope's (2014) argument concerning that MOOCs will reach their potential in revolutionizing higher education when universities find a way to correctly implement them (p. 1).

Overall, the potential of MOOCs' can be defined in two ways. First, their content implications are limited as and alternative to large-scale higher education delivery media. Hence, while MOOCs present an economic way of content delivery, their lack of community building and personal contact as psychosocial factors offer a more sterile learning experience which in the long-run may negatively affect overall knowledge attainment. However, there are a number of promising trends which point to the future possibilities of MOOCs. These include a more integrative approach to content delivery tilting the medium towards cognitivism and constructivism instead of behaviorism as well as a growing awareness of their potential. Second, they are valuable learning tools for individuals not only for skill development but also for collaborative learning, often encompassing an international group as Stevens (2013, p. 10) explains. For this reason, it is highly possible that Zhou's (2016, p. 194) argument about MOOCs' connection to distance education is a likely alternative use of the medium next to open education.

### **3.2 Delivery perspective**

The aspects that are put under scrutiny include e-learning applications that range from predominantly face-to-face to online elements in online environments, computer-assisted learning (CAL) and computer-assisted language learning (CALL). This is followed by discussion of the merging of traditional and online approaches in the form of blended learning. Settings where the focus is on mobile devices as in mobile assisted learning (MAL, m-learning) and mobile assisted language learning (MALL) are also addressed. Next, making use of a variety of gadgets in ubiquitous learning (u-learning) is analyzed. Finally, a possible frame for virtual realities is discussed. As the online element is crucial in the Web 2.0 and e-learning 2.0 contexts, online learning is presented as an overarching frame as it had major influences on all the above described areas.

### **3.2.1 The role of online learning in e-learning**

Online learning is related to every field within e-learning and it affected face-to-face contexts as well through enabling various learning environments. At its core, e-learning today equals device, learning approaches, plus the Internet. The reason behind this model is that the emergence of the Internet was not only a technological evolution but it also changed e-learning as a whole. CALL was amongst the first areas where the educational potential of online learning was exploited, which makes sense as at that time mobile devices had very limited computing power. Later, online learning became an extended educational solution, a networked frame for information access across devices. As it was discussed in connection with the history of e-learning in section 3.1 (see p. 13), this aspect of information access opened up previously closed systems leading to open education, online collaboration, self-access and today's online learning in general.

A key aspect of online learning concerns autonomy development as online solutions enabled the development of extended learning spaces outside of classroom limitations. McMurry, Tanner, and Anderson (2009, p. 2) cite Jones' (1998) diagram depicting growing learner independence ranging from class work to homework, teacher-led autonomy, full autonomy and eventually to naturalistic immersion. This model can be applied to online learning in general as it increases learner independence which can range from controlled (teacher-led in Jones' 1998 model) to the self-access level, which McMurry et al. (2009) emphasize, in the form of MOOCs (full autonomy in Jones' 1998 model).

Two further issues affecting online learning concern informal learning and community formation, representing tightly linked variables. Looking at the forms of online language learning, Hockly (2015) discusses the following areas: formal online courses, virtual worlds, MOOCs, open language learning communities and mobile apps for language learning (pp. 310-311). What is striking about this list is the majority of informal settings. Ziegler, Paulus, and Woodside (2014, p. 61) explain that informal learning is separate from traditional settings and concerns a solitary activity. Hence, it can have significant impact on learner community formation. Ziegler et al. (2014) argue that there are two types of online communities that can emerge: organization sponsored and peer-initiated, which differ in terms of possible communications and structure (p. 62).

Overall, both formal and informal online learning may contribute to the development of the 21<sup>st</sup> century skills (see section 4.2.4 on p. 72 for a detailed analysis of the skills), whereby Web 2.0 plays a crucial part, as Dowling (2011, p. 2) argues. Thus, online learning has implications in developing student independence which is also illustrated in Stevens' (2012, p. 13) points regarding do-it-yourself projects. For this reason, it can be said that online learning has developed from a more database-oriented role in the Web 1.0 paradigm to an agent of autonomy in the Web 2.0 age.

### **3.2.2 Computer-assisted language learning (CALL)**

The term *computer-assisted language learning* (CALL) can be applied to a number of settings where the focus is on making use of IT resources in language education. It is a specialized field of computer assisted learning (CAL). According to Beatty (2013, p. 18), CALL has been experimented with since the 1950s which gives the field a considerable history within e-learning. Similarly to blended and mobile learning this area has witnessed accelerated development, from which Jarvis (2015) highlights “task-based language teaching (TBLT) and the growth of technology” (p. 1). What this boils down to is that different forms of content delivery have been applied which affected the educational and psychological frame of education.

When situating CALL in the behaviorist-cognitivist-constructivist developmental stages of e-learning, it becomes visible how this evolution affected the field. With considerable history, CALL covers more than 60 years where language education has been a central issue. However, due to the Internet and various mobile devices only joining the paradigm decades later, CALL maintained its central position in this time. Jarvis and Achilleos (2013, p. 1) support this development by claiming that initially CALL was largely focused on behaviorism, similarly to Warschauer (1996) and Bax (2003). The next step Jarvis and Achilleos (2013, p. 2) mention is how CALL and constructivism resulted in “technology and task based pedagogy” (p. 2). Finally, they emphasize CALL's strong connection to social constructivism (p. 3).



### **3.2.2.1 Applying CALL**

Issues concerning technology acceptance, understanding and rapport can be applied to the various fields of e-learning as well. However, CALL occupies an important position in formal e-learning development. Due to the current technological state of e-learning, it is most likely that students will first experience formal e-learning in the form of mobile learning or CALL. While mobile learning is more flexible in terms of complementary uses to reach educational goals, CALL represents a more focused approach that goes beyond the application of smartphones and can be seen as the first defining experience of students with formal e-learning.

The success of language learning projects depends on a number of variables which e-learning extends with the addition of a focused technological component. Chiu, Hsu, Sun, Lin, and Sun (2005, p. 399) call attention to two factors in the form of acceptance and continuance and argue that they affect information technology (IT) usage. In other words, technology acceptance leads to successful e-learning implementation (see section 4.2.2 on p. 63 for more detail on technology acceptance). Student resistance to e-learning can depend on a number of factors which Chiu et al. (2005) address in their “decomposed expediency disconfirmation theory model for e-learning continuance” (p. 402). The illustration of their model boils down to three factors being either confirmed or disconfirmed. These include usability, satisfaction and value. The optimal outcome is satisfaction and willingness for continued e-learning usage (p. 402). While this model provides an interesting approach to e-learning satisfaction and Chiu et al. (2005) were able to confirm their hypotheses based on it (p. 413), its use is limited by the fact that the model it is based on (Oliver, 1980) is used in marketing research not education. This raises the issue that individual differences are neglected in this model.

Sun, Tsai, Finger, Chen, and Yeh (2008) developed a learner-centric model that also targeted satisfaction. Their approach is applicable to both commercial and non-commercial environments as it includes learner, instructor, course, technology and design dimensions (p. 1185). Each of these are comprised by further sub-dimensions that altogether cover attitudes toward e-learning, technology-related anxiety, flexibility, quality, usefulness, interaction and assessment among others (p. 1185). These provide a practical checklist for instructors in their e-learning projects about variables to keep in mind and possible pitfalls of such endeavors that may not be present in face-to-face

contexts. This model is applicable to e-learning in general, thereby covering CALL, online, blended, virtual and ubiquitous approaches as well.

Being familiar with the factors that influence student satisfaction and eventual e-learning continuation is only one part of the application process. The second issue concerns technology application from various standpoints. As Arnold and Ducate (2006) argue, it is highly beneficial for teachers to make use of technology from the learners' perspective before applying it in their teaching as this enables understanding from the recipients' side (p. 43). This is an important issue to be kept in mind even in cases where teachers are already familiar with the technology as they could overlook issues that are straightforward for them but learners might find confusing. There are various lists like Son's (2011) categorization of 12 online tools for language teaching (pp. 2-9) to find what solutions fit educational needs best. However, an important aspect in making use of these tools in CALL is how teacher and student roles differ from traditional ones and require a form of agreement to reach the goals.

The final issue that influences CALL application concerns the interrelationship of tutors and pupils. Jiang and Ramsay (2005) call attention to the importance of rapport building and list learning enhancement, motivation and anxiety reduction as reasons (pp. 48-49). In their exploratory study, they were able to find evidence for CALL supporting rapport building (p. 58). This issue extends upon the point of Arnold and Ducate (2006) as through rapport building the students are involved in the overall project which generates motivation and reduces technology related anxiety.

### **3.2.2.2 The changing relevance of CALL in e-learning**

The history of CALL had major influences on e-learning understanding in the decades where technological possibilities were focused on computers. While the importance of CALL in the e-learning frame is undeniable, current developments in technology and learning theories challenged its position. The final point that needs to be discussed concerns CALL's relevance in the current e-learning paradigm.

Jarvis and Krashen (2014) argue that CALL as a label is out-of-date as it is centered solely on computers (p. 5). Adams, Montagne, Rodriguez, and Stevens (2012) make a similar point by highlighting that the computing power of modern devices

undermines CALL as a dominant field (p. 1). Thus, Jarvis and Krashen (2014) and Adams et al. (2012) arrive at a similar conclusion. Furthermore, there are also approaches that seek to address the issue of CALL's changed relevance through a new label. Jarvis and Krashen (2014, p. 5) argue that Jarvis and Achilleos' (2013) term MALU, referring to Mobile Assisted Language Use, represents a more updated approach to emphasizing the current device-rich aspect of language learning.

The aforementioned issues highlight a shift in e-learning that has been continuously building for some years now. Computers occupied a central position as hubs in CALL, the first major area of e-learning. However, technological advancements have all but erased the differences between devices in terms of their usability. This does not mean that CALL will disappear as computer labs and projects including laptops are still present. Such a development entails that the field is currently moving towards a mobile-oriented aspect which is illustrated by bring your own device (BYOD) initiatives as well. Overall, the developments connected to Web 2.0 and the technological advancements that were first applied in CALL have paved the way for multi-device environments and provided the core for the blended, mobile, virtual and ubiquitous realizations of e-learning projects.

### **3.2.3 Blended learning**

Blended learning is the amalgamation of online solutions and face-to-face lessons. Fundamentally, this combination means the exploitation of each approach to benefit the overall learning environment (Holmes & Gardner, 2006, p. 110). Considering how it fits into the e-learning framework, there are different positions. Some researchers understand blended learning as a subordinated field (see Garrison & Kanuka, 2004, p. 97) while others see it as a continuation of e-learning (see Thorne, 2003, p. 1). However, it is also presented as a reaction to "a general sense of disillusionment with the stand-alone adoption of online media" (MacDonald, 2008, p. 3).

The field is not plagued by the level of definitional plurality as e-learning. It rather shows a functional division as illustrated by the aforementioned interpretations. As blended learning is a crucial area in the studies presented in the second part of the dissertation, similarly to e-learning, a working definition needs to be introduced.

In Simon and Kollárová (2015) it was argued that blended learning relates to “cases where face-to-face lessons are supported by virtual or online sessions by using the same technology that is present in the course” (p. 195). Minimizing student resistance to blended environments was a central issue in this approach. Although using the same technology enables the application of learning environments in a manner that supports technological socialization and acceptance, this formulation is rather vague and confusing. As differences will likely be present in the face-to-face and online spaces, same technology usage should be removed in favor of a guiding frame to structure the environments to support and not disrupt the learning experience. A further problem with this definition lies in its lack of a practical aspect.

Sharma (2010) approaches blended learning as three possible combinations. These concern merging of online and face-to-face solutions, technologies and methodologies (p. 456). The above working definition only addressed the first and although Sharma (2010, p. 456) mentions it being the most well-known, the others occupy similarly important positions in the framework. Thus, the issue of technology both inside and outside of the classroom needs to be readdressed. For this reason the revised working definition of blended learning that relates to the e-learning one in section 2.2 (see p. 10), concerns the development or adaption of complementary online and face-to-face learning environments which are used simultaneously to reach educational goals.

### **3.2.3.1 Core issues in blended learning**

Blended learning is a highly versatile approach to learning that can generate both traditional and online solutions to arrive at a model that combines the advantages of both. However, it also comes with a number of disadvantages that are partially also present in e-learning in general. In the following, three such drawbacks are discussed as they represent cornerstones in current blended implementation. The first considers methodological solutions that affect the content delivery of institutions. This is followed by how blending affects learning communities. Finally, the connections between economic changes and blended solutions are addressed.

Liu and Tourtellott (2011) call attention to the flexibility that online learning enables in learning and timetable possibilities (p. 4). While these are favorable options

for students, they also highlight that one of the central issues is strategic institutions is technology use in the institutions (p. 1). At its core, the combination of face-to-face and online delivery modes in blending entails, as Hinkelman and Gruba (2012) explain, the “re-conceptualization for both CALL and second language learning theory” in learning environments (p. 3). These changes are where the appropriate technology applications can aid adapting to student needs. Moreover, they point to e-learning as a potential paradigm shifter affecting education on both the intra- and interinstitutional levels. Blended learning can play a pivotal role in this process as it is highly applicable both to distance and face-to-face education.

Harrington (2010) argues that combining face-to-face and online environments results in “two distinct, and often exclusionary, classroom communities” (p. 3). She indicates that belonging to either the online or face-to-face group means exclusion from the other (p. 3) and can result in self-muting or even damage learners’ identity development (pp. 3-4). The picture Harrington (2010) draws with this comparison is bleak and without empirical support. However, it represents an issue in identity development that needs to be considered in blended projects. Hirvela (2006) argues for a more approachable position with the positive distancing effect which enables the reduction of language related anxiety through the use of computers (p. 234). The beneficial impact of blended learning is also supported by Matzat (2013, p. 41) who argues for learning facilitation in this context and how the frame is beneficial for digital immigrant generations. The latter is evidenced in Chu and Chu’s (2010) study.

Economic changes resonate in education and this is no different with blended learning. Baepler, Walker and Driessen (2014) list a number of points concerning the processes currently affecting higher education. They emphasize the connections between economic challenges, the need for professionals and limited classroom possibilities and explain that this has led to extending the number of online and flipped courses (p. 227). Flipped courses are characterized by “placing didactic lectures on the web and using face-to-face time to build conceptual understanding and cognitive skills” (Baepler et al., 2014, p. 227).

While the flipped classroom seems to be a form of blended learning, Baepler et al. (2014) differentiate it by addressing its two learning stages. The first contrast point is related to lectures that students need to view prior to the classroom lessons. The second

is concerned with course structure, namely in how the face-to-face sessions involve various tasks that build on the video lessons. Thus, the flipped classroom model is an applied approach at the institutional level where not only individual courses are restructured but rather the previous separation between seminars and lectures is reevaluated from a theoretical and analytic perspective. Supporting this claim are Baepler et al.'s (2014) findings. They were able to reduce face-to-face time by 66% to get similar results to more traditional settings by doing three things: blending content delivery, flipping instruction and making use of active learning classrooms (Baepler et al., 2014, pp. 233-234). Overall, such a setup can be seen as a model which institutions could apply to increase the productivity of face-to-face courses. A second application of blended learning is connected to distance education.

### **3.2.3.2 The educational implications of blended learning in distance and face-to-face contexts**

Distance learning and complementing traditional instruction are the key areas where blended approaches can be applied to reach instructional and learning goals both in online and face-to-face environments. However, the main argument behind blended learning stated here is that such an outcome would be unreachable by solely relying on only one of these settings.

An important difference between fully online and blended learning can be pinpointed in the geographical distance between students. While it is completely feasible for learners to participate in MOOCs from all over the globe, the same cannot be said about blended learning. Here geographical distance plays an important role as there are also contact sessions that need to take place. Thus, it is quite straightforward to draw parallels between the goals of blended and distance learning. Yudko, Hirokawa, and Chi (2008, p. 1224) express that rural areas face disadvantages due to distance and argue for blending as a solution. This issue is connected to Offir, Lev, and Bezalel's (2008, p. 1172) argument which states that distance learning is essentially realized through synchronous and asynchronous systems. While these can be equated to the face-to-face and online sessions respectively it brings up the issue of how students react to them.

Distance education concerns learning activities that, similarly to informal learning, changes learner roles by simply not having the teacher present as an authoritative figure at all times. Consequently, this puts the learners in charge of their own progress to a certain extent. For this reason, it comes as no surprise that in terms of required learner independence, Offir et al. (2008) call attention to how distance learning necessitates it more than traditional settings (p. 1173). Although this is a straightforward point, it also carries the issue of changed psychosocial development in learning. Moreover, parallels can be drawn between learning environments and the double community setting addressed by Harrington (2010). Even with the same group of learners in face-to-face or online environments, their behavior will be different as they do not occupy the same roles in the respective spaces. This is important as Offir et al. (2008) found that cognitive ability levels significantly affect how successful students are in distance learning contexts (pp. 1181-1182).

A way to counterbalance the disadvantages resulting from different cognitive abilities and learning backgrounds would be to include learners more in the overall process as Holley and Oliver (2010) explain, through “personalized and individualized modes of study negotiated with individual students” (p. 694). Concerning student preferences, Shahrokni and Talaeizadeh (2013) argue from the interview data in their *Moodle* project that learners expressed their need for a face-to-face course to be simultaneously present with online sessions (p. 21). Moreover, Wieling and Hofman (2010) had positive results concerning student grades through the combination of video lessons and face-to-face course attendance (p. 996).

Baepler et al. (2014) (see previous section) and Wieling and Hofman’s (2010) projects revealed a significant finding of how blended learning can be more successfully implemented. In both cases video lessons were used, however, to reach different goals. Baepler et al. (2014) turned to video lessons to save time and used face-to-face sessions for activities that further contributed to learners’ conceptual development. In Wieling and Hofman’s (2010) case, where the beneficiary effects of combining video lessons and lectures were evidenced through student grades and Offir et al.’s (2008) results about required cognitive abilities, point to a similar conclusion concerning the place of blended learning in face-to-face and distance education. As argued in section 3.2.3.1 (see p. 28), blended learning has the potential to combine the benefits of both traditional and online education. However, learners’ psycho-social development, cognitive abilities

and need for peer learning cannot be disregarded and should represent cornerstones of course design.

### **3.2.4 Mobile-assisted language learning (MALL)**

The premise of mobile-assisted learning (MAL) and language learning (MALL) is that materials and resources can be accessed and used where and when it is best suitable for learners without the time and space limitations of face-to-face sessions. This is in line with how Holmes and Gardner (2006) defined e-learning as “online access to learning resources anytime and anywhere” (p. 14) which is best realized in mobile learning. In the case of MAL, this independence is made available with the help of gadgets with various levels of network connectivity. In earlier MAL projects these included MP3/MP4 players, PDAs and mobile phones. Currently, smartphones, e-readers and tablets are in the focus of MAL initiatives. Similarly, with CALL becoming a major part of CAL, MALL became an important area of MAL.

Mobile devices have been employed in various areas in language education. The major advantage of these projects lies in the exploitation of two key aspects that enables potential in- or out-of-class adaption without high levels of technology related anxiety. The first advantage concerns flexibility through the mobility aspect (see next section) and makes mobile learning suitable for “face-to-face, distance, or online; (...) self-paced or calendar-based” settings (Chinnery, 2006, p. 9). The second advantage is that learners most likely already have the necessary hardware, thus teachers can make use of this (Stockwell, 2010, p. 95). Both of these points build on the users’ familiarity with their devices as a starting point. However, the way learning materials are implemented will ultimately influence students’ motivation level, engagement and consequently language skill development.

#### **3.2.4.1 The development of mobile-assisted learning**

Defining MAL seems to be quite straightforward as a device centered way of knowledge development. However, the literature is somewhat divided in terms of MAL’s place in the e-learning framework. This means one of three approaches for MAL: an emphasis on mobility (Hockly, 2013, p. 80), a subfield within the construct or



having shared areas with e-learning (K. Peters, 2007, p. 3). The final trend, also used as a frame for mobile learning in the present dissertation, claims these differences are becoming less significant as technological developments bring devices to an equal status in terms of access and usability (Clark & Mayer, 2011, p. 1). Looking at each of these issues sheds light on the development of mobile assisted learning and how the language aspect of MALL can be related to it.

Mobility is a key term in MAL; however, what aspect of the learning process is actually mobile is a different issue. Hockly (2013) calls attention to both the device and learners' mobility being key concepts (p. 80) which is quite understandable as MAL by definition needs to include these aspects. However, it raises the issue of how much learning can actually take place this way. As this approach is centered on devices, their capabilities will decide what kind of activities can be realized in mobile learning settings.

Concerning the generations of mobile devices, Wong and Looi (2011) point to of three generations in mobile learning. This development in Wong and Looi's (2011, p. 2365) argument follows the behaviorism, cognitivism, constructivism chain and eventually ends up at a similar level to other computing devices in usability. This characterization is important for a number of reasons. First, it illustrates that MAL and MALL follow the same developmental pattern. This is true even if mobile learning is understood as an independent field in e-learning or is seen as a separate area. Second, it points towards the conclusion that technological developments will need to adapt to the learners' needs. This is supported by Brown and Mbat's (2015) discussion about the role of technology as "the enabler and not as the driver of our teaching and learning activities" (p. 117). Finally, these devices, which are arguably part of the users' personal sphere (addressed in more detail in section 3.3.3 on p. 39), might require more openness on the learners' side to reach the intended educational goals.

#### **3.2.4.2 The place of mobile assisted learning in language education**

It was argued previously that in terms of general developmental stages, e-learning, mobile and computer-assisted learning showcase a similar three level process from behavioristic, cognitivist and constructivist approaches corresponding to technological advancements. Similarly important is how new technological features are put to use.

Kim, Rueckert, Kim and Seo (2013, p. 53) discuss the different adopter categories that Rogers (2003) differentiated and explain that innovation-adaption can be illustrated with an S-curve in a diachronic matter (p. 53). Thus, while initial experimentation with technology may only include a small number of people, it can eventually become established and even norm-forming. As a consequence, the number of studies looking at this issue grows and a pattern emerges in the literature. This makes it possible to trace how certain mobile learning features become integrated into language education.

Each language skill is represented in MALL research to some degree. Listening is a well-supported area (see Rosell-Aguilar, 2013) and vocabulary projects also quite often target mobile settings (see Chen & Chung, 2008). Adapting testing on mobile devices is an area, that similarly to listening and vocabulary projects, works well on smaller screens. Studies that support adaptive tutoring are also found in the mid-2000s as well when the screen limitation of mobile devices was still an important concern (see Virvou & Alepis, 2005). Similarly, Triantafillou, Georgiadou, and Economides (2008, p. 1320) argue about making use of computerized adaptive testing on mobile devices which creates tests that are best suited to students' level. Moreover, Li and Hegelheimer's (2013) project shows a combined approach whereby a mobile grammar application was developed for out-of-class correction and improvement to ultimately develop students' writing skills (p. 135). However, there are skills where mobile devices are less suited due to their limitations.

Reading and writing are skills where the screen limitation of even more contemporary devices, with the possible exclusion of tablets and iPads, becomes imminent. Wang and Smith's (2013) project is similar to Li and Hegelheimer's (2013) in that they combined grammar development with another skill which was reading in their case. However, they encountered students increasingly abandoning the project (p. 128). This highlights how delivery and adaptation need to be primary factors in such undertakings. Connected to this is Godwin-Jones' (2007a, p. 10) point considering screen size as a hindering variable in longer reading projects (discussed in more detail in section 3.3.3 on p. 39). These issues relate to the appropriate usage of mobile devices to meet learning needs. Projects where technology had a supporting role as in Rau, Gao, and Wu's (2008) study where SMS and forum communication were combined or Lys' (2013) undertaking involving speaking skill development using Apple's FaceTime on

iPads as a scaffolding tool were both successful. This leads to the point of how mobile technology integration should be handled.

How well MALL fits into an educational setting depends on a number of variables, including not only the technological knowledge of teachers and students but the computational power of devices and available software as well. Therefore, the focus should be on how the gadgets can be applied to support and document learning (Kong & Song, 2015, p. 228) and, just like in the case of CALL or blended learning, how this is adaptable to in- and out-of-class learning activities and goals.

### **3.2.5 Ubiquitous learning**

Ubiquitous learning (u-learning) represents a stage in the evolution of e-learning where mobile devices, computers and e-learning solutions are exploited at the same time. As Jung (2014, p. 97) explains, u-learning is realized through to the meeting of e-learning, mobile learning and various technologies. Aside from device plurality, this also means that the distinctions previously present between e-learning and m-learning become less emphasized and more unified learning can take place. This approach is supported by Park's (2011) comparison of the development of e-learning, m-learning and u-learning on a flowchart among three criteria (p. 81). As he illustrates, the devices themselves are distinguished by being wired or wireless in e- and m-learning respectively, however, this disappears in u-learning (p. 81). He describes computation and communication as distinctive in e-learning and blurry in u-learning (p. 81). Finally, in terms of learning he sees e-learning limited to a single learning space in school whereas u-learning represents a dynamic and flexible approach (p. 81). In Park's (2011) chart, mobile learning is absent from the last two comparisons as a separate developmental stage which implies that it much rather seen as a transition. As Park (2011) explains this portability aspect is a key attribute of u-learning (p. 81). However, in the present discussion mobile learning is seen as valid field, not a transitional stage.

Ubiquitous learning is an important step in e-learning development as this device plurality creates the possibility to approach content delivery and interaction in different ways. That it is essentially a combination of computer- and mobile assisted learning through wireless solutions makes it possible for students to be engaged in their education both in- and out-of-class with their devices. This means that learners from

less fortunate socioeconomic backgrounds do not have to feel discriminated while a possible BYOD inclusion can be applied as well. Overall, this level of device integration into everyday life also prepares for further steps in e-learning. The first concerns the development of 21<sup>st</sup> century skills and the second points to virtual reality applications.

### **3.2.6 Augmented and virtual realities**

Augmented and virtual realities occupy a position in the e-learning framework that has the potential to initiate a similar paradigm change akin to Web 2.0. It is a developing field characterized by exploratory and experimental studies. Virtual realities can be put to use to simulate environments that are not accessible due to financial, geographic and even historical reasons. Augmented realities extend the learning environment with “digital information that you can interact with in the same manner that you interact with the physical world” (Craig, 2013, p. 2). They are suitable to further the integration of students living with disabilities as interacting in such contexts gives them equal opportunities to interact with their fellow students and peers.

According to Mikropoulos and Natsis (2011), virtual realities can be approached as “a mosaic of technologies that support the creation of synthetic, highly interactive three dimensional (3D) spatial environments that represent real or non-real situations” (p. 769). This approach relates to the device plurality perspective found in ubiquitous learning where users exploit a number of gadgets instead of focusing on a single computer, smartphone or tablet. Mikropoulos and Natsis’ (2011) virtual reality framework provides a sound theoretical frame for virtual reality (VR) implementation. The importance of how they approach VR lies not only in distinguishing it as a purposefully created artificial environment for educational goals but also in highlighting that users’ experiences will be different from face-to-face and also other e-learning projects.

Virtual realities can be put to educational use in a number of ways. However, there are crucial issues that need to be clarified in such approaches. The first one concerns navigation which in adaption can function in two ways: adaptive hypermedia systems (AHS) or avatars in a virtual space. The second issue is connected to changes in

teacher and student roles. Finally, learners' technological socialization needs to be taken into account as it can predefine the success of content delivery approaches.

How will the evolving field of virtual realities affect e-learning? It is definitely a continuation of a development that points towards constructivism as the environments are created to suit educational goals and learner needs. It can also be understood as a future step of ubiquitous learning as it lends itself to devices plurality and also builds on learners' prior experience and socialization in virtual environments.

### **3.3 Device perspective**

#### **3.3.1 Ownership**

Ownership is a variable in mobile learning different from other settings as students can work with their own devices. Bring your own device (BYOD) initiatives whereby student use their own devices in educational are well established. Song (2014, p. 50) argues that the number of students doing so is increasing. Furthermore, Song (2014, p. 51) also highlights the cost-effective nature of BYOD. This adds a certain level of personality to students' involvement that can positively influence their motivation. However, this enthusiasm can possibly decline in longitudinal settings (Song, 2014, p. 51).

Kobus, Rietveld, and van Ommeren (2013) summarize the role of mobile devices focusing on four features: possible distractors during lectures, anytime anywhere access, peer-collaboration and BYOD adaption opposed to computer labs (p. 29). They go into detail how lectures could make use of BYOD and argue for the integration of voting, computation and applications (p. 30) and the opposition of BYOD and on campus IT labs (p.29). Kobus et al. (2013) highlight an important point concerning the limited necessity of university computer labs in BYOD settings. This is a logical conclusion from a maintenance perspective because students making use of their own devices negate the purpose of such facilities. However, we need to account for two other variables as well, namely cases where students do not have access to their own devices for financial reasons and when they see their gadgets as a part of their private sphere. Both of these aspects might limit students' willingness and motivation to use devices in educational settings.

### **3.3.2 Disadvantaged and unmotivated groups**

Concerning devices, two disadvantaged groups of students can be present. The first includes students that experience disadvantages due to their socioeconomic status and limited access to technology. The second contains a group that while has access to proper technology, is not willing to use it due to a number of reasons like technology related resistance, conflicting understandings or other preferred ways of learning. Focusing on these groups, demotivation causing factors are discussed in more detail.

As Ferrer, Belvís, and Pàmies (2011, p. 282) argue, the ways in which students relate to ICT devices correlates with the socioeconomic status of their families. Although, this is quite an understandable point, it also entails that in settings where successful participation requires the ownership or access to devices, lacking them can create social tension. This is especially noticeable in Winet's (2015) approach to mobile learning arguing that a major function of smartphones can be seen in uniting in- and out-of-class learning (p. 10). MALL projects involving both environments (see for example Rosell-Aguilar, 2013; Li & Hegelheimer, 2013), put such students in a disadvantaged position. A possible solution is to include the option to visit the institution's computer lab so that socioeconomic status is not a cause for discrimination.

Kobus et al. (2013) discuss three cases where BYOD initiatives at university level can have negative effects on students. The first one is the aforementioned lack of access. The other two concern situations where students are not motivated to participate in BYOD inclusion out of convenience or their choice to use university computers (p. 30). The second can be attributed to aspects of student life such as daily commute while the third can be understood as a clear differentiation between private and education usage in university courses. Kobus et al. (2013) conducted a questionnaire study with 3,132 Dutch university students, and from their findings an important point emerged. Out of the sample, almost 40% of the students were against obligatory laptop use, even though they were aware of the positive effects it would have on their education (p. 37). This point raises issues about how the students regard their gadgets as part of their private sphere.

### 3.3.3 Private sphere

Private sphere in mobile learning refers to a larger concept where digital natives have a private sphere that extends to their virtual identity and the devices they use to access it. Smartphones currently occupy a central position in this as they are communication tools connected to digital natives' social networking as well; a key aspect in Web 2.0. In practice this creates additional challenges for mobile learning projects. This issue was present in Kobus et al.'s (2013) questionnaire study and was also the reason for the failure of Wang and Smith's (2013) reading project. As Wang and Smith (2013, p. 129) explain, their undertaking had to not only compete with games and social networks but also emphasize that students viewed their devices as private which required separation from formal learning. This is an important point as it highlights a variable that can surface in any project that aims to integrate skill development into students' everyday mobile device usage.

There is a growing number of social networks present which can be differentiated based on their focus. *Facebook* represents a widely accessible social-networking and communications platform. In terms of privacy in mobile and e-learning this means that there is a preconception in connection with learners as they relate that platform to their friends, private messaging and other social relations. Consequently, any project initiated on social networks will have to handle student involvement in a non-obstructive manner to their private sphere and offer existing social learning platforms.

The solution to the issue of students' private sphere in the longitudinal projects in this dissertation was adapting tasks on *Edmodo* which is a web-based social networking learning platform. Even though it has an established user base, there are shockingly few studies about it (see for example Song, 2014; Kong & Song, 2015). *Edmodo* and how it was used is discussed in detail in the empirical part of the dissertation. However, the prevailing reason for its inclusion was that it makes use of how most users are familiar with *Facebook* in its structure. *Edmodo* is mainly designed for learning purposes and was applied for two underlying reasons. One, students are required to create a profile which means that they all start with an equal status. Two, it is a separate website and mobile application connected to education thereby interfering less with the users' private sphere.

### **3.4 The future of the e-learning paradigm**

E-learning is a constantly evolving field that is ready to apply technological developments to the educational paradigm. Thus, a fraction of e-learning studies will necessarily concern experimentation with new technologies. However, this is not limited to education but is connected to other fields and in the present discussion is illustrated through video game development. This category was chosen as an example for two reasons. First, it refers to a leisure activity that has high motivational value and second, involvement in video game culture can act as a socializing agent in digital natives' development (see section 5.1.2.2 on p. 79).

Applying concepts from game design to e-learning can be put into three categories covering design, adaption/development and implementation. Illustrating design are achievements, which in video games indicate that the player has completed a goal or challenge. They have been adapted as badges that give feedback to students about task completion and their work (see Buckingham, 2014). The adaption/development category concerns recognizing the educational potential and value of video games and refers to either adapting or developing further games to suit educational goals. Implementation can be understood as making use of hardware that is present in video games and putting it to classroom use. It is quite possible that the *Oculus Rift* will occupy such a role in the future in virtual realities or simulations. The device has already been put to use in a number of areas including for example medical (see Hoffman, Meyer, Ramirez, Roberts, Seibel, Atzori, Sharar, & Patterson, 2014) and elementary educational contexts (see Lartigue, Scoville, & Pham, 2014).

Educational institutions will be able to further apply the findings of interdisciplinary uses of devices and technologies which will ultimately affect the e-learning frame. This has been the recurring pattern in the development of e-learning in general. Each stage has been defined by a technological milestone that initiated the development of materials, environments, user interaction and goals through the behaviorist-cognitivist-constructivist stages. These were not equally distributed but rather reflected the limitations of the technology and the possibilities that were available in that era. This development is sped up in later stages which is also a reflection of what technology enables and how said possibilities are applied.



### **3.4.1 The relevance of e-learning 2.0**

It is important to address the issue of e-learning 2.0 that is prevalent in the literature. Kim and Baek (2009) argue that “e-learning 2.0 provided content in the form of a learning environment” (p. 169). This point links to how networking and content development are central aspects of e-learning 2.0. The 2.0 frame means that in the history of e-learning there were significant changes that affected the educational paradigm which resulted in a number of e-learning generations.

Karrer (2007) identifies three generations of e-learning, which include 1.0, 1.3 and 2.0 along the criteria of main components, ownership, development time, content size, access time, virtual meetings, delivery, content access, driver and content creator (p. 3). Concerning the components, his differentiation between the 1.3 and 2.0 generations is in line with Cowie and Sakui’s (2013) list of Web 2.0 tools (p. 460). Although Karrer’s (2007) distinctions and arguments are informative, they lack certain areas which would make it valid for the present discussion. For this reason, a generational comparison of the e-learning paradigm was prepared along a different set of criteria that includes the defining theoretical frame, the role of the Internet, users, devices, environment, teacher-student roles, delivery, MOOCs, defining development, goal and an estimated time frame (see Table 4).

Karrer’s (2007) first generation of e-learning includes online elements (pp. 3-4). While this is a valid point and is also in line with how they are framed in the dissertation (see section 3.2.1 on p. 23), it limits the generations to the emergence of the Internet. However, e-learning was present since the 1950s, as it was argued by Beatty (2013, p. 18). For this reason, the three distinct phases of e-learning development in the present discussion have been labelled as follows: e-learning 0.5, 1.0 and 2.0. These are in connection with the defining technological developments of the time periods in each generation. As e-learning was present before the Internet through the application of computers, this generation is presented as 0.5. The next is defined by the emergence of the World Wide Web and is thus a complete model with the 1.0 label. The currently final, 2.0 stage is connected to the effects Web 2.0 had on e-learning through content creation, openness and networking as addressed by Kim and Baek (2009) and Cowie and Sakui (2013).

**Table 4:** The development of the e-learning paradigm

<b>Comparison</b>	<b>e-learning 0.5</b>	<b>e-learning 1.0</b>	<b>e-learning 2.0</b>
<b>Defining theoretical frame</b>	behaviorism	cognitivism	social constructivism (Sturm et al. 2009)
<b>The role of the Internet</b>	--	centralized (if present)	democratic (Oral, 2008) decentralized (Weller, 2007)
<b>Users' skills</b>	need to acquire computer skills	have to learn skills: digital immigrants (Prensky, 2001)	socialized in technology: digital natives (Prensky, 2001)
<b>Devices</b>	computer oriented	single device oriented	multi device oriented BYOD oriented
<b>Environment</b>	computer labs	hypermedia-based (Yeh & Lo, 2005)	adaptive hypermedia systems (Reategui et al., 2008) multimedia-based
<b>Teacher-student roles</b>	hierarchical	somewhat hierarchical	more equal
<b>Delivery</b>	face-to-face	online and blended	online, blended, mobile, virtual and ubiquitous
<b>MOOCs</b>	--	xMOOCs (Alraimi et al., 2015)	cMOOCs (Alraimi et al., 2015) iMOOCs (Teixeire & Mota, 2014) MOOC 2.0 (Sharma, 2014)
<b>Defining development</b>	the spread of computers	the emergence of the Internet	Web 2.0
<b>Goal</b>	finding the role of computers in education	finding the role of the Internet in education	immersion and networking
<b>Estimated time frame</b>	~ from the 1950s to the late 1980s	~ from the mid-1990s to the early-to-mid-2000s	~ from the mid-to-late-2000s onward

An overarching trend is a progression towards users. While 1.0 and 2.0 each had behaviorist-cognitivist-constructivist periods, they significantly vary in length and importance. The initial behavioristic frame of 0.5 was also followed by the other two as it is discussed by Warschauer (1996) and Bax (2003) in Dudeney and Hockly (2012, p. 534). As argued in the beginning of this section, this sped up development was due to the exploration phase which precedes widespread application as seen in Rogers' (2003) description of the S-curve adaption model. The emergence of the Internet made it easier for scientific, professional and private communities to discuss approaches to certain problems.

Growing access to the Internet lifted the more isolated nature of computer labs in generation 0.5 and paved the way for e-learning 1.0 and eventually to open access in 2.0. Subsequently, the Internet became the hub for not only e-learning but also blended, mobile, virtual and ubiquitous solutions. Its previously centralized and hierarchical role become democratic (Oral, 2008) and decentralized (Weller, 2007). A number of delivery methods have emerged and enjoy multi-device support. The anytime and anywhere aspect (Holmes & Gardner, 2006, p. 14) is not only a possibility but a socializing aspect in learners' lives today. While this carries a generational difference (Prensky, 2001, p. 1) it also established the possibility of more equal teacher and student roles. The main goal of e-learning 2.0 seems to be leading towards immersion both on the individual and group levels. What points to the latter is the development of MOOCs into cMOOCs (Alraimi et al., 2015), iMOOCs (Teixeira & Mota, 2014) and MOOC 2.0s (Sharma, 2014).

The current 2.0 state of e-learning established user-friendly environments which make learning context creation easier and potentially act as a socializing factor of digital natives and also immigrants. However, digital natives have a different technological background that is connected to a greater need for immersion. Current technological developments focusing on virtual realities, such as the *Oculus Rift*, and augmented realities, mirror this trend. Thus, the 3.0 state of e-learning could be motivated by increased immersion and the exploitation of virtual realities.

### 3.4.2 The possibility of e-learning 3.0

In light of recent technological and educational developments, a number of predictions of where the field of e-learning is headed have emerged. Huisman, de Boer, and Bótas (2012) for example discuss the future of English higher education. Although language education is at the core of the dissertation, it only partially represents the overall changes in the e-learning frame. A more detailed picture is presented by Martin, Diaz, Sancristobal, Gil, Castro, and Peire, (2011) who analyzed *Horizon Reports* from 2004 to 2014 in terms of technological trends.

Martin et al.'s (2011) findings can be grouped into three categories: currently important, upcoming and promising areas (p. 1904). Based on the *Horizon Reports*, they argue that social networking and mobile gadgets are at the core of education and are likely to have more far-reaching effects as well (p. 1904). This supports the points in the previous section concerning Web 2.0's impact on e-learning 2.0 through networking and device plurality. Games fit into the category of upcoming or developing technologies and as Martin et al. (2011) point out, they are expected to affect education in a similar manner as social networking and gadgets, although their impact would be more limited (p. 1904). They do not discuss virtual realities but address augmented ones by stressing that as an up-and-coming technology, they need further development to be included in education (p. 1904).

Currently, all three areas have advanced in their development. Networking is present in educational projects as well, for example in the form of *Edmodo*, which is a social learning platform. At the time of writing this dissertation, the website has more than 70 million users (see [edmodo.com/about](http://edmodo.com/about)). The present trajectory of the field can be summarized in Martin et al.'s (2011) point as “[e]ducation improvements do not necessarily have to be driven by technological developments. However, there is an increasing interest of researchers on using new technologies to improve education.” (p. 1893). This is what describes the upcoming and promising areas as, for example, gamification theory led to both the creation of education games and the application of commercially available ones to meet educational purposes. This issue coupled with the rise of virtual reality projects and gadgets points to how e-learning 3.0 is likely to be simulation and immersion oriented.

**Table 5:** A possible frame for e-learning 3.0

<b>e-learning 3.0</b>	
<b>Defining theoretical frame</b>	social constructivism (Sturm et al. 2009)
<b>The role of the Internet</b>	democratic (Oral, 2008) decentralized (Weller, 2007)
<b>Users' skills</b>	socialized in technology: digital natives (Prensky, 2001)
<b>Devices</b>	multi device and BYOD oriented
<b>Environment</b>	simulated and adaptive
<b>Teacher-student roles</b>	more equal and possibly includes AI assistants
<b>Delivery</b>	online, blended, mobile, virtual and ubiquitous
<b>MOOCs</b>	cMOOCs (Alraimi et al., 2015) iMOOCs (Teixeire & Mota, 2014) MOOC 2.0 (Sharma, 2014)
<b>Defining development</b>	the spread of virtual and augmented realities gamification and application of games for education
<b>Goal</b>	immersion through simulation
<b>Estimated time frame</b>	~ from the mid-to-late-2010s onward

A possible script in terms of changes in the e-learning frame for the next 10-15 years is the application of the advancements in augmented and virtual reality and artificial intelligence (AI) research to correspond with educational goals. There are already AI assistants available to the public like Apple's Siri or Microsoft's Cortana. Table 5 presents a possible frame for e-learning 3.0. While the aspects of defining theoretical frame, the role of the Internet, users' skills, devices, delivery and MOOCs are not different from the 2.0 stage, the others argue for an increased role of virtual realities through simulation. Overall, the possibility of e-learning 3.0 is connected to the role of augmented and virtual realities and how the established and developing technologies can lead to the creation of more advanced environments that build on simulation and immersion. Thus, the possibility of a new e-learning generation in the next 10-15 years can be feasible.

## **II. Factors influencing content development in e-learning**

### **Introduction**

The central aim of my dissertation is to address the possibilities of language skill development in blended learning. For this reason, following the theoretical foundations of e-learning, it is important to identify factors that influence content development. These are presented along two key areas including learners' individual differences and current trends in language learning using e-learning.

Individual differences are discussed in two groups. The first concerns variables connected to language learning in e-learning and the second group covers variables that have significant influences on e-learning participation. The first category includes age, motivation, learning and cognitive styles and autonomy. These are individual differences that define language learning in general. However, they also play an important role in e-learning applications. These individual differences are complemented by gender, willingness to use technology, online interaction and the 21<sup>st</sup> century skills which all shape students' e-learning experience.

Language education is a constantly evolving field which is quick to adapt and apply various learning and technological approaches to meet educational goals. From these five were identified to have special importance. In terms of learning framing, technical scaffolding, problem- and project-based learning are discussed in detail. Concerning the technological group, two solutions in the form of adaptive learning and gamification are addressed. This is followed by an analysis of how studies corresponding to the various frames are represented in the literature. Technical framing was identified as the most used and the possible reasons of learning approaches and students' technological socialization are explored. Finally, assessment in e-learning is discussed, with special focus on peer assessment.

## **4. Individual differences**

Individual differences represent an elaborate construct that is necessary to consider in educational settings and cover various aspects of students' learning and psychological differences. Dörnyei (2005), for example, goes into detail about the following areas: personality, temperament, mood, language aptitude, motivation, self-motivation, learning styles, cognitive styles, language learning styles, student self-regulation, anxiety, creativity, willingness to communicate, self-esteem and learner beliefs. While these variables cover the many aspects of the psychological development of language learners, e-learning represents a somewhat different construct. This entails that there are a number of additional individual differences together with the language learning ones. As the focus is on e-learning and language learning connections, individual differences that are primarily language related were omitted from discussion.

Individual differences that define e-learning can be sorted into two groups. The first considers variables that are present generally in language learning and e-learning occupies a technological dimension in them. These include age, motivation, learning styles and autonomy. The second group refers to individual differences that have specific connections to the e-learning setting and thus affect language learning in a major way. These encompass gender, willingness to use technology, online interaction and 21<sup>st</sup> century skills.

### **4.1 Variables connected to language learning in the e-learning frame**

The first category of individual differences is at the meeting point of language learning and e-learning. They are connected to both areas to varying degrees and are arguably equally important. Age is discussed as a frame to how generational differences between digital natives and immigrants (Prensky, 2001, p. 1) are present in the literature and how it relates to the 21<sup>st</sup> century skills. Motivation is addressed as the drive behind continuous learning and how it affects student expectations and satisfaction in e-learning. This is followed by a discussion of how learning styles can be analyzed and ways in which e-learning can contribute to more individualized instruction. Finally, autonomy is put under scrutiny, as the goal of instruction in any field is to make students autonomous users of the acquired knowledge, to which e-learning presents a number of opportunities.

### **4.1.1 Age**

Age is the first variable presented as it provides a frame to the other individual differences. It is a crucial factor in the start and continuance of language learning (see Nikolov, 2009). Next to gender and willingness to use technology, it is among the most persistent issues discussed in the literature. The starting point for this argument can be found in Prensky's (2001, p. 1) distinction of digital natives and immigrants. This has led to two important approaches that are discussed in further detail: addressing whether digital natives are a valid construct and how the generational differences affect educational and workplace conditions.

#### **4.1.1.1 The digital native and digital immigrant dichotomy**

Prensky's (2001) arguments about grouping users according to their technological socialization had a lasting impact on the literature. At the core of Prensky's dichotomy is the notion that as a result of interacting with digital environments "today's students *think and process information fundamentally differently* from their predecessors" [italics added by Prensky] (2001, p. 1). He labels those users who were socialized in technology digital natives. However, digital immigrants were described as having acquired digital skills as well, to varying degrees and Prensky (2001) emphasizes how they kept their "accents" which refer to how digital technology mixes with their prior socialization (pp. 1-2). Although it can be considered a useful framework, this distinction raises a number of questions. Most notably, what is the exact age group of the digital natives and does their digital literacy imply that they are more adept at using technological solutions than their digital immigrant teachers.

Prensky's (2001, p. 1) arguments refer to a larger labeling discrepancy in the literature. In his original distinction, it seems that digital natives and immigrants are easily distinguishable, homogenous groups. However, this is not supported by the literature. Margaryan, Littlejohn, and Vojt (2011) summarize the findings of a range of university level empirical studies and argue that using digital native to label an age group's technology application is rather oversimplified (p. 431). They also add that a universal, digital native group that is skilled in said technologies, might not be present (p. 439). Ng (2012a) also claims that there is little empirical evidence for the digital native argument (p. 1065).



Ng (2012a) conceptualized three points that debunk digital nativism . First, age is not decisive but the ways in which technology is integrated into meeting learning goals and previous practice are (p. 1065). Second, the application of available technology in a ubiquitous manner is more limited than previously assumed (p. 1065). Finally, the point about technologically rich environments affecting brain development also does not hold as it is not supported by scientific confirmation (p. 1065). These points undermine Prensky's (2001) arguments about digital natives.

#### **4.1.1.2 Digital literacy and digital divide**

Although Prensky's (2001) seemingly clear-cut dichotomy has been challenged, it still holds value as a distinguishing frame. The first feature where digital natives can be differentiated from immigrants is age. Although Ng (2012a, p. 1065) stressed that it is not decisive, he does so by relating it to technological socialization and through this correlation it can become a distinguishing factor. Jones, Ramanau, Cross, and Healing (2010) provide a frame for the digital native generation by establishing an age limit which covered a maximum of 25 years counting from 1983 (p. 723). However, they also advise caution concerning the homogeneity and demands of this generation (p. 731). This point leads to the second possible contrast which is not based on technological socialization as an environment but focuses on the acquired skill set which is different from digital immigrants.

The second feature that can be used to distinguish digital natives is based on the depth and speed of the skills they have acquired in their technological socialization. These are grouped under the umbrella term digital literacy and as Ng (2012a, p. 1067) explains based on Ng (2012b), encompass “the (i) technical (ii) cognitive and (iii) social-emotional dimensions of digital literacy” (p. 1067). Ng's (2012b) model relates to the three arguments made by Ng (2012a) explaining why digital native as a term used to describe the new generation of learners lacks empirical evidence. As technological socialization is present with various learner generations, this leads to two issues: transferability and adaption of digital literacies.

Mohammadyari and Singh (2015) call for researching how people can apply their digital literacy to accommodate e-learning in the workplace due to the changes and developments in e-learning (p. 12). They define digital literacy as “the ability to

understand, analyze, assess, organize and evaluate information using digital technologies” (p. 15). Teaching digital literacies is an important issue as although learners are socialized in technology, there may be no clear difference between personal and educational use of digital environments. Gurung and Rutledge (2014) found that these two contexts had a number of connections on digital skill development and as a consequence, the line between learning at home or in school using technology became less defined (p. 99). What this means is that students will try to adapt the skills they have acquired from their personal use to educational contexts. Support for this point is found in Ng (2012a) calling attention to the lifestyle aspect of Web 2.0 for young generations (p. 1077).

There are two reasons digital literacy should be used as scaffolding for future workplace skill development. The first concerns Ng’s (2012a) study, where he found that while students had little problem adapting to new technologies, the planning-preparing-integrating part was more time consuming for them (p. 1077). The second scaffolding, namely identity formation, arises through interaction in such environments. Mohammadyari and Singh (2015) emphasize the role of peers and friends in this development and argue that the received information and guidance aids learners to estimate their required engagement with technologies and possible outcomes of sustained usage (p. 20). Such an engagement can help both digital native and immigrant to learners bridge the gap and lessen the digital divide.

The term *digital divide* is a currently used to differentiate between different age groups of technology users. As Waycott, Bennet, Kennedy, Dalgarno, and Gray (2010) explain, this is due to Prensky’s (2001) analogy (p.1202). In their study, Waycott et al. (2010) did not find evidence for digital divide between students and teachers (p. 1208). They claim that differences were present in where technology was used and how participants applied the same technologies but to reach different ends (p. 1209). Rivera-Nivar and Pomales-García (2010) looked at the issue of aging at the workplace and found a connection between information recall and “lesson content type, environment simulator, video size and participant age” (p. 957). Their findings (pp. 957-958) suggest that although the digital divide is by no means final, it is still a variable to reckon with. Overall, the level of digital nativism and digital literacy together define the age factor. While one can be more important than the other, their combination is what determines the digital skills of the e-learner.

### 4.1.2 Motivation

Motivation is arguably the most important individual difference as it not only drives language learning but skill and knowledge acquisition in general. It is a well-established area in language instruction with probably the largest base of research behind it. In connection with SLA, Dörnyei (2005) writes that “[i]t provides the primary impetus to initiate L2 learning and later the driving force to sustain the long and often tedious learning process” (p. 65). As motivation can be approached from many points, a guiding frame is needed for its discussion in connection with e-learning as well as language learning.

The Dörnyei and Ottó model of L2 motivation (1998), as seen in Dörnyei (2005, pp. 84-85) and summarized in Table 6, provides a three-step frame for handling motivation that is also applicable to e-learning environments. Its basic premise is that motivation is generated, maintained and eventually evaluated (Dörnyei, 2005, p. 84). According to this model, the motivational functions of the preactional stage are goal setting, intention construction and launching. The actional stage consists of task completion, self-evaluation and –assessment. Finally, the postactional stage evaluates the previous stages and relates them to future intentions (p. 85). These steps are suitable for e-learning projects as well, since the motivational influences discussed by Dörnyei (2005, p. 85) are mostly the same.

The application of the Dörnyei and Ottó model of L2 motivation (1998) to the present e-learning setting follows the same three steps by discussing how technology can influence each stage. As e-learning makes it possible for learners to be engaged both in- and out-of-class with their development, this issue is addressed at all stages through student expectations, interest in technology, flow and connections with student satisfaction and demotivation.

**Table 6:** Summary of the Dörnyei and Ottó model of L2 motivation (1998) based on Dörnyei (2005, pp. 84-85)

<b>Motivational stage</b>	<b>Preactional</b>	<b>Actional</b>	<b>Postactional</b>
<b>Motivation type</b>	choice	executive	motivational retrospection
<b>Motivational goal</b>	generating motivation	maintaining motivation	evaluation

#### **4.1.2.1 Generating motivation**

Generating motivation is the first step in engaging students in their own learning. In the Dörnyei and Ottó model of L2 motivation (1998), it is part of the preactional stage (Dörnyei, 2005, p. 85). It precedes the actual task engagement and provides a drive for it. E-learning adds an additional variable to this in the form of technology, gadgets, environments and learning applications.

Looking at the technology aspect in general, Ushioda (2013, p. 1) summarizes Stockwell's (2013) arguments about the two-edged nature of motivation that brings learners to engage with technology. Thus, interest in technology can lead to language related applications or vice versa (p. 1). Although in these claims technology is used as an umbrella term with no differentiation in how it is applied, it is a useful analogy as differences in technological socialization, gender and e-learning expectations will likely mean that both appear in an average group of learners.

#### **4.1.2.2 Maintaining motivation**

Once motivation has been established, upholding and maintaining it is the primary goal of this stage. In the Dörnyei and Ottó model of L2 motivation (1998) this is guided by executive motivation as it refers to sustained activities (Dörnyei, 2005, p. 84). The technological aspect of e-learning can assist this longitudinal process through maintaining interest, engaging the students and giving them control of the process.

Wiśniewska (2013, p. 211) illustrates the concept of interest consisting of individual and situational interest. The latter is further divided into triggered and maintained dimensions. The parallels to the Dörnyei and Ottó model of L2 motivation (1998) are striking as individual interest plays an important role in the preactional stage while the triggered and maintained interests are part of sustained motivation.

There are a number of ways in which e-learning can complement language learning motivation. Jones, Issroff, Scanlon, Gill, McAndrew, and Blake (2006) discuss six motivation influencing variables in mobile learning: freedom, ownership, communication, fun, context and continuity (p. 252). These can be related to e-learning in general as mobile learning represents a potential bridging function between private and educational learning environments as a source of motivation due to the devices

being part of the private sphere of the learners. In practical terms, this means it is more connected to informal usage.

Jones et al. (2006) call attention to the higher motivational values that learners relate to informal settings (p. 252). Such environments can be applied to in-class learning situations and can be linked to two further motivation models. Jones and Issroff (2005, p. 397) discuss Keller's (1987) motivational model and list that he argues for the motivational value of "curiosity, challenge, confidence and control" (p. 397). A possible bridge would be another model that Jones and Issroff (2005, pp. 398-400) discuss, namely how Issroff and del Soldato (1996) approach motivational aspects of collaborative learning through social affinity between partners, cognitive ability, feedback, distribution of control, nature of task and time.

Control appears prominently in both of the above models which in practice means that the triggered-maintained interest turns into active engagement guided by the learners. Essential for this is Esteban-Millat, Martínez-López, Huertas-García, Meseguer, and Rodríguez-Ardura's (2014) finding concerning the connections between the level of interactivity and perceived control in online learning (p. 119). Furthermore, they investigated how learners' flow experience is indirectly related to the tutor's views and the materials used (p. 119). Looking at Csíkszentmihályi's (1990) definition, flow can be understood triggered by an activity where one understands the rules of task completion, possesses the required skills and is deeply engaged in the completion process (p. 71). What can be concluded from these models and Esteban-Millat et al.'s (2014) results is that control and engagement occupy central positions in sustaining motivation in e-learning environments. Also, a fluctuating level of motivation is normal as, Falout (2012) explains (p. 3).

#### **4.1.2.3 Evaluating motivation**

The final step in the Dörnyei and Ottó L2 motivation model (1998) is evaluating motivation. As Dörnyei (2005) claims, this is the "learners' retrospective evaluation of how things went" (p. 84). This stage links into the students' eventual continuation of engagement with the learning material and determines out-of-class usage as well.

Fukuda and Yoshida (2013) argue that the following factors have an impact on out-of-class study time: “clear course aims, strong student–teacher relationships, a non-threatening classroom environment [and] interactive classroom procedures” (p. 38). Although these need to be established during in-class sessions, if virtual learning environments are involved, students’ in-class experiences are likely to play into the eventual learning outcomes. If learners see these settings as confusing, unwelcoming or useless, out-of-class usage of the environments will likely drop exponentially. This issue is directly related to Dörnyei’s (2001, p. 20) description of the expectancy-value theory and basically means that learners invest a certain level of motivation in task completion and depending on their assessment of its contribution to their development, it will determine their continued motivation. Finally, the engagement in learning communities through digital media and its effects on attitude and aptitude cannot be underestimated as highlighted by Galoyana and Madyarova (2016, p. 109). These have significant influences on motivation as a growing portion of digital natives’ socialization.

**Table 7:** Summary of how learning and e-learning differences affect motivation in the Dörnyei and Ottó model of L2 motivation (1998)

<b>Motivational stage</b>	<b>Preactional</b>	<b>Actional</b>	<b>Postactional</b>
<b>Learner differences affecting motivation</b>	expectations gender technological socialization	interest engagement control	expectancy-value comparison experience
<b>E-learning differences affecting motivation</b>	devices prior experience 21 <sup>st</sup> century skills	interaction willingness to use technology	continued usage mobile learning online interaction

Table 7 presents a summary of the above arguments of how learning and e-learning differences affect motivation in the three stages of the Dörnyei and Ottó model of L2 motivation (1998). It can be seen that the motivational structure is highly related to both areas. The preactional stage has the largest number of learning differences that are connected to the learning history of students and their private sphere in the form of their devices. The actional stage is defined by learner involvement which translates to level of willingness to use the given technologies. Finally, the postactional stage refers to students’ reflection on their experiences and it can be integrated into their formal and informal learning as well. As a consequence, how learners experience motivation can

largely impact their psychological development concerning their possible selves (see Dörnyei, 2009, pp. 212-217).

#### **4.1.3 Learning and cognitive styles**

Learning styles represent individual differences that enable the personalization of the learning process. As Chang, Kao, Chu, and Chiu (2009) explain, they are “indicator[s] of how a student learns and likes to learn, and how an instructor teaches to successfully address the needs of the individual students” and emphasize the importance of identifying learning styles as a starting point for adaptive learning (p. 273). Relating learning styles to the second stage of the Dörnyei and Ottó model of L2 motivation (1998), where executive motivation drives control (Dörnyei, 2005, p. 84), it can be seen that learning styles provide initiative for interest and can lead to increased learner control through engagement. Although, as Hatami (2013) highlights, there is a divide in the literature regarding whether tailoring teaching to learning styles leads to increased learning (p. 489), adapting to students’ preferred way of learning still holds a number of motivational values that need to be discussed.

Lee, Cheng, Rai, and Depickere (2005) argued more than a decade ago that in web-based learning approaches “environments can simultaneously serve as delivery medium, content provider and subject matter” (p. 2) which is still a valid point. This puts special emphasis on the environment being non-threatening and flexible to adapt to the learning styles of students. While there are studies such as Chang et al. (2009) who successfully implemented learning style identifying mechanisms (p. 281), such resources may not always be available. In these cases, identifying learners’ cognitive styles can be a reasonable first step.

Chen (2010, p. 1029) calls attention to Riding and Rayner’s model (1998) in which cognitive styles refer to “preferred and habitual approach to organizing and representing information” and that they affect strategy use in learning and navigation. Lee et al. (2005) explain that cognitive styles can be grouped as “either field dependent (FD) or field independent (FI)” (p. 3). They give a lengthy summary of the FD-FI continuum and touch upon issues like preference for learning, social orientation, learning approaches, hypermedia learning environments and tool usage (see Table 8 for a summary). Concerning e-learning, Lee et al.’s (2005) claim that FI learners are

expected to have huge advantages over FD students (p. 5). A connection to this issue can be found in Lee et al.'s (2005, p. 4) point about how the FD learners are more socially oriented in their learning. This makes sense, since in virtual environments this feature is less focused and more emphasis is put on individual advancement which also links to the non-linear approach preferred by FI students.

**Table 8:** Summary of Lee et al.'s (2005, pp. 3-6) discussion of cognitive styles

<b>Cognitive style</b>	<b>Field dependent</b>	<b>Field independent</b>
<b>Preference for learning</b>	more guidance oriented	more analytical and autonomous
<b>Social orientation</b>	more socially oriented	less socially oriented
<b>Learning approach</b>	linear	non-linear
<b>Hypermedia learning environments</b>	less effective usage	more effective usage
<b>Using tools in learning</b>	less likely	more likely

Lee et al. (2005) found cognitive styles to be major determiners of the application of online learning settings as they relate to differences in learning dimensions and are consequently indispensable in the success of adaptive teaching (p. 14). Calcaterra, Antonietti and Underwood's (2005) results concerning how "hypermedia navigation behavior was linked to skills rather than to styles" (p. 454) is also of importance as it would entail that FD or FI can be linked to the technological socialization of learners. Based on these points, orientation towards field dependence would relate more to digital immigrant learners whereas field independence to digital natives. This issue is further evidenced by Barak (2005) who claims that learners involved in projects without computers follow linear progression, whereas students engaged with computerized projects tend to apply strategies that point more toward a FI approach (p. 241).

Learning and cognitive styles are an area of e-learning that can be addressed in a number of ways through computer- and mobile assisted solutions across devices. While creating environments that adapt to these styles represents a great deal of challenge for instructors and content developers, they can contribute to technological socialization, decreased technology-related anxiety and enhanced learning experience as evidenced by Mampadi, Chen, Ghinea and Chen's (2011) results in connection with adaptive hypermedia systems (p. 1009).



#### 4.1.4 Autonomy

The final individual difference that is addressed as a language learning variable that can be promoted by e-learning is autonomy. It is an important concept in SLA as it refers to a level in the learning process where students are competent enough to take control of their own learning to various degrees. Borg and Al-Busaidi (2012) claim that a prevailing teacher belief is providing learners with “the freedom and/or ability to make choices and decisions” (p. 286). This issue is the basis of learner autonomy and refers to a shared concept across the literature.

Bhattacharya and Chauhan (2010) summarize the literature’s points on autonomy which points to a number of emerging patterns. Although, their analysis leads into connecting autonomy to blogging, it also lays out the conceptualization of various levels of autonomy. What this means is that developing autonomy put learners on a three or four stage internalization process.

A similar approach to the Dörnyei and Ottó (1998) model of motivation (Dörnyei, 2005, pp. 84-85) can be applied to autonomy development. This entails a three-stage process, starting with autonomy triggering variables which lead to individual learning and eventually to the control of the learning process. A point accentuated by Bhattacharya and Chauhan (2010) fits this model well, as they call attention to how autonomy does not need to be synonymous with individual learning (p. 377). Hence, in order to facilitate cooperation, negotiated autonomy can be seen as a fourth possible level of autonomy development. However, unlike the first three stages of covering triggering, individualizing and controlling autonomy, the fourth level is not connected to this diachronic process. In practice this means that negotiated autonomy can be present with each of the other stages at the same time.

E-learning presents various contexts for teachers and students to develop autonomy. Illés (2012) argues that in language development literature, translation and CALL are fitting for autonomy development (p. 511). She further emphasizes how CALL contributes to language and technological advancements (p. 511). This issue is connected to the previously discussed individual differences as in cases when FI learners experience greater degrees of freedom, they will feel more motivated to take control of their own learning. Similar results can be achieved with FD learners as well through negotiated autonomy settings. By using e-learning and linking both language

and technical development, such environments can lead to furthering learners' digital literacy, 21<sup>st</sup> century skills and online communication in general. The motivational value of such approaches is likely to be greater as learners will be able to relate this type of development to real-life challenges that they can apply in the future, thus furthering their autonomy.

## **4.2 Variables related to e-learning**

Individual differences related to e-learning concern variables that would not be present through the same functions in traditional contexts. However, they are major determiners of technological socialization. Two such differences received major focus in the literature, which are gender and willingness to use technology. Although gender is obviously present in traditional educational contexts, its role becomes more emphasized in e-learning as both gender and willingness to use technology are presumed to be characterized by a male bias. However, an analysis of the literature shows that this is more related to specific fields as well as attitudes and can be minimized with appropriate e-learning solutions. Willingness to use technology is discussed as a construct that is made up of technology acceptance, resistance, anxiety and obsession. It is argued to be a major determiner of e-learning application that is influenced by personal and educational usage. Online interaction is contrasted with face-to-face environments and how social networking contributes to academic and identity development are also discussed. Finally, the 21<sup>st</sup> century skills are analyzed in terms of the construct itself and how they relate to the other seven individual differences as a preferred learning outcome of e-learning.

### **4.2.1 Gender**

How gender differences affect e-learning performance is a major issue in the literature. It is a highly researched area as the bias associated with technological skills is a factor that can have long-lasting consequences on learners' socialization. Since digital natives are increasingly accessing technology at early ages, their associations with gender can determine their future work aspirations. To see this developing trend, in the following research projects are discussed at various levels of education to pinpoint how at

different stages gender differences may emerge and what solutions can be applied to minimize them, if present.

#### **4.2.1.1 Connections between ICT and gender**

Information communication technology (ICT) in the 21<sup>st</sup> century is an important socializing factor in the development of digital natives. However, there is a persistent bias towards male usage of ICT being more developed than female (Li & Kirkup, 2007, p. 302). Li and Kirkup (2007, p. 303) further argue how contrary to previous beliefs, gender related attitudinal differences regarding the Internet are minimal. Such a finding points to three issues. First, the idea of gender bias is outdated and was more prevalent in the socialization of digital natives and immigrants when access to technology was limited. Second, it is present only in some aspects rather than the whole construct as Li and Kirkup's (2007) above points are about general IT usage and Internet attitudes. Third, it is in connection with the learners' socialization with technology at home and at various levels of education.

Addressing the first aspect, how access to technology can lead to gender differences, Papastergiou and Solomonidou (2005) point to historical reasons (p. 378). They discuss how the gender gap is connected to technology and science related fields and is prevailing in both educational and work contexts (p. 378). However, Papastergiou and Solomonidou (2005) base this argument on Solomonidou's previous 1998 and 2001 findings. In the time that has passed since then not only has Web 2.0 changed the way of content distribution but also smart devices and Internet access became widely available. These are factors that arguably have far-reaching impact on the gender-gap construct.

Aspects of learners' socialization and their effects on gender differences go hand in hand. Volman, van Eck, Heemskerk, and Kuiper (2005, p. 36) explain that nowadays ICT instruction is more concerned how it can be applied as a learning tool. In terms of gender differences, Volman et al. (2005, p. 36) list that the literature is concerned with ICT attitude, interest and self-confidence. The importance of these variables becomes even more significant when taking into consideration Abbiss' (2009) claims. She conceptualizes that "cyberspace culture will increasingly reflect the desires and sensibilities of males to the exclusion of females if boys continue to be the inventors

and girls the users” (p. 344). What this means is that as long as the status quo is male-oriented, gender differences will likely continue to be present.

#### **4.2.1.2 Gender differences in ICT at various levels of education**

An emerging pattern from the analysis of the literature shows that gender difference studies are mainly concerned with the primary, secondary and tertiary educational levels (see Table 9). Two age groups receive focused attention covering the 13-16 and 18-21 years. The results of these studies and their aims point to two trends. The first concerns the 13-16 age group and how the exposure and usage of ICT at home, in educational contexts and role models in the form of IT teachers can shape socialization and create gender differences. The second group encompassing the 18-21 age covers how prior socialization has shaped students’ understanding of their educational goals and possibilities.

Findings such as girls underestimating their ICT skills and limited differences in Internet skills (Kuhlemeier & Hemker, 2007, p. 475), no significant differences in online communication and educational use of the Internet as well as recreational Internet usage somewhat in favor of males (Papastergiou & Solomonidou, 2005, p. 390) show that male and female gender differences are less skill- and more goal-based. Supporting this claim is Nævdal’s (2007) argument that while 15-16 year-old boys use computers primarily for entertainment and experimental purposes, girls of the same age are more focused on practical and social possibilities (p. 1114). Nævdal (2007) also found that girls not only outperformed boys in English but showcased a linear relationship concerning time spent using the computer and English achievement, whereas in the case of boys this was curved-linear (p. 1114). This is similar to the differences found between field independent and dependent learning approaches (see section 4.1.3 on p. 55). Furthermore, it is also in line with Volman et al.’s (2005) findings that in working with ICT boys prefer exploration while girls are more guidance oriented (p. 51.).

**Table 9:** A thematic representation of gender differences in ICT in the literature

Context	Comparison	Age/ n/ m+f	Gender difference	
			Male	Female
<b>Primary and secondary education</b>	recreational Internet usage (Papastergiou & Solomonidou, 2005, p. 390)	12-16 y av. 14 y 170+170	used more	used somewhat less
	online communication (Papastergiou & Solomonidou, 2005, p. 390)	12-16 y av. 14 y 170+170	not significant	
	educational Internet use (Papastergiou & Solomonidou, 2005, p. 390)	12-16 y av. 14 y 170+170	not significant	
	decrease in female CS teachers' presence (Papastergiou, 2008, p. 606)	17-18 y 177+181		decreased computer self-efficacy
	increase in female CS teachers' presence (Papastergiou, 2008, p. 606)	17-18 y 177+181		increased computer self-efficacy
	working with ICT (Volman et al., 2005, p. 51)	93+120	exploration	with explanation
	computer usage (Nævdal, 2007, p. 1114)	15-16 y 656	entertainment experimentation	more practical more social
	PC-time and achievement in English relationship (Nævdal, 2007, p. 1119)	15-16 y 656	curved-linear	linear
	student-centered approaches to information science instruction (Vekiri, 2010, p. 22)	~14-15 y 135+166		motivating
	own ICT skill estimation (Kuhlemeier & Hemker, 2007, p. 475)	13-15 1219+ 1126	higher estimation	underestimation
	development level of Internet skill (Kuhlemeier & Hemker, 2007, p. 475)	13-15 1219+ 1126	somewhat higher	somewhat lower
	participation in ICT subjects and careers (Anderson et al., 2008, p. 1305)	~17-18 f: 1453	increasing	decreasing
<b>Tertiary education</b>	academic performance in College Entrance Examination (Fan & Li, 2005, p. 291)	~18-21 y 796+144	lower performance	higher performance
	attitudes towards computers (Smith & Oosthuizen, 2006, p. 365)	~18+ y 1062	no difference	
	attitude towards Internet (Li & Kirkup, 2007, p. 303)	18-25 y 217+248	little difference	
	activities concerning information technology (Li & Kirkup, 2007, p. 302)	18-25 y 217+248	stereotyped toward males	

**Legend:** **n**: number of participants, **y**: age in years, **av.:** average, **~**: not addressed concretely, estimation based on descriptions in the article (e.g. first year university students equal ~18+), **m+f**: distribution of male and female students in the sample (if discussed)

Despite the similarities in skills, female presence in ICT careers and even subject participation is falling (Anderson, Lankshear, Timms, & Courtney, 2008, p. 1305). Anderson et al. (2008) provide a list of five deterring factors that female students associate with the ICT field. These factors include the perceived image of the field, male bias, feelings of inferiority, few female IT teachers, missing role models and limited ICT proficiency (p. 1306). Although Anderson et al. (2008) found only limited support for these points in their survey, two other factors were identified. Female students regarded ICT subjects as boring and dissatisfactory (p. 1314). A relation can be found with these results and Vekiri and Chronaki's (2008) point as they claim that it is highly possible that peer and family attitudes shape ICT related gender differences (p. 1394). Vekiri (2010) confirmed that there are connections between teacher and parents roles and ICT related student motivation (p. 22). This means that even if female and male students start with similar skills, their primary and secondary socializations can nullify them and lead to gender differences.

Findings at the tertiary educational level continue the same trend as at the primary-secondary levels. Fan and Li (2005) found that in Taiwan female students performed better than male students in College Entrance Examinations (p. 291) in computer science programs which they explain through a combination of "prior computer experience, self-efficacy and academic performance" (p. 293). In Africa, Smith and Oosthuizen (2006) did not find significant differences between female and male attitudes towards computers (p. 365). Li and Kirkup's (2007) results point to the same conclusion regarding students' views on computer ownership in the UK and China (p. 311). Also, personal use of the Internet tends to be more male-oriented and women underestimate their ICT skills in both countries as both male and female students could perform information searching tasks on similar levels (Li & Kirkup, 2007, p. 312).

The above studies illustrate that cultural differences do not necessarily affect gender differences in ICT skills at the tertiary educational level. Socialization and role models play a more important role in this development (Papastergiou, 2008, pp. 605-606). However, the studies also revealed key points in technological socialization where gender differences can be compensated for. The technological dimension of e-learning is well suited to address these gender differences and presents two major solutions. The first concerns Carbonaro, Szafron, Cutumisu and Schaeffer's (2010) approach focusing on applying a game-based approach to IT instruction (p. 1110). Another solution could

be the application of adaptive hypermedia systems as gender is among the factors that Mampadi et al. (2011, p. 1003) discuss. Overall, simulations and virtual realities can present contexts for unbiased ways for interaction through peer-focused socialization spaces.

#### **4.2.2 Willingness to use technology**

Willingness to use technology, an essential individual difference connected to e-learning, is similarly important as motivation in the learning process. As argued previously in section 3.2.1 (see p. 23), e-learning can be distilled into the simple equation of device, Internet and learning approaches. Hence, in settings where participants see technology as a threat, this model will collapse. Lai (2013) calls attention to how crucially self-directed technology use affects learning and how out-of-class usage should be promoted (p. 100). These are critical points as ICT knowledge should be transferable. Kennewell and Morgan's (2006) argument concerning how ICT capability goes beyond school opportunities and connects to growingly technology-based work settings also underpins this argument (p. 167).

Willingness to use technology is, then, a multi-level construct that ranges from simple variables such as electric literacy (Godwin-Jones, 2006, p. 8) to more complex ones such as ICT capability (Kennewell & Morgan, 2006, p. 256), even encompassing multiuser variables in the form of social media. The latter has been shown to be an important factor in college aspirations (see Wohn, Ellison, Khan, Fewins-Bliss, & Gray, 2013, p. 434). For this reason, willingness to use technology is presented through two key aspects: technology acceptance and its opposite, technology related anxiety, obsession and resistance. Finally, the possibilities of how of e-learning can contribute to technology acceptance are discussed.

##### **4.2.2.1 Technology acceptance**

Technology acceptance is transparent construct on the surface, referring to users willingly participating in ICT related activities; however, it has a more complex psychological structure. Lai's (2013, p. 101) summary of technology adaption affecting variables can be related to Dörnyei's (2001, p. 20) expectancy-value theory and

basically means that students will more likely adapt technological solutions in their learning if they are to some level familiar with them and see how it will support their progress.

A further articulation of technology acceptance can be found in Lai's (2013, p. 101) discussion of Ajzen's (1985) theory of planned behavior. This is a three-variable construct that encompasses "an attitudinal (...) a perceived behavior control (...) [and] a social influence component" (p. 101). Such an approach extends the expectancy-value core with adding the social variable as an equally important part of the construct. Although Ajzen's (1985) theory is more than 30 years old, it is highly applicable to the Web 2.0 era where networking is a major factor. Thus, social influence in the form of peer pressure or support will likely affect technology acceptance. In the case of ICT, this represents two environments: at home and in the educational institutions. How this relates to technology acceptance can be found in Kuhlemeier and Hemker's (2007) results. They state that digital skill acquisition is more connected to informal behavior in the form of exploration and experimentation than formal education (p. 476).

The above findings point to how technological socialization in the home is exploratory and as a result more field independent and the school environments are more concerned with applying those skills and therefore are rather field dependent. As a possible construct, this explains how gender differences arise in working with ICT even though female and male students start out with similar skills (see Table 9 in section 4.2.1.2 on p. 61). Educational applications can thus contribute to technology acceptance in different manners.

Venkatesh, Morris, Davis, and Davis' (2003) unified theory of acceptance and use of technology provides a suitable frame for educational support of technology acceptance. As Mohammadyari and Singh (2015) explain, it extends on the theory of planned behavior by incorporating the technology acceptance model as well (p. 13). It also points to effort expectance being a major determiner of technology acceptance (Mohammadyari & Singhm 2015, p. 13) which is also in line with Dörnyei's (2001, p. 20) expectancy-value theory. What this means in terms of technology adaption is that tutors should explore learners' ICT level and provide contexts where they have equal opportunities to apply technologies over a sustained period of time to contribute to their professional IT socialization as well.



#### **4.2.2.2 Technology related anxiety, resistance and obsession**

In the previous section those aspects of technology use were addressed that lead to technology acceptance and eventually contribute positively to willingness to use technology. However, technology use can also lead to anxiety, resistance and even obsession. Venkatesh et al. (2003) present user acceptance through three steps. The interaction starts with the how the users react to IT, followed by intentions and finally usage (p. 427). Venkatesh et al. (2003) also illustrate that the first and last steps have a two-way relation, meaning that intentions are a transitional stage largely influenced by user reactions and IT use. Ideally, this leads to technology acceptance and continued application. However, if discrepancies arise, technology resistance can be an outcome.

Brosnan (2002, p. 12) highlights Jay's (1981) influential approach to technophobia which covers three aspects of technology related anxiety. From these the second, referring to "fear or anxiety towards computers" (Brosnan, 2012, p. 12) is of central importance in the present discussion. Based on how technological socialization is more present with digital natives, one could argue that digital immigrants are more prone to experiencing technology related anxiety. However, this generalization would provide a limited picture.

Technological anxiety can be present in everyday learning situations. Conti-Ramsden, Durkin, and Walker (2010) identified in their project with students with specific language impairment a connection between language skill and computer related anxiety (p. 143). As they explain, these learners had to deal with "general anxiety, perceived ease of use and language ability" (p. 143). In Venkatesh et al.'s (2003) model this would mean that these students would be less willing to use the given technology due to it being a source of anxiety. This has two major consequences. First, until the issue is addressed through adaptive systems or additional IT training, learners with such problems will not be able to participate fully in classroom instruction. Second, if computer-based testing is used they will also experience test anxiety additionally to the digital environment.

The networking and rapid technological development of the Web 2.0 era was not without a number of psychological problems. As a consequence, technology-related anxiety is by no means limited to educational settings. One of the most wide-reaching problems caused by technology is obsession ending in addiction. Rosen (2012) argues

that these present mostly symptoms such as compulsive use, withdrawal and relapse and claims that technological addiction is not equally distributed among personality types (p. 74).

A second set of problems emerged as a result of Web 2.0 and social media. Although Wohn et al. (2013) address how social media affects students' higher education aspirations (p. 434), there are less positive results as well. Arguably one such issue with the highest reach is cyberbullying. As Huang and Chou (2013) explain, it is different from face-to-face bullying through "rapid dissemination and anonymity, both resulting from the technology element" (p. 228). Huang and Chou (2013) summarize a number of factors that are present in cyberbullying from gender to technology use (p. 228). Another major problem present next to cyberbullying is online sexual harassment. It is a growing problem that has led to initiatives such as Müller, Röder and Fingerle's (2014) *Cool and Safe* prevention program, for example.

Such a complex psychological setting where technology acceptance, anxiety, resistance and obsession may be present simultaneously connecting various steps of the learning process requires instructors to be familiar with the potential risk minimizing factors of e-learning. Moreover, parents also need to be aware of above issues as well, since Kuhlemeier and Hemker (2007, p. 476) found that students acquiring digital skills largely turn to informal contexts where the aforementioned risks are more prominent

#### **4.2.2.3 Addressing how e-learning can support willingness to use technology**

E-learning settings can provide scaffoldings to support willingness to use technology through integrative and longitudinal projects where students can apply their ICT skills to reach various goals. Crucial to this is Stevens' (2011) explanation of the 'aha!' moment, which is understanding the merits of technology through experience over time (p. 2). He further argues that "technologies only become transformative when their use becomes second-nature to the point where we and those around us use them in our normal workflow" (Stevens, 2011, p. 3). Such prolonged exposure and integration of technologies into language learning requires instructors to reevaluate the teaching process and explore learning and learning needs.

Thompson's (2013, p. 14) summary of digital native learner characteristics relate to Stevens' (2010, p. 3) paradigm shift aspects about current teaching and e-learning contexts. Factors listed by Stevens (2010, p. 3) such as pedagogy, literacy, formality, transfer and directionality can all be connected to findings in digital native research and, in Thompson's (2013) research, are all directly related to the teaching process. This system is supported by the previously discussed double technological socialization of learners in the home and school environments and points to the former having a predetermining impact on experiences related in the latter. As a developmental process, this construct is related to an increased need for scaffolding in educational contexts. Indeed, Erlich, Erlich-Philip, and Gal-Ezer (2005, p. 485) argue for establishing a level computer literacy before course-level computer mediated communication employment. Similarly, Thompson (2013, p. 23) highlights that scaffolding is required for digital natives as without it students might fossilize at the level of personal use without developing an understanding of how ICT can be applied to contribute to their progress in education and work. In practice this translates to integrating the learners' already present skills into 21<sup>st</sup> century skill applications.

Finding a balance between learner and educational needs through e-learning contributes to the development of positive computer self-concept. Christoph et al. (2015) call attention to the connections between computer self-concept and sustained computer-based learning (p. 2). Arriving at this stage does not only contribute to technology acceptance but also creates learning settings that are motivational for the learners as they see their skills being transferable and beneficial for their professional development in general. For this reason, technology introduction needs to follow a frame that establishes the ground for such a development. T. Hayes' (2008) three-e strategy concept does so as it establishes steps for technology acceptance that e-learning can foster. The three steps concerns understanding the applicability of technology, sufficiently accessible usage and long-term integration (p. 68). What T. Hayes' (2008) model basically does is relating the technology acceptance model to e-learning environments in the form of scaffolding instructors can use to develop learner autonomy. For this reason, it represents an important frame to how e-learning can contribute to willingness to use technology.

### **4.2.3 Online interaction**

The online space introduced a number of socialization affecting individual differences in the development of learners. These changed not only how students view themselves but also the ways in which they are willing to engage in technology related activities and community building. Moreover, engagement with social networking sites such as *Facebook* has had wide reaching influences on learners' language and academic development. It also changed their concepts of face-to-face interaction and identity building. For this reason, online interaction is discussed through these three points and its connections to willingness to use technology are also addressed.

#### **4.2.3.1 The effects of online and face-to-face interaction on learner development**

One of the strengths of e-learning is that it makes learning possible beyond the time and space limitations of the classroom. Furthermore, geographical distances are also reassessed as students from all over the world can participate in online lessons. This means that learners' socialization is characterized by online and face-to-face interaction both inside and outside of educational contexts. Distance and online collaborative learning have become also established areas for interaction.

Michinov and Michinov (2008, p. 1540) write that the last decade of higher education witnessed a rise in online distance group learning. Such a development is by no means surprising as it shares the same educational goals which are furthered by the learners' engagement with online groups in social networking sites. Thus, students apply ICT experiences they acquired in their private life to their learning needs (see Stevens, 2011, pp. 2-3). This corresponds to Michinov and Michinov's (2008) definition of collaborative learning which entails that it "generally takes place in an environment in which participants exchange ideas and share experiences in order to achieve group solutions to complex problems and, in doing so, build up knowledge" (p. 1541). An important development emphasized by Michinov and Michinov (2008) is that fully online approaches are growingly incorporating face-to-face components either in the form of an introductory session or periodically through the learning process (p. 1541). This trend points to a development in the blended direction.

A blended application of collaborative learning can be found in the form of telecollaboration which uses the online space for experimentation and the face-to-face

sessions for learning framing (Guth & Helm, 2012, p. 42). While there is room to experiment with the roles of the environments and their percentage, this combination is what enables the development and application of a larger number of skills than each context could do on its own. In order to establish beneficial environments for online collaborative learning, three issues need to be taken into account to develop technology acceptance and limit anxiety. These concern teacher guidance, environment safety and required literacies for sufficient engagement.

Tsai (2010, p. 1138) argues that online collaborative learning will not reach its full potential if learners do not possess initial elementary knowledge. Tsai (2010) supports this claim with results of significant learning differences and emphasizes the major role of teachers in the initiation phase (p. 1142). Teacher presence contributes to students' engagement in the learning environments as they will feel safer and less anxious, which are cornerstones of online community building (Jones & Issroff, 2005, p. 403). Providing help to learners during the online segments is also important as Kitsantas and Chow (2007, p. 384) articulate. Kitsantas and Chow (2007, p. 393) explain that asynchronous communication in online environments presents increased opportunities for T-S interactions as the virtual space can lower students' perceived threat level.

Finally, the role of online literacies needs to be discussed. Guth and Helm (2012 p. 43) argue that Lankshear and Knobel (2006) pinpointed three dimensions of new literacies, namely operational, cultural and critical ones. These fit well into Thompson's (2013, p. 14) summary of digital native learner characteristics and Stevens' (2010, p. 3) ten paradigm shifts. However, these literacies are not readily available but have to be trained and practiced. English language education can scaffold this development, as Illés (2012, p. 505) argues. Thus, online learning presents a frame for such projects as online collaboration in the form social networking and media provides a motivating frame for flow (Weber, Tamborini, Westcott-Baker, & Kantor, 2009, p. 400) and skills application.

#### 4.2.3.2 Social networking affecting academic and identity development

Social networks have become an essential part in the socialization of learners and have been applied in academic settings as well. Similarly to the application of digital skills, a distinction can be drawn between formal and informal uses of social networking sites. Although there are obviously differences in the objectives of these approaches, they follow the same pattern of community building.

Galoyana and Madyarova (2016, p. 106) summarize that Ito, Baumer, Bittanti, Boyd, Cody, Herr-Stephenson, Horst, Lange, Mahendran, Martínez, Pascoe, Perkel, Robinson, Sims, and Tripp (2010) pinpointed the following types of online interaction: “hanging out, messing around, and geeking out”. All three are related to informal uses of social networks and Galoyana and Madyarova (2016) were able to find the same pattern in their sample of Armenian high school students (p. 114). Even though these represent more leisure uses of social networking sites, Yu, Tian, Vogel, and Kwok (2010, p. 1496) argue that social networking can also be linked to academic success through systematic network building. Furthermore, Yu et al. (2010, p. 1500) found that this can be turned into learning outcomes and peer acceptance. This social variable was also identified in Ainin, Naqshbandi, Moghavvemi, and Jaafar’s (2015, p. 72) study as a predictor of *Facebook* usage. However, adapting social networks for formal learning is not as straightforward.

Mazman and Usluel (2010) observe that social networking sites contribute to out-of-class interaction (p. 445). In fact, socialization through such sites is a significant variable when compared with the learning management system *Moodle* as seen in Deng and Tavares’ (2013, p. 167) study. They found that their pre-service teacher participants preferred *Facebook* (p. 167). Favorable results were presented concerning *Facebook* implementation in Mazman and Usluel’s (2010, p. 450) project and Sánchez, Cortijo, and Javed’s study (2014, pp. 144-145) as well. The underlying reasons for this development can be found in Klimanova and Dembovskaya’s (2013) argument that social networking sites are favored due to “[s]ocial interactivity, as well as an increased popularity among students” which make them “attractive environment[s] for language learning” (p. 69). These studies further cement the claim that technology adaption starts from the everyday contexts from which it can be applied to educational setting. However, environments corresponding with expectations set in them are crucial, as stated explicitly by Mazman and Usluel (2010, p. 451) and Stevens (2011, pp. 2-3).

Such a level of technological socialization and engagement in online communities is bound to have consequences on learners' identity development.

Social networking sites introduced a significant issue of identity development through presenting users with a communication and group building platform. Seeing how Ito et al.'s (2010) levels of participation were confirmed by Galoyana and Madyarova (2016, p. 106), this is a highly important aspect. What this means for the present discussion is that there are an increasing number of people who are exposed to social networking even without being users of the sites themselves. Users of *Facebook* are engaged in a multilingual environment even if they use the site itself in their L1 through various groups and interests. Eslami (2011, p. 11) makes an important point by arguing that technology can connect native and non-native speakers without geographical and temporal limitations. Furthermore, as Chen and Yang (2014, p. 57) claim, the interaction between these two groups is increasing. This presents a frame which assumes that students are already experienced users of social networking sites and are able to apply them to contribute their language development. However, such an involvement also shapes identity development.

An applicable framework for identity development in social networking can be found in the possible selves approach. Comello (2009) summarizes the essence of James' (1890) theory about the social self and describes it as being the "seat of aspiration, and membership in desirable social groups" (p. 339). This frame is highly applicable to social networking and is supported by Ito et al.'s (2010) growing participation levels. Comello (2009) further argues that the working self-concept is important as it "explain[s] the dominance of some self-views over others" (p. 343). She explains using Wheeler, DeMarree, and Petty's (2007, p. 235) findings that this can lead to a number of self-representations that are activated by certain predefined inputs (Comello, 2009, p. 343). In terms of social networking sites and identity formation, digital native learners' personality is more defined by group belonging than digital immigrants'. Support for this issue can be found Thompson's (2013, p. 14) summary evidenced digital natives' persistent need for collaboration in the learning process. In terms of e-learning environments, this entails the adoption of solutions that aid the learning process in a collaborative manner.

#### 4.2.4 Twenty-first century skills

The 21<sup>st</sup> century skills do not refer to specific individual differences *per se* but are rather the intended outcome of the technological socialization of learners and the educational as well as professional application of said skill set. They are in close relation with all the previously discussed variables. However, since students acquire these skills differently, the frame itself needs to be addressed as it represents a bridge between the educational and future professional development of learners.

Kirkwood (2006) argues that “[c]omplex information handling requires both operational and cognitive skills” (p. 317). The former refers to information search and retrieval while the latter covers assessing and application (p. 317). He emphasizes the need to change the traditional teacher-learner hierarchy in favor of learners (p. 329). His point is supported by Calvani, Fini, Ranieri, and Picci’s (2012) summary about the two emerging trends in the literature concerning digital literacy. The first concerns an extension of the frame to encompass information, media and visual literacy as well. The second trend refers to a development in favor of social and cognitive skills over technological proficiency (Calvani et al., 2012, p. 799). Conceptually the same idea is addressed in Kimber, Pillay, and Richards’s discussion (2007, p. 62) of Kimber, Pillay, and Richards’ (2002) technoliteracy model. This means that educational institutions on all levels should approach digital literacy consistently with learners’ technological and cognitive development.

When approaching digital literacy development in the educational system, an appropriate starting point needs to be identified. Hyun (2005) argues that collaborative learning can already be promoted from early childhood (p. 71) and was able to support his claims with sound results (p. 86). Such findings lead to the importance of socializing digital natives from a young age into how they can achieve a variety of goals with the available technology.

The *Partnership for 21<sup>st</sup> Century Learning (P21)* (2007) identified a number of variables to reach the goals of technological socialization. These range from subjects, learning and innovation skills, information, media and technology skills, life and career skills to support systems (p. 2). With components like creativity, innovation, critical thinking, problem solving, communication and collaboration making up learning and innovation skills and digital literacy being covered by information, media and



technology skills (media-, information- and ICT literacy) (P21, 2007 p.2) the institutional awareness of 21<sup>st</sup> century skills is growing.

The increased understanding of technological socialization and the 21<sup>st</sup> century skills affect the roles of teachers and educational institutions in general. Calvani et al. (2012) call attention to a two-objective approach to realize this development. First, ensuring that learners acquire elementary technological skills can contribute to the minimization of socio-economic and cultural differences (Calvani et al., 2012, p. 805). Second, there is a need for the structured integration of technological socialization into education, the incorporation of the informal digital skill acquisition aspect and cognitive development support into the overall frame (p. 805). By establishing environments where these objectives can be reached, educational institutions of all levels can contribute to the equal development of students where individual differences such as age, gender, motivation, learning and cognitive styles can be minimized in order to achieve greater student autonomy, willingness to use technology and sufficient 21<sup>st</sup> century skills.

## **5. Current trends in language teaching in e-learning**

### **5.1 Learning approaches**

Learning approaches represent ways to content delivery and interaction in e-learning projects. They are psychological and technological frames that are applied to reach certain educational objectives. Although the list of learning approaches discussed in this chapter is not final, they represent emerging trends of language education in e-learning.

Out of the five presented approaches, three concern learning framing, namely technical scaffolding, problem- and project-based learning and two are technological approaches in the form of adaptive learning and gamification. Subsequently, these frames are related to a number of research studies covering grammar, vocabulary, reading, writing, listening and speaking development.

The following list is not ranked. These learning approaches are applicable to a number of educational situations and can even coexist within the same project to suit

learning goals. This means that they are not exclusive but much rather offer the possibility to address student needs during the learning process in a flexible manner.

### **5.1.1 Learning framing**

Learning framing refers to approaches that guide the learning process. These are not unique to the e-learning paradigm and as such are present in traditional classroom settings as well. Their main purpose is to provide a frame to reach educational goals and for this reason they are highly applicable to the e-learning paradigm as well. In the following three such approaches are discussed through a number of e-learning studies: technical scaffolding, problem- and project-based learning.

#### **5.1.1.1 Technical scaffolding**

Technical scaffolding might seem as a better candidate for the technological framing group, however, its inclusion here is motivated by an important factor. As an approach, this form of scaffolding can greatly vary in how the technological aspect is utilized. Most notably, this means framing education in a way where face-to-face learning is complemented by technology and not substituted by it.

Scaffolding has already been touched on previously but it needs to be addressed in terms of learning approaches as well. Yelland and Masters (2007) identify three major roles of scaffolding. They explain that it needs to be collaborative, inside the zone of proximal development and how less scaffolding is required with growing learner competencies (p. 364). Yelland and Masters (2007) further argue, that there are various types of scaffolding such cognitive, affective and technical (p. 367). In the context of the present discussion the last is of special importance as it includes scaffolding through a technological environment that encompasses both the devices and the programs (Yelland & Masters, 2007, p. 367).

Technical scaffolding can take a number of forms. It can represent a learning platform or program that supports and monitors students' progress and gives constant feedback. This means that such an approach has the possibility to turn into adaptive learning. However, the major difference between technical scaffolding and adaptive learning lies in their underlying principle. Adaptive learning is designed for learner

autonomy development through technology. Technical scaffolding, on the other hand, is concerned with providing students with learning content autonomy in the first place.

### **5.1.1.2 Problem-based learning**

Problem-based learning (PBL) refers to learning situations where tasks are constructed along certain issues that need to be solved. As Pearson (2006, p. 57) explains, PBL entails teaching with a problem-based approach as “the stimulus and focus for student activity”. He goes on to address how PBL involves cooperation, and follows the pattern of problem formulation, connection to learning needs, knowledge extension and problem solving based on the preceding steps (Pearson, 2006, p. 57). This makes PBL especially suitable for traditional and online collaborative learning, which can be also combined in the form of blended learning.

Shahini and Riazi (2011) introduce their Philosophy-based Language Teaching model to address productive language skills (p. 170). As they explain, the merit of this approach is that simultaneously develops language and thinking skills (p. 171). They based their construct on Lipman’s (2003) model (p. 172). Looking at this structure from a classroom activity standpoint, it can be understood as a combination of scaffolding and PBL at its core. Although there are considerable similarities, Shahini and Riazi’s (2011) approach can present the bridge between in-class and online applications of PBL.

Socializing students in problem-based learning develops their critical thinking and equips them with learning strategies they can fall back on in different contexts. The problem of ICT introduction, mentioned by Pearson (2006, p. 71), could potentially distort the formulation of problems. However, this can be solved by first providing the learners with a scaffolding of how such projects work as in Shahini and Riazi’s (2011) approach. This translates well into blended learning programs and would also potentially correlate positively with autonomy development. Overall, PBL can be seen as a positive contributor to the development of the 21<sup>st</sup> century skills.

### **5.1.1.3 Project-based learning**

Project-based learning represents a similar frame as PBL, however, there are a number of significant differences. According to Wette (2011, p. 136), language education curricula can be either process or product-based. As Beckett and Slater (2005) explain, this translates to process-based approaches which concern “the simultaneous acquisition of language, content, and skills” (p. 108). This means that project-based instruction is not limited to the language classroom but also represents an applicable frame for CLIL projects as well. Furthermore, as Dooly and Masats (2011) explain, the development of a number of competences involves not only ICT but also requires interaction and collaboration among students (p. 43). They emphasize that project-based learning makes the simultaneous development of language and interpersonal skills possible (Dooly & Masats, 2011, p. 43).

The implementation model of project-based learning discussed by Dooly and Masats (2011, p. 45), shares some of the aspects of Shahini and Riazi’s (2011, p. 172) presentation of Lipman’s (2003) model. In both cases, cooperation is a main aspect of the respective frames. However, in problem-based contexts, the starting point is more open, whereas in project-based learning, the first step is planning. In Dooly and Masats’ (2011) model, this is followed by implementation which is situated between two stages of presentations. The first concerns the project participants and the second the overall audience (p. 45). Their final stage, which is missing from the problem-based approaches, is assessment. Dooly and Masats (2011, p. 48) emphasize the role of reflection in project-based learning and with good reason. It enables students to evaluate their learning process in light of the skills they used and the product they created. Furthermore, both aspects are major parts of the 21<sup>st</sup> century skills.

The digital age makes it easier than ever before to document student progress. Beckett and Slater (2005) present their Project Framework which is aimed to establish and document progress in project-based learning (pp. 110-1). As they explain, it aims to address the “simultaneous learning of language, content, and skills” (p. 110) which is in line with Dooly and Masats’ (2011) approach. Beckett and Slater (2005) further explain that their Project Framework contains a planning graphic as well as a project diary (p. 110), making it a two-component model. Beckett and Slater (2005) found that all of their students were able to use these tools (p. 113) and almost 80% reported that they were helpful to their development (p. 114).

Project-based learning offers a highly applicable frame for e-learning solutions. It enables to involve students in multi-level developmental processes where their language skills and interpersonal skills are applied in project creations. This makes project-based learning suitable for a number of CLIL related areas and facilitates the increased roles of ICT skills. Similarly to PBL, it can be applied to develop students' 21<sup>st</sup> century skills. Project-based learning also provides learning contexts that are potentially motivating as students have more possibilities to be involved in their own development.

### **5.1.2 Technological framing**

Technological framing refers to environments that are unique to e-learning. These are learning approaches where technology plays a crucial role in the learning progression of students and content framing. Gülbahar (2007) calls attention to the role of technological planning in e-learning that covers the teaching contents, methods and technology implementation (p. 945). Two such approaches are discussed in the present chapter in the form of adaptive learning and gamification. The latter was also touched upon in Martin, Diaz, Sancristobal, Gil, Castro, and Peir's (2011) analysis of the *Horizon Reports* concerning technological trends in between 2004 and 2014. As discussed in section 3.4.2 (see p. 44), Martin et al. (2011) position the role of games as a potential future technology that will likely have significant impact on education; however, it will not be on the level of mobile devices or social networking (p. 1904).

A second point to be emphasized in terms of the technological framing concerns the limitations of the field itself. Donnelly, McGarr, and O'Reilly (2011, p. 1470) call attention to Ertmer's (1999) categorization of two levels of barriers that can hinder ICT integration. The first refers to the limited presence or even absence of "equipment, training and support" whereas the second covers teacher beliefs that can take the form of technology resistance (Donnelly et al., 2011 p. 1470). In terms of technological framing, both can disrupt e-learning projects and hinder student development.

Finally, as Kennewell and Morgan (2006) note ICT competence not only allows for changes in the curriculum but relates to real-life and work skills (p. 266). For this reason, both adaptive learning and gamification are connected to the e-learning 3.0

frame (see section 3.4.2 on p. 44) as possible paradigm changing technologies. Their main goals are argued to be reaching a higher level of immersion through simulation.

### **5.1.2.1 Adaptive learning**

Adaptive learning refers to educational contexts where the main goal is to adapt to the learning needs of students and provide them with alternate routes to learning material mastery. Chen, Chang, and Wang (2008) present an approach to adaptive learning in the frame of ubiquitous learning through combining computers and mobile phones for material access (p. 82). They found that by utilizing ubiquitous learning, test results and educational goal achievement could be improved (Chen et al., 2008, p. 90).

Chen et al.'s (2008, p. 90) findings are in line with Reategui et al.'s (2008, p. 542) results where the application of an adaptive hypermedia system led to positive learning experience on the learners' side. Godwin-Jones (2007b, p. 12) describes another approach in the form of intelligent tutoring systems (ITS). While in the case of Reategui et al.'s (2008, p. 532) project the persona effect was at the center of inquiry, Godwin-Jones' (2007b) introduction lists the general features of such platforms. As he explains, the main advantage of ITSs lie in how they adapt to learners and allow "remediation, repetition, or skipping ahead" (p. 12). Godwin-Jones (2007b) concludes with how these systems need to be coupled with an AI program to work properly (p. 12).

Godwin-Jones' (2007b) point relates to the discussion in section 3.4.2 where the e-learning 3.0 frame is presented as a future stage that is defined by immersion through simulation, gamification and AI partners. Today most major smartphone operating systems include an AI assistant which means that users are growingly socialized in using them and are gaining experience with an AI partner that adapts to them. This is a major advantage for the future implementations of adaptive learning systems as it creates settings where technology-based anxiety and resistance can be minimized in the favor of learning and educational goals.

### **5.1.2.2 Gamification**

Gamification is a field that is gradually overcoming stigmatization. This is due to the increasing number of research studies that have proven the validity of gamification and also the maturation of the medium of video games and their general, public acceptance. Hayes (2008, p. 97) argues that interest in video games can lead to extension to the IT field in general. The underlying reason for this potential can be found in Horowitz's (2011) explanation, who emphasizes that they "provide visual and audio simultaneously at a consistent rate, and they engage the player in real-time decision making" (p. 8) and calls attention to the high possibility of vocabulary acquisition in such environments (p. 10).

Kennewell and Morgan's (2006) approach to play focuses on how that engagement is not only "voluntary, with no extrinsic goals" but it is also process oriented and associated with low levels of "risk and [is] highly engaging" (p. 267). Connecting this definition to gamification anticipates environments where stress levels are low and participation is voluntary. Both of these attributes can be understood as learning participation goals. What this translates to in practical means is that there are a number of possibilities that can be exploited in such engaging and motivating environments.

An important aspect of games is present in Kuhn's (2015) argument, namely how they represent a generational difference in terms of favored entertainment (p. 1). This becomes even more significant when taking Chik's (2014, p. 88) account into consideration that states how gaming is not a solitary but much rather a community-based activity. This means that video games and the Internet elevated the medium to a pivotal socializing, language and IT skill development agent. In terms of educational contexts, teachers can build on this foundation to create engaging contexts where students are motivated and technology related anxiety can be reduced as well. Two approaches lend themselves especially to this goal: simulation and identification.

Simulations can be approached from a number of perspectives. de Freitas and Oliver (2006, pp. 253-254) discuss the framework of game- and simulation-based education evaluation along four dimensions which include learners, pedagogical goals, context and representation. There also exists a main distinction between available game software. As Kuhn (2015, p. 98) explains, these include educational and commercial

games. The obvious difference between the two lies in their intended contexts. Educational games target to fulfill learning and commercial ones leisure goals. However, commercial games can be put to use in educational setting as well.

According to Sun, Ye, and Wang (2015, p. 170), commercial games have matured enough that they can “precisely simulate complex real-world science principles, thereby giving learners opportunities for applying those principles to problem-solving”. This enables immersion to function as a natural process as students can more easily identify with a world that follows rules akin to real life. Educational attention towards simulations is also growing which can be seen in games like *Minecraft* gaining academic recognition (see Smolčec, Smolčec & Stevens, 2014) and MAL-based history studies (see Akkerman, Admiraal, & Huizenga, 2009). The bridge between simulations and more personalized learning can be found in the form of identification.

Presenting students with environments as well as set character traits ready for adoption as Klimmt, Hefner, and Vorderer (2009, p. 362) explain, is what elevates identification and simulation to immersion. Such immersive worlds can further build on the positive aspects of CMC in connection with willingness to communicate as it was found in Reinders and Wattana’s study (2014, p. 115). Given that the environment is already present, a narrative approach can provide the means to reach language related goals. This was the case in Akkerman et al.’s (2009) historical simulation project and they found that “storification is enhanced by ‘living the narrative’” (p. 458). The importance of this approach becomes even more pronounced when taking Klimmt et al.’s (2009) argument into consideration that the interactivity of video games makes it possible for users to establish themselves as part of the given world through their actions (p. 353). Hence, educational uses of virtual worlds like *Second Life* can serve this purpose quite well from a perspective where the learning task is situated around filling the world with characters and the narrative approach lies in creating a plot (Stanley & Mawer, 2007, p. 7). Successful school implementations are also possible with educational games serving as a CLIL approach as evidenced by Papastergiou’s (2009, p. 10) CS course.

Gamification presents currently one of the most promising areas of e-learning. It can provide a context for various learning approaches and involves digital natives’ prior



socialization with video games as a motivational agent. It makes use of other learning and technological frames as well, such as project-, problem-based and adaptive learning. In terms of immersion value, gamification has the potential to become one of the cornerstones of a new e-learning paradigm (see section 3.4.2 on p. 44).

## **5.2 Current trends in language development in e-learning**

### **5.2.1 An overview of learning and technological frame applications in language development**

E-learning contexts can provide various learning and technological frames for language skill development. As the goal of the dissertation is to address language development in blended contexts, the target language skills are explored in more detail in corresponding studies. The present discussion provides an overview of trends in e-learning studies covering the 2005-2015 time period.

A number of studies were selected to represent grammar, vocabulary, listening, speaking, writing and reading development. E-learning-related research questions of the projects were identified and sorted based on the learning and technological frames they applied to reach educational goals. Most of the projects had more research questions, however, only those are included in the present discussion that were most relevant to the field. This comparison is presented in Table 10 along with the skills and knowledge development areas. Initially, each field was intended to be represented by five-five projects, however, in the case of grammar knowledge this was prevented by the lack of studies.

What is immediately visible in Table 10 is the significantly high presence of technical scaffolding as the identified learning frame. It occupies more than 80% of the sample studies. Technical scaffolding was used to label studies where e-learning approaches were included in the learning process and served as learning support (see Arena, 2010; Beasley & Chuang, 2008; Chen, 2013; Daniel & Woody, 2013; Fernandez, Simo, & Sallan, 2009; Huang, Chern, & Lin, 2009; Friedman, 2009; Horst, Cobb, & Nicole, 2005; Park, Yang, & Hsieh, 2014; Cobb, 2007; Payne & Ross, 2005; Shahrokni, 2009; Stockwell, 2010; Tanner & Landon, 2009; Vandergriff, 2006; Walls,

Kucsera, Walker, Acee, McVaugh, & Robinson, 2010; Winke, Gass, & Sydorenko, 2010; Woody, Daniel, & Bake, 2010).

Other cases were also identified where technical scaffolding was used. It concerned studies that involved the comparison of traditional and e-solutions (see Blake, Wilson, Cetto, & Pardo-Ballester, 2008; Gilmore, 2009; Hamano-Bunce, 2011; Jarvis & Szymczyk, 2010). There were no studies with problem-based learning and the other frames were represented in limited fashion. Adaptive learning was only present in one grammar focused project (Sauro, 2010), gamification was identified in a vocabulary study (deHaan, Reed, & Kuwada, 2010) and all three instances of project-based learning were found in writing skill development (King, 2015; Hattem, 2014; Lee, 2011). The overall high representation of technical scaffolding and the underrepresentation of the other frames point to four possible reasons.

The first issue related to the aforementioned representation of learning and technological frames in studies can be attributed to the state of e-learning between 2005 and 2015. It can be argued that e-solutions in connection with language learning were and to some degree still are in their exploratory phase. This means that even with digital native students, there were factors that prevented more sophisticated e-learning integration. Even if these students were socialized in a number of technological developments, they still received traditional education. In such cases e-learning can be best implemented as a complementary learning frame. This makes sense as fully online learning would require even digital natives to go through an adjustment period and it would lack the personal contact element with peers and tutors. Moreover, fully online solutions have not been applied widely and research has shown that certain affective factors missing from such contexts limit the level of learning that can take place (see sections 3.2.3.1 on p. 28, section 3.2.3.2 on p. 30 and section 4.2.3.1 on p. 68).

**Table 10:** A sample of current trends in language teaching involving e-learning

<b>Skill/ knowledge</b>	<b>Study</b>	<b>Year</b>	<b>Research aims connected to e-learning</b>	<b>Findings</b>	<b>Applied learning approach</b>
Grammar	Jarvis & Szymczyk	2010	comparing self-study grammar books with computer-based materials (p. 34)	students' have positive attitude towards computer-based materials, but they also listed more disadvantages than paper-based materials (p. 38)	technical scaffolding
	Sauro	2010	the effects of corrective feedback via synchronous CMC immediately and over time (pp. 101-2)	none of the two feedback types had significantly large impact on target form knowledge (p. 109)	adaptive learning
Vocabulary	Horst	2005	the effects of student online word bank entries in EAP development (p. 95)	learners could submit sufficient word bank entries and using the vocabulary items was motivating (p. 106)	technical scaffolding
	Friendman	2009	students compiling lexical databases from online texts (p. 126)	students could apply the lexical items correctly (p. 135)	technical scaffolding
	Shahrokni	2009	measuring the combination of textual, pictorial and textual + pictorial approaches in online incidental vocabulary learning (p. 1)	textual + pictorial presentation led to greater incidental vocabulary learning (p. 11)	technical scaffolding
	deHaan et al.	2010	the connections between degrees of interaction with a video game and vocabulary recall (p. 77)	the active players of the game could recall more items than the passive viewers (p. 84)	gamification
	Stockewell	2010	measuring the effects vocabulary learning among PC and mobile platforms (p. 98)	learners could decide which platform to use to suit their needs (p. 108)	technical scaffolding
Listening	Beasley, & Chuang	2008	the connections between song likability and an online environment (p. 3)	there is a positive connection between song likeability and the online environment (p. 13)	technical scaffolding
	Fernandez et al.	2009	the ways in which podcasting can support learning in higher education (p. 385)	podcasting can supplement face-to-face education and work as a connecting bridge between students and teachers (p. 391)	technical scaffolding
	Arena	2010	measuring how listening instruction combined with Web 2.0 affects learning (p. 1)	using Web 2.0 tools had a positive effect on learning (p. 7)	technical scaffolding
	Walls et al.	2010	students' level of motivation in using educational podcasts (p. 373)	students' motivation to use educational podcasts may be limited (p. 375)	technical scaffolding
	Winke et al.	2010	the effect of captioning videos on multiple viewings (p. 68)	multiple viewings with captions support language development (p. 73)	technical scaffolding
	Payne & Ross	2005	the connections between individual differences in working memory and output in chat sessions (p. 40)	working memory and chat usage are related (p. 50)	technical scaffolding

Speaking	Vandergriff	2006	a comparison of learner reception strategies in face-to-face and synchronous CMC contexts (p. 115)	no significant differences in reception strategy use in the two contexts (p. 124)	technical scaffolding
	Blake et al.	2008	comparing oral proficiency in distance, face-to-face and blended environments (p. 114)	oral proficiency of first year students are similar in distance and face-to-face environments (pp. 123-4)	technical scaffolding
	Tanner & Landon	2009	the connections between computer assisted pronunciation practice and language skills in self-directed contexts (p. 54)	significant changes in language skills (p. 62)	technical scaffolding
	Hamano-Bunce	2011	comparison of oral interaction in chatrooms and face-to-face classrooms (p. 426)	using chatrooms is beneficial for learning (p. 432)	technical scaffolding
Reading	Cobb	2007	solving vocabulary issues in extensive reading (p. 38)	online text tools can help non-native learners' comprehension as well (p. 58)	technical scaffolding
	Huang et al.	2009	exploring the connections between reading strategy use and comprehension (p. 13)	strategy use supports comprehension and there is need for explicit strategy instruction (p. 23)	technical scaffolding
	Woody et al.	2010	measuring preference for e-books (p. 945)	experience with e-book does not influence students' overall preference for textbooks (p. 947)	technical scaffolding
	Daniel & Woody	2013	exploring students' habits and performance with of e-books and textbooks (p. 18)	students using e-formats are more likely to multitask, show resistance in terms of reading habit changes, no major performance differences (p. 22)	technical scaffolding
	Park et al.	2014	meaning construction in online reading (p. 151)	online reading comprehension involves the creation of a web-based map with a number of sources (p. 160)	technical scaffolding
Writing	Gilmore	2009	how training learners in the use of online corpora affects their draft writing (p. 366)	using online corpora appears to be beneficial for draft writing (p. 369)	technical scaffolding
	Lee	2011	addressing how blogging and face-to-face interaction relate to autonomous learning (p. 87)	blogging was beneficial for autonomy development (p. 103)	project-based learning
	Chen	2013	the connections between multilingual writers and social networking (p. 143)	social networking led to a number of developed identities for social networking interaction (p. 163)	technical scaffolding
	Hattem	2014	exploring <i>Twitter's</i> use in language play (p. 151)	<i>Twitter</i> provided a motivating platform for language play to take place (p. 165)	project-based learning
	King	2015	addressing how <i>Wikipedia</i> article writing can be used as an authentic language task (p. 106)	writing <i>Wikipedia</i> articles is beneficial for skill and scholarly identity development (p. 119)	project-based learning

The second issue is connected to how e-learning seems to be evolving to meet educational needs. The general emerging pattern is that blended learning is the field of e-learning that seems to be most successfully developing. This is no surprise as a number of studies have supported the merits of the frame. Most importantly, blended learning occupies the intersection of traditional and online learning (see Figure 1 on p. 11) which makes learner and teacher inclusion of various technological socialization backgrounds smoother. The studies conducted in the dissertation support this issue on both sides.

The third issue entails that the limited representation of the learning and technological frames does not necessarily correlate with their uses. This can be also associated with the sample size of the research studies used in the present discussion which covered three main e-learning journals: *Computers & Education*, *Language Learning & Technology* and *ELT J*. The central focus of the journal selection criteria was to gain general insights into how the aforementioned frames are applied to meet educational needs. It is possible that a more in-depth look concerning specialized journals on language skills would result in somewhat different findings. However, the general picture shows that technical scaffolding is the main frame used in e-learning projects in between 2005 and 2015.

Finally, e-learning has also been applied to meet the needs of students with learning disabilities (see Dickson, Cawthon, & Bond, 2015; Freire, Linhalis, Bianchine, Fortes, & Pimentel, 2010; Garberoglio, Magnan, & Ecalle, 2006; Nævdal, 2007; Passerino, & Santarosa, 2008). Comparing both sets of studies would likely result in different patterns in terms of applied learning and technological frames. Exploring the issue was outside the goals of the dissertation. However, such a project would likely shed light on a number of individual differences that require further attention. The potential findings could be applied in the development of adaptive learning and gamification projects. The merits of these frames could contribute to the language development of students with learning disabilities. The underlying reason for this is that adaptive learning enables more self-paced learning, which can be complemented by low anxiety level environments in the form of gamification.

## 5.2.2 Assessment

### 5.2.2.1 Test qualities

Providing feedback to students and measuring their development are key elements of every educational setting which is also true for SLA context. For this reason, it is important that tests are designed to give accurate data about the knowledge of the learners (diagnostic), their advances (formative) and overall mastery within a certain timeframe (summative) (see Olrich, Harder, Callahan, Trevisan, & Brown, 2010, pp. 385-389). There are certain features a test needs to have which Bachman and Palmer (1996) label as test qualities and include reliability, validity, authenticity, interactiveness, wash-back, impact and practicality (p. 17). In the following, these criteria are addressed.

Messick (1989) defines validity as “an integrated evaluative judgment of the degree to which empirical evidence and theoretical rationales support the adequacy and appropriateness of inferences and actions based on test scores” (p. 13). However, as Gikandi, Morrow, and Davis (2011) argue that a trend shift has taken place in validation theory where the assumptions made from the scores and their consequences are the primary factors (p. 2338). Indeed, Shaw and Crisp (2011) conclude their overview of validation literature with Kane’s (2006) point about an argument-based approach to validation.

Mackey and Gass (2005) explain that reliability is largely referred to as “meaning instrument consistency” (p. 128). Thus, reliability ensures that a test used with one group of a specified proficiency level would have similar result with a different group with shared characteristics. Mackey and Gass (2005) go on to address two main sides of calculating reliability; the raters and the tests themselves (pp. 128-130). When talking about the former, at least two evaluators need to be present to compare the scores. Doing so determines how reliable the raters themselves are and highlight issues with the assessment criteria. Mackey and Gass (2005, p. 129) also call attention to the importance of strong reliability which is present if the evaluators arrive at highly similar conclusions. This means that if validity has been established and the assessment criteria are unambiguous, raters should have very similar or identical scores in their verdicts. Validity and reliability are arguably the most important criteria that tests need to have; there are, however, further ones that need to be addressed as well.

According to Angelelli (2009), authenticity refers to “the degree to which tasks on a test are similar to, and reflective of a real-world situation towards which the test is targeted” (p. 20). This is in connection with positive or negative washback during test completion. Cheng and Curtis (2004) explain washback in two ways. In the case of positive washback, the results of the test were used to bring about positive changes either in the tests or institutions, whereas the latter refers to cases which had negative impact on teaching and learning (p. 3).

Practicality is closely connected to washback and authenticity as it also determines the test takers’ motivation in the completion and analysis phase. As Bachman and Palmer (1996) explain, practicality is used to describe the connections between required and available resources with tests (p. 36). Impact covers the effects of using the test and the decisions that led to applying it (Bachman & Palmer, 1996, p. 137). According to Bachman and Palmer (1996), it can contain the intended outcomes for stakeholders, the education system and also on society as a whole, thus the potential usage of the test (p. 137). Finally, interactiveness refers to the “extent and type of involvement of the test taker’s individual characteristics in accomplishing a test task” and includes test takers’ language ability, topical knowledge and affective schemata (Bachman & Palmer, 1996, p. 25).

The required level of authenticity, practicality and interactiveness and a possible positive washback effect can be related to the transition from assessment 1.0 to 2.0 that Elliot (2008) differentiates. In this construct, assessment 1.0 refers to tests that are paper-based, classroom-based, formalized, synchronized and controlled (p. 66). However, the 2.0 approach focuses on being authentic, personalized, negotiated, engaging, recognizing existing skills, being deep as well as problem oriented (Elliot, 2008, p. 68). In practical terms, the dichotomy between assessment 1.0 and 2.0 could be translated into in-class and online testing in blended or online learning setting.

One could argue that assessment 1.0 is more suited for evaluating for example the language proficiency of a larger number of students at the same time. However online testing is present in both high- and low-stakes settings. The *TOEFL iBT* test is delivered and administered online and fits into the category of high-stakes tests due to its results having a significant impact on the professional advancement of the test takers. MOOCs often use multiple choice quizzes to assess the progression of learners and

while it may affect their final grade, their overall impact is limited to the course they are used in and thus represents low-stakes settings.

Furthermore, as assessment 2.0 definitely builds on the three issues that Bachman and Palmer (1996) mention in connection with interactiveness. Thus, it can be seen as a more differentiating approach to testing that has individual differences among its primary foci. The other categories also point towards putting the learners in situations that they would face in target language settings. However, it raises the issue of administration. As already discussed, practicality covers the resources that can be used during testing and puts test takers in situations where their skills can be adequately assessed, but preparing an individualized test for each participant even in smaller groups is not feasible as it would require an unreasonably large amount of time. Hence, one of the reasons standardized tests exist. However, assessment 2.0 can be put to use in settings where the scoring process has been automatized and software solutions are available to test large number of students and also provide feedback in a manageable time frame.

#### **5.2.2.2 The growing rationale for using peer assessment**

Peer assessment has been used in language education and continues to be important. Looking at it from the assessment 2.0 perspective by Elliot (2008, p. 68), it includes authenticity, personalized feedback and the assessment criteria are usually negotiated. Stoyhoff (2012) calls attention to how “the separation of teaching, learning, and assessment has largely ended” (p. 527). He also points out that teachers recognize the positive effects of assessment in the pre-, during and post-teaching and learning stages (p. 527). Furthermore, he highlights the growing role of learners in assessment and complementing teacher-based assessment through students’ self- and peer-assessment (p. 528). Thus, peer assessment takes on the features of formative assessment and provides feedback from both tutors and fellow students.

Peer assessment has also found its way into online assessment. Liang (2010) argues that online peer response is used “as an alternative to face-to-face (F2F) communication” (p. 45). Furthermore, as Liang (2010) notes, meaning negotiation and collaborative learning are the two areas how peer-assessment was categorized (p. 46). Collaborative learning projects can reduce language anxiety as students work as a team.



Thus, taking on the role of instructors through peer responses contributes to their critical thinking skills (Chen, Wei, Wu, & Uden, 2009, p. 289). In online delivery, such initiatives also secondarily contribute to the enhancement of learners' IT skills and their willingness to use technology.

Another point supporting peer-assessment is made by Mok (2011), who claims that the thoughtful implementation of peer-assessment can positively affect developing "learner responsibility, metacognitive strategies, evaluation skills, and a deeper approach to learning" (p. 231). However, Mok (2011) also found in her project conducted with junior high-schoolers in Hong Kong that psychological preparation can be necessary and supports her findings (p. 236). Setting an age baseline is thus required before implementing a peer-assessment project as it can induce anxiety in learners. Overall, the proposed baseline for peer-assessment age, based on Mok's (2011) results, can be set at a 14-16 years.

Structurally, as Hansen and Liu (2005) explain, peer assessment follows a pre, during and post phase. In the first phase assessment criteria need to be explained, negotiated and illustrated through a sample while also taking into account the students' previous experience and creating an environment for peer trust. This is followed by monitoring the process and subsequently discussing in linking to overall classroom processes (pp. 32-38).

In conclusion, it can be argued that peer assessment is a highly versatile tool that has the potential to influence language development positively in a number of ways. However, adapting it to the level and needs of the students is crucial. If they are new to computer-based assessment, it might be overwhelming at first. Therefore, Wang (2008) emphasizes Vogel, Greenwood-Ericksen, Cannon-Bower, and Bowers' (2006) 'appropriate challenge' concept. At its core, this approach is not different from Krashen's (1985) input hypothesis where comprehensible input is the key to language development. For this reason, peer-assessment can represent a level-appropriate, potentially motivating inclusion agent in language education.

## **Conclusion to the literature review**

Concerning the delivery perspective, the fields were presented individually with their defining characteristics. Subsequently, these were connected to learning contexts, content delivery methods and participants. While some of these areas like CALL and blended learning have a longer history, others like MALL, virtual and ubiquitous learning are rapidly developing as technological limitations become minimal. Hardware solutions are no longer confined to computers and the device plurality of the Web 2.0 age became a major socializing element with digital natives.

As for the current state of e-learning, it can be said that the possibilities of Web 2.0 are being realized in a cross-device manner with a growing emphasis on immersion. Coupled with the latest technological possibilities granted by virtual realities, this development can potentially bring about a new, 3.0 generation of e-learning in the upcoming decade. The possibilities of virtual education go beyond immersion and point toward an approach to education through simulation. This way of teaching enables a more interdisciplinary and practice oriented teaching approach. However, its overall success, similarly to Web 2.0, will depend on educators, formal and informal learning and possible learning communities.

In terms of content development affecting factors in e-learning, two main areas were discussed. The first concerned learners' individual differences as they are major variables in any educational context. However, to address the ways in which e-learning alters learning environments, individual differences were put under scrutiny as two sets of variables. The first encompassed age, motivation, learning and cognitive styles as well as autonomy. These were argued to be variables connected equally to language learning and e-learning. The second group focused on individual differences related to e-learning in the sense that they greatly affect the learning process and experience in such contexts. These variables include gender, willingness to use technology, online interaction and 21<sup>st</sup> century skills. Although gender is obviously connected to general learning as well as an individual difference, in this approach it was identified as a major determiner of technological socialization that has far-reaching effects on e-learning involvement.

Next to the individual differences, current trends in e-learning related to language education were also identified. This entailed the discussion of two kinds of

learning approaches. First, learning frames were identified in the form of technical scaffolding, problem- and project-based learning. Second, this was complemented by analyzing how adaptive learning and gamification can aid the learning process. It was found that although theoretically these five approaches represent complementary learning approaches, technical scaffolding is most prominent in language skill development studies with an overwhelming 80% in the presented sample. Finally, assessment was discussed through required test qualities, how e-learning affected the field and the growing rationale for using peer assessment as an inclusive rating approach.

The literature review has established a frame that the second part of the dissertation with the studies builds on. As blended learning is a major part of the conducted research, the field is referred to a number of times and is also addressed through a short discussion of how it was used in the studies. A number of learning platforms, websites and applications have also been applied. These, similarly to blended learning, are discussed based on the issues in the literature review.

# PART 2: EMPIRICAL STUDIES

## 6. Phases of the research

### 6.1 Overview

The overarching goal of the dissertation is to discuss possibilities in which the *Listening and Speaking Skills (LSS)* courses at the University of Pécs can be further developed in a blended manner to increase opportunities for skill advancement. For this reason, six studies were carried out with two groups of students and a number of teachers as participants. These were sorted into three phases covering the exploration, application and evaluation stages (see Table 11 and Figure 3).

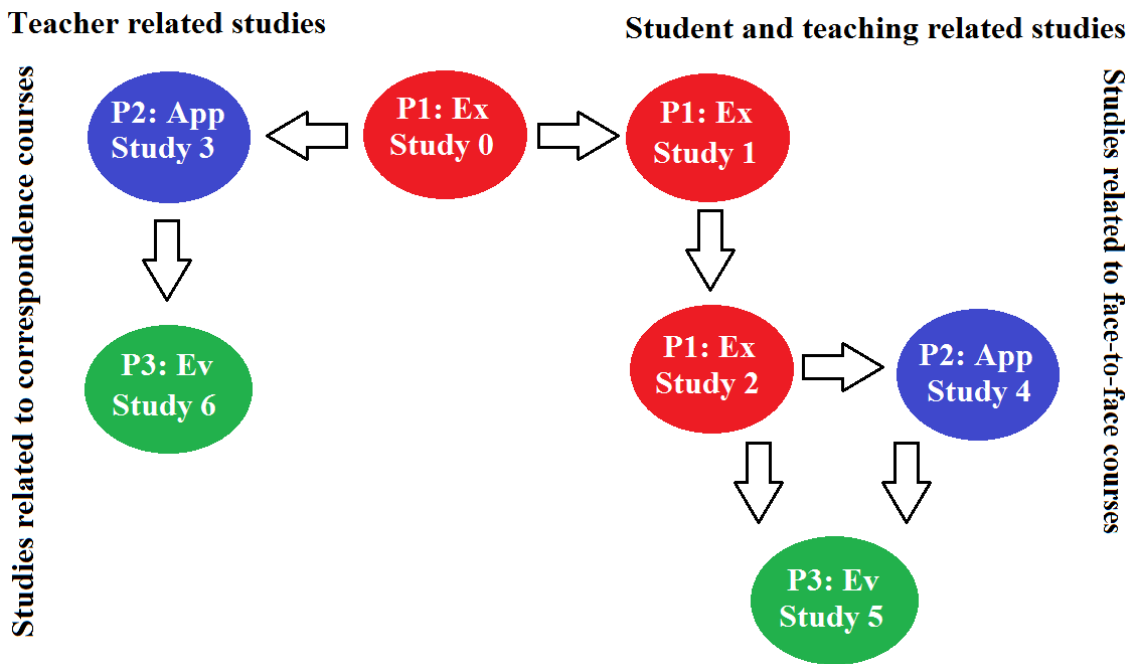
The exploration stage involved three studies out of which one was carried out prior to the other two and acted as a preliminary starting point. For this reason it was labeled ‘Study 0’. It refers to an exploratory questionnaire study conducted in 2012 whereby English majors’ e-learning concepts, needs and requirements were analyzed. Studies 1 and 2 were both carried out with the same group of 15 BA students and are exploratory projects based partially on the findings of Study 0. Study 1 piloted blending possibilities in *LSS* skills development and Study 2 evaluated the findings of a vocabulary development sub-project.

The application stage begins with Study 3 which is an interview study conducted with five university teachers after having completed their first blended courses in the English teacher MA program. Study 4 is a follow-up project to Study 2 and addresses the need for structured vocabulary development indicated by both the participants and the questionnaire analysis in Study 1.

The final stage of evaluation is made up of two projects. Study 5 concerns students’ views on the redesigned blended *Listening and Speaking Skills* course and is therefore a follow-up project to Study 1. As the final phase of the project, it is meant to assess the development of the blended approach. Study 6 is an interview study addressing how well blending is suited for application in correspondence skills development courses. Most studies also have a number of complementary appendices with tables and statistical analysis which are referenced in each project.

**Table 11:** Representation of the three research phases and the corresponding studies

<b>Phase</b>	<b>Participants</b>	<b>Research questions</b>	<b>Data sources</b>	<b>Methods of analysis</b>
<b>Exploration</b>	<b>Study 0 (2012)</b> 21 BA and 8 MA students	<b>RQ1:</b> What do the English majors think of e-learning? <b>RQ2:</b> How can their e-learning habits be characterized? <b>RQ3:</b> How do they envision e-learning?	questionnaire completed by the students	qualitative content analysis
	<b>Study 1 (2015)</b> 15 BA students	<b>RQ1:</b> How can a blended approach scaffold students' listening and speaking skills development? <b>RQ2:</b> What kind of tasks did students find the most and least useful? <b>RQ3:</b> What are the implications for the correspondence program?	questionnaires completed by the students	qualitative content analysis  descriptive statistics
	<b>Study 2 (2015)</b> 15 BA students	<b>RQ1:</b> How can a blended approach scaffold students' vocabulary development? <b>RQ2:</b> What is the level of students' active and passive vocabulary knowledge? <b>RQ3:</b> What are the implications for further vocabulary development?	vocabulary tests completed by students	descriptive statistics
<b>Application</b>	<b>Study 3 (2015)</b> 5 university teachers	<b>RQ1:</b> How do the participants understand e-learning? <b>RQ2:</b> How did they design their blended learning courses? <b>RQ3:</b> What challenges did the blended learning courses pose to teachers? <b>RQ4:</b> What was the feedback for the blended learning courses?	semi-structured and structured one-to-one interviews	qualitative content analysis
	<b>Study 4 (2015)</b> 20 BA students	<b>RQ1:</b> How does vocabulary instruction using e-materials contribute to students' vocabulary development? <b>RQ2:</b> What kind of measurable changes have taken place in the students' vocabulary?	vocabulary tests completed by the students	descriptive statistics
<b>Evaluation</b>	<b>Study 5 (2016)</b> 17 BA students	<b>RQ1:</b> What is participants' assessment of the blended approach? <b>RQ2:</b> How do participants assess their own skill development? <b>RQ3:</b> How feasible is a blended approach in face-to-face seminars? <b>RQ4:</b> What further challenges are there for face-to-face blended projects?	questionnaire completed by the students	qualitative content analysis  descriptive statistics
	<b>Study 6 (2016)</b> 1 PhD student	<b>RQ1:</b> How did the participant understand blended learning? <b>RQ2:</b> How did the participant design the course for blended instruction? <b>RQ3:</b> What was the level of student engagement? <b>RQ4:</b> What further challenges are there for correspondent blended projects?	structured one-to-one interview	qualitative content analysis



**Figure 3:** Visual representation of the interconnectedness of the studies

**Legend:** **P:** phase, **App:** application, **Ev:** evaluation, **Ex:** exploration, **arrows:** refer to follow-up projects

## 6.2 The rationale for blending in the research projects

Blended learning was the guiding frame of the projects conducted in the present paper. Although it is discussed in detail in chapter 3.2.3 (see p. 27), the practical aspects of the approach are put under scrutiny to outline applications and limitations in the present context.

As argued previously, the advantages of blended learning go beyond applying both face-to-face and online environments. Further emphasis for this point is found in Brown and Adler (2008, pp. 18-19) who argue not only for the importance of social learning but also call attention to the participatory component of such environments. However, blended learning is not without limitations. These are also discussed as even though, this frame is well suited for a number of skill development purposes, it also introduces learner variables like technology related anxiety that would not be present in face-to-face contexts. Finally, the blending context of the six research projects is detailed.

### **6.2.1 Blending in practice**

Periodical meetings with fellow students and teachers during courses have been present before blended learning. In fact, Phipps and Merisotis (1999, p. 26) frame blended learning as “the third generation of distance learning systems” where the first two are correspondence courses using different mediums. Their categorization highlights an important aspect of using online education, both in itself and in a blended environment. This is the possibility for learners to join classes without the geographical barriers of traditional settings. However, blended learning can be approached from two main perspectives. It can be a combination of online and face-to-face elements or the introduction of online elements.

Allen and Seaman (2010, p. 5) classify online content delivery the following way: “0%: Traditional, 1 to 29%: Web Fabricated, 30 to 79%: Blended/ Hybrid, 80+%: Online”. Based on this analogy, only those courses can be labeled blended which are designed to have at least 29% face-to-face sessions. Thus, blending requires teachers to restructure their courses in a dual manner whereby the face-to-face lessons need to utilize the presence of teachers and other students. In practice this means two possible approaches.

The first approach to blending considers introducing new materials during online sessions, where the flexibility of online learning makes it possible to practice and further extend upon what has already been introduced to learners. The second possibility means taking the opposite approach. As such, it entails that the online environment is also used to introduce new materials, however, the face-to-face sessions are responsible for discussions and deep-knowledge development. Peachey’s (2013, p. 69) argument about how online solutions can be applied to increase the possible learning time supports this point. Extending the temporal limitations of courses can equal a more diversified approach to how the materials are handled. This was also a primary concern of the six studies in the dissertation.

### **6.2.2 Benefits of blending**

Opting for a blended approach not only means flexibility in terms of management, it could impact class size as well. Returning to the differences between blended and fully online, Dudeney and Hockly (2013) address the two the following way. They explain that blended learning is especially suitable for bringing together students in local areas,

whereas the benefactors of the fully online implementation would be international participants (p. 76). Dudeney and Hockly (2013) argue how these courses can include teachers who work in related fields to teach together both locally (blended) and internationally (fully online) (p. 76). Thus, as already discussed, blended courses have huge advantages through their online element opposed to traditional delivery where geographical distances would more likely hinder such online collaboration

Blended learning makes it possible to teach in a way that bypasses the rigidity of traditional timetables and adds the opportunities provided by online environments. However, as Garrison and Kanuka (2004) emphasize, blended learning is largely concerned with “rethinking and redesigning the teaching and learning relationship” (p. 99). Such issues were already examined in section 3.2.3 (see p. 27), including changes in the implementation of the course material, class management and possible participants, however, a major change involves how communication happens in a blended context. Both communication and the included technological dimension are areas where blended learning can possibly induce anxiety.

### **6.2.3 Limitations of blending**

As addressed previously, there are a number of benefits of using a blended approach. These can be summed up in Pardo-Gonzales’ (2013) listing of “[f]lexibility in their learning environment (...), [p]ersonalised instructor feedback in and outside class (...) [and] [r]ecognition of the value of face-to-face instruction” (p. 59). However, there are also hindering factors that need to be calculated with when designing the online component of blended learning.

Prezel, Eshet-Alkalai, and Alberton (2009) identify three aspects that can work against the success of online learning. These include “reading from a digital display (...), loneliness (...) [and] digital skills” (p. 2). For this reason, the introduction of any blended environment should be preceded by a needs analysis and implementation requires careful monitoring. The flexibility of blending should make it possible to address the emerging issues during the course.

However, there are some limitations that can be avoided by a simple pre-course training, for example familiarizing the students with the new context. This way a number of problems can be dealt with prior to starting the course. Although some of these limitations appear to be gender and age related (see sections 4.1.1 on p. 48 and



4.2.1 on p. 58), they are more connected to technology acceptance and anxiety. Overall, these limitations can be overcome by utilizing motivating contexts where students are engaged in their development and understand how their skills are transferable to other environments.

#### **6.2.4 Blended learning in the research projects**

The decision to redesign the first-year English major courses *Listening and Speaking Skills (LSS) I* and *II* using blended learning is a result of two developments. First, student scores were steadily declining in the *Proficiency Exam*. This is a filter exam consisting of a written and oral part that encompasses the assessment of students' reading, writing, listening and speaking skills at the end of their first academic year. There are six courses preparing student for the *Proficiency Exam* components consisting of two *Reading and Writing Skills*, *Listening and Speaking Skills* and *Grammar in Use* seminars each in the span of the first two semesters.

The second area leading to blending were the results of students' needs analysis in the beginning of the *Listening and Speaking Skills II* course that was the context for Studies 1 and 2. The reason behind implementing the pilot project at this stage rather than in the context *LSSI* was building on students' acquired familiarity with the course format to adequately evaluate the results of this experimental approach. The structure proved to be successful as students were able to identify a number of points where they felt further development is needed.

Addressing the issues that learner deemed crucial within the time constraints of the face-to-face course would not have been possible. Therefore, building on the benefits of traditional and online instruction, a blended frame was applied. Keeping in mind Allen and Seaman's (2010, p. 5) classification of the percentages of online, face-to-face and blended delivery and Peachey's (2013, p. 69) point concerning extending the learning period through blending, the solution was to keep all face-to-face lessons and providing an online environment for further development.

Both *Listening Speaking Skills* courses that were part of the research projects started with an introductory session. This included a discussion of the course requirements, the online platforms as well as the peer-assessment criteria. In the 2014/15 spring semester, this happened using the rating scale adapted from Szabó and Papp (2013, p. 160) which is based on the descriptors of the advanced level English

ECL language exam. This was changed to the *Proficiency Exam* criteria in the 2015/16 fall semester. Both lists focus on vocabulary, task completion, pronunciation, grammar and structuring. Students also completed a needs analysis either in class (*LSSII*) or online (*LSSI*). Implementing the development of the skill areas they listed as problematic was a prime objective of the research studies.

As the primary focus of both *LSS* courses was on language skill development, a blended learning approach was applied that did not require classes to be held online. Instead, a main online environment was prepared using the social learning platform *Edmodo* and was supplemented by a number of websites and applications including mainly *Quizlet*, *MindMup*, *iTunes* as well as selected video lectures and presentations from *Coursera* and *TED*. The face-to-face part of the course was largely implemented in the same vein as the students previously experienced through focusing on in class listening, speaking, discussion and argumentative tasks. Thus, the online element was used to complement the contact sessions.

The context of the research studies enabled the integration of a variety of assessment methods. While online tests were present exclusively as vocabulary quizzes, peer assessment was used in every skill development course together with a two-evaluator approach. A major reason for using two raters in evaluating student presentations lies in the design of the *Proficiency Exam*. In the oral part of the exam, students are assessed by two teachers. Thus, the evaluation approach in the blended courses served two purposes. First, peer assessment prepared learners for the *Proficiency Exam* setting. It introduced computer-based assessment in low-stakes environments first, similarly to Wang's (2008) study. Second, it also served to deepen students' understanding of the assessment criteria, which Vanderhoven, Raes, Montrieux, Rotsaert, and Schellens (2015, p. 124) argue to be an important determiner of peer-assessment inclusion.

Blended learning in the research studies was largely applied as tool in Peachey's (2013, p. 69) understanding to increase the possible learning time. Contributing to students' technological socialization was also present as a secondary objective. This issue was most prominent in selecting authentic learning platforms and materials. Blended learning proved to be a useful frame that is well suited to meet the language development needs of students and immerse them in forms of online learning.

### **6.3 Overview of the e-learning platforms, websites and applications used in the studies**

The Web 2.0 era opened up many possibilities for online content creation and application that can be used as cornerstones in various educational settings. Making use of technology in classrooms is currently not only beneficial in terms of enhancing content delivery, but is a major contributor to multi-faceted technological socialization. As argued in section 4.2.2 (see p. 63), willingness to use technology can be greatly enhanced through user acceptance (Venkatesh et al., 2003, p. 427), scaffolding (Thompson, 2013, p. 23) and self-directed use of technology (Lai, 2013, p. 100). A combination of these variables makes out-of-class use of technology smoother and less threatening for students. Furthermore, it also contributes to the development of 21<sup>st</sup> century skills which can pave the way for professional use of technology.

Designing the online element of the *Listening and Speaking Skills* courses followed a number of selection criteria in terms of e-learning platforms, websites and applications. First, all solutions needed to follow the Web 2.0 frame to content delivery and creation. What this meant in practical terms was an intuitive user interface that would fit into learners' existing technological frames. Although Web 1.0 approaches can be useful as well to reach certain goals (see section 3.1.2 on p. 14), they would go against the technological socialization of digital natives, which is primarily Web 2.0 based.

Second, in the platforms that were used for online content delivery and testing, it was important to have options to also include the students in the process. The underlying reason for this idea can be found in the constructivist theoretical frame of e-learning (see section 1.2 on p. 7). Ziglari and Parviz (2012, p. 2131) as well as Keengwe and Onchwari (2008, p. 53) address that teacher and student roles are changed in constructivist approaches for more equal statuses that take the place of the traditional hierarchical structure.

The third aspect considered out-of-class learning opportunities. As argued previously, blended learning was not used to move certain classes online, but to extend the possible learning time. For this reason, a number of learning platforms, websites and applications were analyzed. Selection criteria involved timed task delivery, automated scoring and mobile applications. Timed delivery makes it possible to upload a number

of activities and tests and give learners access at predefined times. Automated scoring provides immediate feedback on tasks or online tests. The addition of mobile applications makes it possible for students to access learning materials, tasks and practice tests in their preferred time and place.

A fourth aspect considered the financial part of the course. Since there was no funding or grant available, nor was it intended for the students to pay any access fees, only those solutions were considered that were free of charge. In practical terms this meant the following structure. Both blended *LSS* courses had an e-learning platform that served as the central hub for practice tasks, online tests and course documents. This central site was then extended with supporting solutions that were either complementary or compulsory for course completion. A contrastive summary of how the use of e-learning platforms, websites and applications corresponded with their functions in the *LSS* courses, language skill development, technical frame for task creation, badges, built-in application, self-paced learning, student-based task creation and mobile applications can be found in Table 12.

*Edmodo* served as the main hub for the online tasks as a social networking learning platform. There are a number of reasons that support this choice. First, the interface of the site is designed to resemble *Facebook* which limits the learning curve of both teachers and students when it comes to using the site. Second, there are no fees connected to *Edmodo*. Third, it has a huge user base of currently more than 70 million people (see [edmodo.com/about](http://edmodo.com/about)). Fourth, there are many options for task creation and learning material sharing. Fifth, it is well suited for out-of-class learning through automated scoring, timed delivery and a mobile application. Sixth, it is possible to give students detailed feedback in the form of comments with non-automated tasks. Seventh, the site provides statistics in rankings and pie-charts on task completion which can be used to revise task items. Finally, it has additional applications available through the *Edmodo App Store* which also make student-based task creation possible. *Edmodo* was directly present in Studies 1, 2, 4 and 5 and indirectly in the form of interview responses in Study 6. For a detailed analysis of the possible uses of *Edmodo*, see Simon (2016).

*Quizlet* was the second most prominent website used in the projects. Its main profile is centered around interactive flashcard creation and sharing. *Quizlet* was selected as a compulsory solution for vocabulary development support based on the

findings of Study 2 and was the basis of Study 4 and is also discussed in Study 5. The website was used to address vocabulary item delivery and practice. It has a number of features that support both processes. First of all, *Quizlet* has the option to pronounce the contents of the flashcard which contributes not only to vocabulary but also speaking development. Second, there are a number of game-based features and practice options that aid self-paced learning. Finally, *Quizlet* is also available as mobile application.

The complementary websites and applications concerned various sources to which the students could turn to further develop their language skills. Although some of these solutions also occupied compulsory roles in the pilot stage that was Study 1, they were subsequently changed to support self-paced learning and autonomy development. The interactive mind map creation website *MindMup* was used as a compulsory tool in Study 1 to scaffold vocabulary development. However, it was changed to a complementary possibility in further projects. *Coursera* and *TED* were used to present the students with authentic language input. For this reason, video lessons and presentations were selected to correspond with presentation goals and digital skill development. A number of grammar related video playlists on *YouTube* were also shared with the students. The *MyGrammarLab* mobile application was used to address self-paced grammar practice on the advanced language level. Finally, *iTunes* and *BBC Podcasts* were recommended to students for listening practice beyond the *Edmodo* tasks.

The final website students accessed was connected to questionnaire delivery and analysis. *Qualtrics* was piloted and used for these purposes. The site has a number of options to create engaging questionnaires that can be accessed both in web browsers and on smartphones. Item construction is straightforward through a number of options that encompass both open- and closed-ended questions. *Qualtrics* also gives feedback on each item in the form mean, standard deviation, minimum, maximum and variance values as well as total number of answers. The website was used as a needs-analysis tool and the platform of student satisfaction questionnaire delivery in Study 5.

All the discussed e-learning platforms, websites and applications are addressed in detail with a number of figures and illustrations in the respective studies.

**Table 12:** The platforms and websites used in the studies

<b>Platform/ Website/ App</b>	<b>Function(s) in the blended courses</b>	<b>Skill/ knowledge developmen t</b>	<b>Used for</b>	<b>Task creatio n frame/ Frame</b>	<b>Communicatio n</b>	<b>Badges</b>	<b>Built-in applicatio s</b>	<b>Self- paced learnin g</b>	<b>Student -based task creation</b>	<b>Mobile applicatio n</b>
<i>Edmodo</i>	main hub for online tasks	listening	practice, testing	Web 2.0	asynchronous	built-in, extendable	through the app store	yes	yes	yes
<i>Quizlet</i>	compulsory use	vocabulary	delivery, practice	Web 2.0	-	-	yes	yes	yes	yes
<i>MindMup</i>	compulsory, complementary use	vocabulary	mind map creation	Web 2.0	-	-	-	yes	yes	-
<i>Coursera</i>	complementary use	speaking	video lesson viewing	Web 2.0	-	-	-	yes	-	yes
<i>TED</i>	complementary use	speaking	video presentation viewing	Web 2.0	-	-	-	yes	-	yes
<i>iTunes</i>	complementary use	listening	listening to podcasts	Web 2.0	-	-	-	yes	-	only on iOS
<i>MyGrammar Lab</i>	complementary use	grammar	grammar practice	Web 2.0	-	-	-	yes	-	yes
<i>BBC Podcasts</i>	complementary use	listening	listening to podcasts	Web 2.0	-	-	-	yes	-	based on topic
<i>YouTube</i>	complementary	grammar	video lesson viewing	Web 2.0	asynchronous	-	-	yes	-	yes
<i>Qualtrics</i>	questionnaire delivery	-	-	web 2.0	-	-	-	-	-	mobile friendly

## **7. Research phase one: Exploration**

The first phase of the research projects was concerned with exploring the possibilities of e-learning integration into listening and speaking skills development. As addressed in section 6.1 (see p. 92), contrary to the second and third stages, this phase contains the summary of an additional preliminary study conducted in 2012. This project was labeled ‘Study 0’ as it was not part of the research structure planned for the dissertation, however, its findings were utilized in the design of Study 1. For this reason, it is briefly summarized.

### **7.1 Study 0: Exploring the e-learning needs of English majors**

#### **7.1.1 Introduction**

Study 0 is the summary of a needs-analysis study conducted in the 2012/13 fall semester with English majors at the University of Pécs. The full description of the project and its findings can be found in Simon (2014). In the present case only those issues are discussed that relate to the following studies.

#### **7.1.2 Context**

The context of the study was the Institute of English Studies at the University of Pécs and as argued in Simon (2014, p. 113) it involved what Dörnyei (2007, pp. 98-99) calls convenience sampling. The selected criteria in this study was enrollment as an English major either at the BA or MA level, as full-time or correspondent students.

#### **7.1.3 Research questions**

The research questions of the project were as follows:

- RQ1: “What do the English majors think of e-learning?”
- RQ2: “How can their e-learning habits be characterized?”
- RQ3: “How do they envision e-learning?” (Simon, 2014, p. 113).

#### **7.1.4 Participants**

There were 43 English major students who participated in the study from two BA and one MA courses. This meant 29 female (average age: 29.9 years) and 14 male learners (average age: 24.85 years) with a 29-14 division based on their enrollment in the full-time or correspondence programs (Simon, 2014, p. 113).

#### **7.1.5 Data collection instrument**

A questionnaire with open- and closed ended items was developed to address the participants' e-learning understanding, habits and requirements. The instrument followed a three-part structure based on the research questions (see Simon, 2014, pp. 117-119 for the instrument).

#### **7.1.6 Findings**

The study identified three issues. First, the e-learning habits of the participants showed a diverse picture whereby their understandings of the field itself revealed a number of controversies and they made limited use of the academic possibilities of e-learning they had been introduced to during their studies. Second, their e-learning experiences were primarily shaped by indirect exposure. Third, despite previous points, students presented and supported preferred scenarios of e-learning at the lecture and seminar levels at the Institute of English Studies at the University of Pécs (Simon, 2014, pp. 114-116).

#### **7.1.7 Conclusion**

The findings of Study 0 pointed to a number of emerging patterns. First, it revealed that e-learning exposure is present in the students' socialization either directly or indirectly, and it influences how they assess the importance of their respective courses in terms of delivery and contact sessions. Second, the results showed a need for further research which in Simon (2014, p. 116) was addressed as assessing teachers' relation to e-learning and designing a pilot phase for e-learning implementation. Although in different manners, both were carried out and are discussed subsequently as Studies 1 and 3 (see Figure 3 on p. 94).



## **7.2 Study 1: Exploring blended learning conversion in listening and speaking skills development**

### **7.2.1 Introduction**

The first study of the exploration phase was conducted in the spring semester of the 2014/15 academic year. It is partially a follow-up project to Study 0 and also a reaction to developing trends at the Institute of English Studies at the University of Pécs. It represents an exploratory pilot study concerning how the issue of the declining listening scores on the *Proficiency Exam* and students' language needs could be resolved. It discusses the findings of a semester long pilot blended learning project and lists the implications for further research initiatives concerning learner needs, e-learning platforms and language skill development.

### **7.2.2 Context**

The context of the project was the *Listening and Speaking Skills II (LSSII)* course in the spring semester of the 2014/15 academic year at the Institute of English Studies at the University of Pécs. This course is part of the six skill development seminars, including two *Reading and Writing Skills*, two *Listening and Speaking Skills* and also two *Grammar in Use* courses in the students' first academic year. These are mandatory for first year English majors and their goal is to prepare them for the *Proficiency Exam* at the end of their first year.

By the time of enrolling in the *LSSII* course, the students have theoretically participated in the fall semester equivalents of the above preparatory courses. This means that they have had some time to get acquainted with the university's learning management system (LMS) *ETR* and its content management system *CooSpace*. *CooSpace* was also subject of the questionnaire study conducted in the frame of Study 0 and the findings concerning under what circumstances the students would utilize an accompanying site to their courses was integrated in the design of the project at hand. By the time of writing this paper both *ETR* and *CooSpace* are obsolete and *Neptun* has taken over their functions as a unified LMS.

### **7.2.3 Research questions**

The project was structured around the following research questions:

- RQ1: How can a blended approach scaffold students' development?
- RQ2: What kind of tasks did students find the most and least useful?
- RQ3: What are the implications for the correspondence program?

### **7.2.4 Participants**

There were overall 16 students who started the course, however, one dropped out during the first month. From the 15 students, three were male and twelve female, with an average age of 19.6 years. Every participant was a first-year English major in their second semester. Two-third of the sample (10) was enrolled in the BA program whereas five students were in the first year of teacher training.

### **7.2.5 Data collection instruments**

The data collection instruments involved in the study can be grouped into pre- and post-course questionnaires. Students completed the instruments on the first and last sessions of the *LSSII* course.

The pre-course section of the instruments included a questionnaire with a quantitative and qualitative component as a self-assessment and a needs-analysis. Students assessed their own abilities based on a five-point scale along the following criteria: formal accuracy, oral accuracy, vocabulary, style, communicative effectiveness, discussion, argumentative and presentation skills. The pre-course self-evaluation was carried out in the form a comparative table where on the left side students needed to indicate their presumed skill level and on the right what they wanted to reach by the end of the semester. The complementary qualitative component in the instrument asked the students what they were expecting from the course, what they were ready to do for their progress and their presumed task needs (see Document B1 on p. 243).

The post-course section included a self-assessment and measuring student satisfaction. Similarly to the self-assessment conducted in the first lesson, the end-of-course respective skill assessment also had two scores to compare. The first set of

scores represented the students' intended skill level of by the end of the semester and the second their final assessment of their abilities (see Table A4 on p. 224). Students who completed the first round of self-assessment received this instrument with their names and what they marked in the beginning of the semester. Learners who did not complete the pre-course assessment only indicated their end-of-course evaluation.

The student satisfaction questionnaire was developed to address how applying a blended aspect to a course that the learners experienced as a face-to-face seminar in the fall semester of the 2014/15 academic year would be beneficial to their language development (see Table A5 on p. 225). The questionnaire was comprised of 51 four point Likert-scale items with the following ranking: strongly disagree (1), somewhat disagree (2), somewhat agree (3) to strongly agree (4). There were also 13 open ended questions in the instrument.

Since this was an exploratory study, the inclusion of open ended items was important to get feedback on the blended approach. Dörnyei (2007) calls attention to how qualitative data enables to pinpoint sensitive areas (p. 39) and makes it possible for the researcher to immediately address them (p. 40). As the instrument was an end-of-term student satisfaction questionnaire, the results were not used immediately but were integrated in the design of Studies 4 and 5. However, Study 2 was a project where the implementation was based on the results of the qualitative elements of the needs-analysis questionnaire and therefore qualifies as an immediate reaction to student needs.

The student satisfaction questionnaire included the following sections: general information, questions about in-class tasks, online tasks, feedback, *Edmodo* and overall impressions of the course. Each of these are dealt with separately in the findings section with detailed tables in Appendices A and B. It was important that students provided data from their actual experiences without any pressure. For this reason, the instructions in the questionnaire made it clear that data were collected for statistical purposes only, participation was voluntary and filling out the questionnaire did not include personally identifiable information. Also, students were informed in the first session about the research aspect of the course and how participating in it will not affect their grades in any way.

## 7.2.6 Procedure

As addressed in the introduction of this study, turning the traditionally face-to-face seminar *Listening and Speaking Skills II* into a blended course was motivated by two factors. The first concerned the decreasing scores on the *Proficiency Exam* suggesting that learners require further practice opportunities which are not possible in the classroom sessions due to time limitations. The second factor was exploring how e-solutions can contribute to the development of learners' language skills.

### 7.2.6.1 Implementing blending

The first step of the blending implementation was searching for websites and online platforms that could be used in the project. *Edmodo* was chosen as the main hub for the online tasks. The primary reasons for this were, as discussed section 6.3 (see p. 99), an intuitive interface, a high number of features and no additional costs.

Although *Edmodo* served as the central platform of the course, it was complemented by a number of video lessons from the self-study *Introduction to Public Speaking* MOOC (McGarrity, 2015). The reason behind selecting specific lessons was to give students additional support for completing the required presentation tasks. Additionally, they also needed to watch a number of *TED* presentations. These focused on gadgets, presentation skills and the role of technology in storytelling to fit the overall course design (see the full list of video lessons and presentations in Document B2 on p. 244).

A further element integrated into the course design was informing students about podcasts. Even though options such as *PBS* and *Kued* were listed on the syllabus, the primary focus was on *iTunes* and *BBC Podcasts*. Students also received a speaking situations abstract, which was a collection of expressions they could use during the presentation and discussion tasks. This was compiled based on Kész and Törökné Tenk (2011, pp. 169-187).

As described in detail in section 6.2.4 (see p. 97), adding a blended element to the *LSSII* course did not mean moving certain classes online but rather providing the learners with additional online practice and development opportunities. The face-to-face sessions of the course followed what students experienced during *LSSI*, namely

listening and speaking tasks. The presentation tasks included assignments that learners were familiar with the requirements from the previous semester. These covered a presentation on a topic of students' choice and a picture presentation where they received the image one week prior to the class via e-mail. An additional exercise required learners to prepare pair presentations based on a video or podcast they selected. Subsequently, students needed to create an online quiz based on their presentation and share it with the group on *Edmodo*. The syllabus explained the criteria along which the students' presentations were evaluated, including: formal accuracy, oral accuracy, vocabulary, style and communicative effectiveness (adapted from Szabó & Papp, 2013, p. 160) (see Document B1 on p. 243).

Students handed in their peer-review sheets (see Document B3 on p. 247) on *Edmodo*. Feedback on students' presentations was delivered via e-mail in the form of students' anonymous peer-assessment scores, comments and detailed comments and scores of two evaluators. I was one of the raters and the other reviewer was a fellow doctoral student. Receiving feedback from two evaluators was introduced in the third week of the course to simulate the oral *Proficiency Exam* conditions. Document B4 (see p. 248) illustrates the final assessment sheet students received. It consisted of two sections. First the two evaluators' scores and comments were listed contrastively which was followed by students' peer-review scores and feedback.

### **7.2.6.2 Addressing language development**

The online part of the blended *LSSII* course was concerned with addressing students' language development needs based on the results of the self-assessment and the needs-analysis questionnaire. As discussed in the data collection instruments section, beyond assessing their own levels on selected criteria on a five-point scale, the questionnaire also addressed learner needs. This happened in three sections: skill development needs, ready to do for progress and task needs. Tables A1-3 (see p. 221) show that learners mentioned quite a number of points concerning each area. These findings were grouped into the four categories of vocabulary development, speaking, listening and other needs.

*Vocabulary* development shows a similar picture in all three cases with students' main aim being lexical extension. The *speaking* descriptions were most detailed about what kind of development learners would like to achieve including general skill

improvement as well as becoming better presenters and debaters. *Listening* development was similarly prominent with focus on improvement, tasks and specific needs. The *other* section is made up of comments with specific focus on improving self-confidence, getting feedback, help with the *Proficiency Exam* as well as receiving tasks in class and at home. Based on these findings, the course's blended element and face-to-face sessions were adapted accordingly.

A number of overarching solutions were implemented in the course design concerning face-to-face and online elements. First, to address self-paced listening practice at home, students received a practice task every week on *Edmodo*. Also, one of the two in-class listening tasks was moved to the online interface. Students' final listening score included only the compulsory online and in-class listening tasks. The aim behind this approach was to reduce the pressure of completing the home exercises and encouraging practice. *Edmodo* makes it possible to simulate classroom environments by adding a time limit to task completion (see Figure 4).

Time Taken: 18:48 | Turned in May 6, 2015 @ 12:43 PM  
Graded | Delete

15/20  
Total Points:

1 2 3 4 5 6 7 8 9 10

Question Total: 2 points

7. According to the speaker, what could have been better in the movie?

Action it isn't as good as the comics

Correct Answer

Correct Incorrect Partial Credit 2 / 2

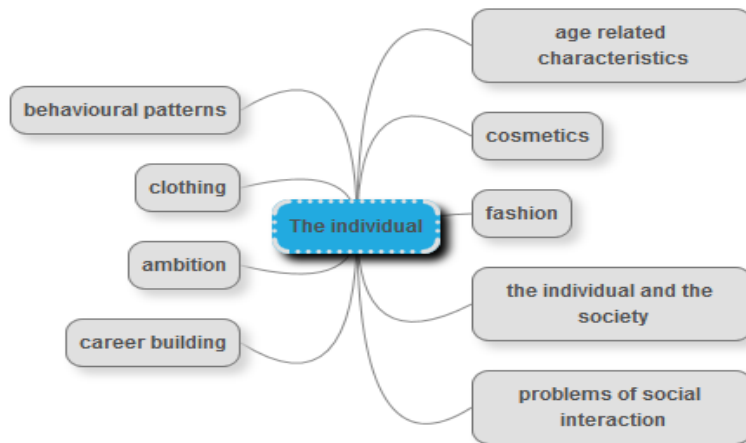
**Figure 4:** Sample of an online listening task on *Edmodo*

The second project targeted students' argumentative and discussion skill development. In the beginning of the semester, students were engaged in a staged debate where each participant needed to contribute an argument to the topic and had to select the next person to continue the discussion. This was followed by group discussion sessions, where students worked in groups of four and had to argue for or against a certain topic. The final step of this skill development was engaging students in pair discussion. Topics were taken from previous *Proficiency Exam* exercises as well as Tompos and Neville's (2012) book concerning various argumentative topics. Table 13 shows a sample exercise of this type.

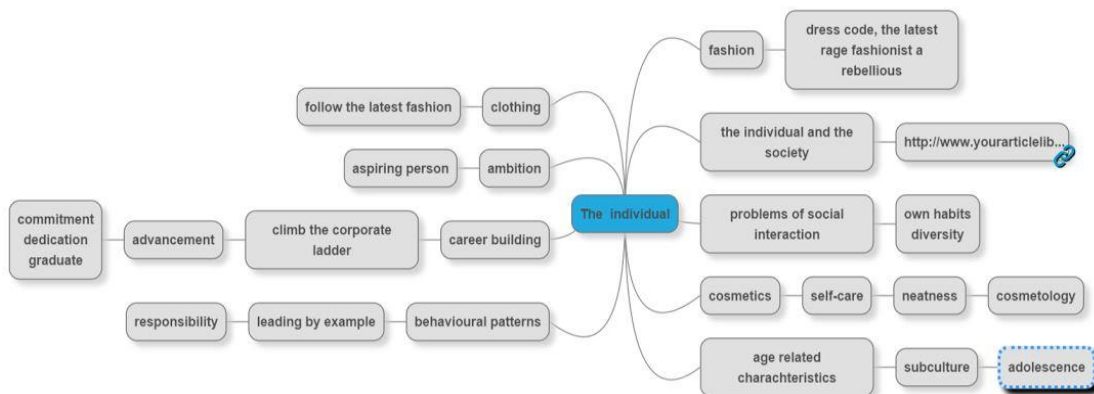
**Table 13:** A sample exercise for argumentative and discussion skill development adapted from Tompos and Neville (2012, p. 12)

<p><b>3A House swap during holidays</b> Swapping houses during holiday is a good idea because:</p> <ul style="list-style-type: none"> <li>• you can find many houses to choose from</li> <li>• there are no extra costs</li> <li>• you may even stay somewhere for free</li> <li>• more and more people are doing it all over the world</li> <li>• anything else you find important</li> </ul>	<p><b>3B House swap during holidays</b> Swapping houses during holiday can be dangerous because:</p> <ul style="list-style-type: none"> <li>• something can easily go wrong</li> <li>• it is easy to damage the property if you are not familiar with it</li> <li>• you have to organize your own journey</li> <li>• you can only see once you get there whether you made a good swap</li> <li>• anything else you find important</li> </ul>
--	--

The third language skill that received special attention was vocabulary development in two larger projects. Since there was no suitable mind map creation tool available in the *Edmodo App Store*, an outside website was applied. February 2015 was used as the time period for learners to get used to *Edmodo* and the mind map project took place in March 2015. The *MindMup* website was used and the task's initial collaborative goal was changed to individual completion since many participants had technical problems. Students received the intermediate and advanced level ECL language exam topics (adapted from Szabó & Collins, 2010, pp.154-7; 2011, pp. 208-10) in the form of mind map scaffoldings which they needed to extend with vocabulary items, expression and possibly videos, pictures and even websites connected to that topics (see Figures 5 and 6). After task completion, students could view each other's mind maps.



**Figure 5:** Example for a mind map scaffolding created on the *MindMup* website adapted from Szabó and Collins (2010, p. 154; 2011, p. 208)



**Figure 6:** Example for a completed mind map on the *MindMup* website

Taking place in April 2015, the second month-long vocabulary development project took required students to search for a podcast of their choice and write a reflective essay on why they picked it, what they learned from it and their reasons for recommending it. Students were also required to include a word list of expressions they found most useful and prepare a short listening exercise for their classmates. These submissions were also turned into online practice listening tasks. Overall, students mostly picked the *6 Minute English Podcast* on *BBC*'s website and were able to reflect on it in a logical manner while creating meaningful exercises.



An accompanying subproject included measuring students' vocabulary levels with Nation and Beglar's (2007) diagnostic instrument. Following this step, Nation's (1990) as well as Schmitt, Schmitt and Clapham's (2001, pp. 86-88) vocabulary levels tests and Martinez's (2011) phrase test were intended to be adapted on *Edmodo*. However, there was a technical issue that the site only allows for matching tests where every item has a pair. Thus, the tests were redesigned into five 25 item multiple choice tests (see Figure 7). Students received information on the level of the given vocabulary items and the tests were delivered online on *Edmodo* with the questions in a randomized order. This project is discussed in detail in Study 2.



**Figure 7:** A sample for an online vocabulary test on *Edmodo*

### 7.2.7 Findings

*Edmodo* proved to be a well-designed website for giving feedback to learners on the various listening tasks. From a teacher's standpoint, it gave information about the problematic items in the forms of pie charts, showed task completion times, made group and individual communication possible and provided an easy way of giving feedback. At the end of the semester, students completed a self-assessment and a reflective questionnaire reporting on their progress.

The findings of students' self-assessment are discussed in a comparative fashion. Students' presumed skill levels at the beginning of the semester and their intended development by the end of the course were put side-by-side with students' eventual self-assessed skill development.

The student satisfaction questionnaire's results are addressed in sections corresponding to the questionnaire parts. These include in-class tasks, online tasks, feedback, *Edmodo* and overall impressions. Each section has corresponding tables in Appendix A with the summarized results of the Likert-scale items together with their mean and standard deviation values.

### 7.2.7.1 Students' self-assessment

The end-of-term self-assessment questionnaire asked students to reflect on their development during the semester. The first part included the learners' presumed skill level at the beginning of the semester, the second the level they intended to reach at the end of the semester and the third how they assess their own abilities by the end of the course (see Table A4 on p. 224). In cases where students did not complete the start-of-term self-assessment, only their final scores were included in the calculation.

Students indicated their learning goals in various degrees, some more ambitious as the others, but all intended to get better in the duration of the course. Based on the mean values of the planned scores in Table 14, it can be concluded that although not achieving the intended score, students assessed their development concerning formal accuracy, oral accuracy, vocabulary, style and communicative effectiveness positively. In students' views, their skills increased almost 20% in all aspects.

**Table 14:** The findings of the first and second rounds of skills self-assessment

<b>Comparison/ average</b>	<b>FA</b>	<b>OA</b>	<b>V</b>	<b>S</b>	<b>CE</b>
<i>Where you saw yourself in the beginning of the semester</i>	3	2.54	2.54	3	2.72
<i>Where you wanted get by the end of the course</i>	4.36	4.45	4.36	4.27	4,54
<i>Where you see yourself now</i>	3.75	3.46	3.46	4	3.64
Perceived change by the end of the semester	<b>+0.75</b>	<b>+0.92</b>	<b>+0.92</b>	<b>+1</b>	<b>+0.92</b>

**Legend:** **FA:** formal accuracy, **OA:** oral accuracy, **V:** vocabulary, **S:** style, **CE:** communicative effectiveness

## 7.2.7.2 Findings of the student-satisfaction questionnaire

### 7.2.7.2.1 Findings of the in-class tasks

The first section of the questionnaire gathered information about how students perceived the in-class tasks. Each task was addressed with two four-point Likert scale items. One was asking about how the participants perceived the given task contributed to their language development and the second question (Q) addressed how level-appropriate it was in their regard.

Elements of the face-to-face course integrated in the blended version included in-class listening tasks (Q11-12), various discussion activities (Q7-10), a presentation on a chosen topic (Q1-2) a picture talk based on assigned pictures (Q3-4) and pair presentations (Q5-6). The discussion tasks were organized to introduce participants into argumentation in a step-by-step manner. First, they happened as a staged debate in the classroom where each student had to add one point to the topic at hand, next, they worked in groups to solve a problem (Q7-8) and finally they argued in pairs (Q9-10). During the session, one listening task took place in class (Q11-12), while another took place online on *Edmodo*.

The mean values displayed in Table A6 (see p. 229) (Q1, 3, 5, 7, 9 and 11) suggest that the students found the various in-class tasks beneficial for their language development. *Presentation* (3.4), *picture talk* (3.13), *pair-presentation* (3.27), *group discussion* (2.93), *pair discussion* (3.07) and *listening* (3.2) all had high mean values. A similar trend can be observed in learners' assessment of the tasks' level appropriateness (Q2, 4, 6, 8, 10 and 12). However, students' scores indicated higher values in terms of level appropriateness: *presentation* (3.4), *picture talk* (3.4), *pair-presentation* (3.33), *group discussion* (3.2), *pair discussion* (3.02) and *listening* (3.53).

Questions 13 to 16 were open ended items gathering further information (see Table A7 on p. 230). Question 13 inquired about how the in-class tasks contributed to students' development. Their answers were as follows: *vocabulary development* (7) (three references to the *presentation task* and one to the *in-class listening exercises*), *speaking development* (7) (two learners highlighting the role of the *presentations tasks*), *listening tasks* (6), *self-confidence building* (3), *pronunciation development* (1) and the overall *structure of the course* being helpful (1).

Question 14 asked about what other forms of development students would have welcomed. The answers indicated that participants required more *vocabulary* related (4) and *speaking* (1) *exercises*. One learner indicated *satisfaction* with the course. Question 15 was about any other comments the students might have wanted to add. There were four answers concerning feedback to the course. Two students commented on having *too many exercises*, one stressed she/he would *not allow reading presentations* and another one argued for having the *discussion tasks without helping cards*.

#### **7.2.7.2.2 Findings of the online tasks section**

The second part of the questionnaire looked at the e-learning tasks of the *LSSII* course. Concerning e-learning experience, only two students reported to have encountered e-learning previously whereas nine had none and four were not sure.

The areas in this section included exercises or files students accessed on the accompanying site *Edmodo* (Q16-22), a selection of lesson from the Introduction to Public Speaking MOOC on *Coursera* (Q23-25), a number of *TED* presentations (Q26-28), a mind map creation task on the *MindMup* website (Q29-31), a reflective essay on a podcast of the learners' choice and their own listening task based on it (Q32-34), a vocabulary size test (Nation & Beglar, 2007) (Q36) and vocabulary tests adopted from Schmitt, Schmitt and Clapham's (2001, pp. 86-88), Nation (1990), as well as Nation and Martinez (2011) (Q36-37).

As discussed in section 6.3 (see p. 99), *Edmodo* was chosen to provide a hub for the *LSSII*s course for a number of practical reasons. The website's features were utilized in moving the second listening task of each lesson to this online space and also providing students with an additional weekly exercise that they indicated in the needs-analysis at the beginning of the semester. Based on the mean scores in students' answers, they found both the *compulsory online listening* tasks (3.47) (Q16) and the *home practice listening* exercises highly beneficial for their development (3.4) (Q18). Their level appropriateness shows a pattern in favor of the *compulsory* tasks (3.53) (Q17) as opposed to the *practice* ones (3.4) (Q19) (see Table A8 on p. 231).

Initially, there were a few vocabulary lists put together based on the in-class, the compulsory online and the home practice listening tasks. However, usage remained low,

so this was shortly discontinued. This is further evidenced by how 60% of the students did not turn to these (Q20).

During the course, students were required to assess their classmates based on the same criteria they were scored with as well. These included formal accuracy, oral accuracy, vocabulary, style and communicative effectiveness. The criteria were chosen and defined based on the advanced level ECL language exam requirements (see Szabó & Collins, 2013, p. 160). Students were also asked to reflect on their own presentations but only a few did so during the semester. Question 21 shows a varied picture about writing the peer-reviews for classmates with an overall mean value of 2.93. A strong positive correlation can be identified about finding the received peer-review scores fair (3.33) (see Table A9 on p. 232).

Giving students support with how to structure their presentations was a primary aim of the course. The *Coursera MOOC Introduction to Public Speaking* (McGarrity, 2015) was a prime candidate for this as it contains short video lessons about choosing keywords, slide planning and so on. Furthermore, it is a self-study course, meaning there are no deadlines and students could access each video lesson throughout the semester. Question 25 revealed that *Coursera* was almost exclusively unknown to the participants (mean: 1.93). Question 23 shows that only about 40% of the students (6) turned to the *Coursera* lectures which is in line with about 66.5% of the sample (10) not finding the MOOC useful at all for developing their presentations skills (mean: 2.47) (Q24) (see Table A10 on p. 232). These results could be contributed to the issue that the students were already familiar with presentation creation to some degree, hence why the introductory videos focusing on the topic were deemed less useful.

In addition to the video lectures, students were required to watch selected *TED* presentations each week. Responses to Q26 show a somewhat different pattern from Q23 with a mean value of 2.6. Based on their answers to Q27, the participants found these videos more useful for the development of their presentation skills (mean: 3). Contrary to *Coursera*, overall 11 students were familiar with *TED* prior to taking the *Listening and Speaking Skills II* course (Q28). These findings point to learners requiring less content on the background theory of how to put together a presentation and more on the applied aspect of it through actual speakers (see Table A10 on p. 232).

Three exercises targeted vocabulary development and vocabulary level measurement. The first of these was providing learners with mind map scaffoldings based on the intermediate and advanced level ECL topic descriptions adapted from Szabó and Collins (2010, pp.154-7; 2011, pp. 208-10). The students' task was to extend these with words, expressions and possibly with pictures, websites and videos on the *MindMup* website. Q29 shows that completing the task happened mostly without problems (mean: 2.93) and was beneficial for students' language development (3.2). *Viewing classmates' mind maps* was also seen as beneficial by learners for their language development (2.73) (see Table A11 on p. 233).

The second vocabulary development task required students to find a podcast of their choice, write a reflective essay about it discussing its topic, what they learned from it and why they would recommend it. In the essay, they were asked to add a list of words and expressions from the podcast as well as to prepare a short listening task with 5-10 questions. Question 32 revealed that finding the subject of their podcast analysis was somewhat challenging for students (mean: 2.33). However, *putting together the vocabulary lists* were seen as far easier (Q33) (3.2). *Creating the listening task* also shows an overall positive distribution (3.07) (see Table A12 on p. 233).

The final phase of vocabulary related activities was concerned with online testing. The first step was utilizing Martinez's (2011) diagnostic test to determine the vocabulary level of the participants and was completed on the *Compleat Lexical Tutor* website (Cobb, 2001). Students indicated that they found *feedback on their vocabulary level useful* (Q35) (mean: 3.13). The next stage involved five matching tests adapted from Nation (1990), Schmitt, Schmitt and Clapham (2001, pp. 86-88) and Nation and Martinez (2011). These were reworked into multiple choice questions on *Edmodo*. Items were included from the 2.000-10.000 word levels. Questions 35-36 show the same highly positive pattern with concerning appropriateness and language development with mean values of 3.33 (see Table A13 on p. 234).

Question 38 asked students to describe the ways in which the online tasks helped their development. The most mentioned category was *vocabulary developing* (10) with one student stressing the *TED presentations* and the *MindMup website*. *Listening skill development* and *tasks at home* each were mentioned four times. Although not a focus

of the course, *writing skill development* was also mentioned by three students, most likely due to the podcast essay task and *pronunciation development* was also listed once.

Question 39 collected data on what other forms of development the participants would have welcomed. *Vocabulary* was mentioned by two participants with comments about *more vocabulary lists to listening tasks, fewer mind maps and vocabulary tests*, as well as *tests similar to the Proficiency Exam. Speaking, more Coursera tasks and more online tasks based on TV series or movies* were all mentioned once. These findings of Q38 and 39 contradict the previously identified issues where *Coursera* video lessons were largely avoided by the students and they did not utilize the vocabulary lists either.

The answers to Q40 revealed what aspects of the online tasks need improvement. Overall, students mentioned six points: *repetition in the vocabulary tasks* and their *limited usefulness, task completion time* not being enough, *short deadlines, disliking* some of the *tasks* and hard to get used to the *interface*. Two students expressed their overall *enjoyment* of the online tasks, similarly there was a mention of the *interface* being *easy to use*, *useful vocabulary tests* and *listening skill development* (see Table A14 on p. 234).

#### **7.2.7.2.3 The findings of the feedback section**

Students received feedback in a number of ways during the semester. First, they received immediate feedback in class after the presentation and discussion tasks. Subsequently, they got the results of the peer-reviews together with a detailed evaluation of their performance based on the same evaluation criteria used in the peer-reviews via e-mail. Starting from the third week, a two-evaluator approach was introduced to simulate the *Proficiency Exam* circumstances. Furthermore, students received feedback concerning the grammar, syntax and spelling of their answers on *Edmodo*.

Questions 41 to 45 show a similar pattern, revealing that the students found the *in-class feedback* the most constructive (mean: 3.87) (Q41) which was followed by *written feedback* (3.8) (Q42). Students also assessed receiving *scores from two evaluators* as highly useful (3.8) (Q43). *Written feedback on Edmodo* (Q44) was also identified as constructive (3.53) together with *peer-review comments* (3.4) (Q45).

Question 46 revealed further information about feedback. One student mentioned the *peer-reviews being helpful* and another one described how it developed assessment skill in writing the peer-reviews. However, a student also mentioned how peer review results were contradictory (see Tables A15 & 16 on p. 236).

#### **7.2.7.2.4 Findings of the Edmodo section**

The third section of the questionnaire focused on the students' experiences with *Edmodo*. Based on the answers to Q47, learners found using *Edmodo* highly useful during the semester (mean: 3.33). The results on the site's interface (Q48) display a similar distribution (3.29). Question 49 revealed that while ten students found task completion easy, it came with some difficulties to six others (2.87). Overall, participants found accessing files on *Edmodo* mostly intuitive (3.13).

Questions 51 and 52 show similar distributions which means that students *encountered a number of errors* (2.47) which negatively *influenced their task completion* (2.43). There was, however, an opportunity to contact the tutor via e-mail if learners had some errors that made finishing a task impossible. This usually included *Edmodo* not accepting some answers or simply freezing in task completion. There is an option on the teacher interface to delete students' solutions and utilizing this is what providing tech support usually meant in the later parts of the course besides the initial orientation in the first two weeks. Question 53 shows that students were overall satisfied with *online support* they received (3.07).

*Edmodo* offers custom badges that can be awarded to students besides its stock badges. There were 17 badges overall developed for the course based on a collection of royalty free clipart found on [www.clicker.com](http://www.clicker.com) which functioned as a form of checklist of task completion (e.g., "the golden microphone: completed all presentation tasks"). However, students found receiving *badges* moderately motivating (2.93) (Q54). The near equal distribution of answers in Question 55 shows that students were either not convinced by the usefulness of an accompanying site or by the possible benefits adding a blended aspect to a face-to-face course (2.4) (see Table A17 on p. 237).

The answers to Q56 included two comments about the *listening tasks*, and problems with the *links* and the *layout* of the online listening tasks on *Edmodo*, and one



remark for the *interface* being better than *CooSpace*, the *online element being useful* and the *overall usefulness of feedback* (see Table A18 on p. 237).

#### 7.2.7.2.5 Overall impressions

The final section focused on students' overall impression of the course. Questions 57-58 revealed that the participants highly *enjoyed the course* as a whole (mean: 3.47) (Q57) and report that they were *able to develop their listening and speaking skills* (3.33) (Q58). Moreover, students also found *working with Edmodo* to be a positive feature of the *LSSII* course (3.13) (Q59), even if it contradicts the results of Q55 (see Table A19 on p. 238).

Questions 60-64 collected additional data for the future iterations of a blended listening and speaking skill development course (see Table A20 on p. 238). Question 61 revealed that there is a great *demand for further speaking tasks*. Four students listed generally that they require *more speaking exercises*. There were three answers for *additional presentations*, one for *spontaneous speaking tasks* and one student argued for *more TED videos*. *More vocabulary tasks* would have been welcomed by two participants as well as *more listening exercises* (1) with *easier texts* (1). There were also three students who expressed their *satisfaction* with the course.

Question 61 inquired about tasks learners would have liked to have less of. *Listening and presentation tasks* both were mentioned three times followed by *Edmodo tasks* (2) and *peer-reviews* (1). There were, however, a number of responses that included constructive advice about what kind of changes students expect. These were *fewer exercises* (4), thereby mainly referring to the *online tasks* and broadened *deadlines* (1). Making the listening tasks *easier* was also mentioned. Additional data was provided for Q61 in Q62 as *too much homework* was mentioned here together with moving most of the *listening tasks to the classroom environment*. Otherwise, three answers indicated the students *enjoying* or *liking the course*, three finding it *useful*, as well as two positive remarks about the *structure*, and one for the course being *interesting*. Being *beneficial* for listening development and present overall *atmosphere* were also mentioned.

Question 63 collected data about what the students would recommend for future versions of the course by making it a direct question instead of an indirect inquiry that were questions 61 and 62. *Fewer online tasks* were listed by three participants, together with *fewer presentations* (2) and *more speaking tasks* (2) *more listening exercises* (1) and *more picture presentations* (1). A *syllabus* where each task is listed was mentioned by students as well as *longer deadlines*. The reason for the former was the exploratory nature of the course, where a primary aim was to react to students' needs, hence only the online scaffolding was described in the syllabus. One student mentioned she was *satisfied* and would not change anything and a second would recommend *Edmodo*.

The final question (Q64) provided the most detailed insight into how the learners experienced their first blended course, as it asked for their overall impression. These were organized into categories and four points were identified as most prominent: room for improvement, presentation and listening exercises as well as online tasks.

Room for improvement included the following statements: *three presentation tasks are too much* (1), *too many exercises* (1), *picture description left a negative feeling* (1), *seeing the listening scores left a negative feeling for the whole class* (1), *overwhelmed by homework* (1), *include all tasks in the syllabus* (1), *deadlines too short* (1), and *feeling others having a larger vocabulary* (1).

The presentation tasks were categorized by the following answers: *liked argumentative tasks* (2), *liked presentations* (2), *enjoyed presentations* (2), *able to choose own topics* (1), *presentations useful, helpful and interesting* (1), *improved proficiency* (1) and *interesting presentations* (1).

The students had the following to say about the listening tasks: *liked listening tasks* (2), *listening tasks were difficult* (2), *more listening tasks than in the previous semester* (1), *online and in-class listening tasks* (1), *much better than Listening and Speaking Skills I* (2), *home practice tasks were useful* (1), *improved listening and speaking skills* (1).

Online tasks were described as follows: *useful home practice tasks* (2), *a new way of practicing listening and speaking* (1), *learning on the internet was new but useful* (1), *online version was good* (1), *Edmodo useful* (1) and *liked the online interface* (1). Further answers included: *enjoyment or liking* (12), *additional praise* (5), *useful* (4),

*evaluation* (2), *mood* (2), *speaking development* (2), *liking the variety of tasks* (1), *raising interest* (1), *practice* (1), *vocabulary development* (1), *structure* (1), *funny* (1), *interesting* (1), *people* (1) and *teacher* (1). Overall, these answers are supported by the Likert-scale items (see Table A20 on p. 238).

### **7.2.8 Conclusion**

Returning to the research questions, it can be said that additional practice opportunities and skill development outside the classroom were the most significant results of applying a blended approach (RQ1). Learning support, however, can be further developed within *Edmodo* and other websites. Students found the online listening tasks the most useful and the *Coursera* video lectures the least useful (RQ2). The third research question points to the next step of the project, namely turning the correspondence courses into e-learning ones. Based on the questionnaire results and students' answers, *Edmodo* is a well-suited website for this change and e-learning conversion is possible (RQ3). This issue is readdressed in Study 6.

The findings revealed that the implementation of a blended approach was successful and presented the participants with a platform for additional tasks and activities. Learners provided useful information for the further steps of the project and highlighted problematic areas. The in-class tasks were complemented by the online ones well and the platform was identified as useful. Although students were not entirely convinced about turning to an external site, their overall development shows the beneficial nature of the project. The results of Study 1 were used as a guiding frame for Studies 2, 5 and 6.

## **7.3 Study 2: Piloting online vocabulary development and testing on *Edmodo***

### **7.3.1 Introduction**

Study 2 presents the findings of the vocabulary testing and development subproject conducted in the frames of Study 1. First, a theoretical frame is discussed concerning vocabulary size measurement and word level knowledge. This is followed by detailing how the vocabulary tests were adapted and what the vocabulary profile analysis of the participants' essays revealed. Since this study was carried out during the blended learning *Listening and Speaking Skills II* course discussed in detail in Study 1, only those elements are addressed that are relevant to the study at hand. Therefore, the overarching data collection materials, procedures and questionnaire results can be found in more detail in sections 7.2.5 and 7.2.7 (on p. 107 & 114).

### **7.3.2 Theoretical frame**

The field of vocabulary research is a multidimensional principle. Within the SLA context it has been driven by the core concept of how vocabulary acquisition is fundamental to L2 mastery (Schmitt, 2008, p. 329). A logical question that follows concerns the required lexical size needed to be engaged in successful communication.

Addressing the issue of vocabulary coverage, Schmitt (2008) summarizes the findings of a number of research studies that aimed to find the threshold knowledge needed to be able to understand spoken and written discourse. Based on Hu and Nation (2000), he makes the point that 98% coverage is needed in written and similarly, referring to Bonk's (2000) results, 95-98% coverage is necessary for spoken discourse (Schmitt, 2008, p. 330).

There have been some initiatives to create specific word lists that aim to cover the spectrum of general vocabulary knowledge outlined in Schmitt's (2008) summary. A prime example for this is the *New General Service List* (new-GSL) developed by Brezina and Gablasova (2015) which includes 2,494 items, out of which 2,116 belong to the common lexical core (p. 14). A similar project was developed by Browne, Culligan and Phillips (2013a) in the form of the *New General Service List (NGSL)*. Although both lists were titled confusingly *New General Service Lists*, there are

fundamental differences in their approaches to the vocabulary items they include. The *NGSL* provided part of the vocabulary core dealt with in Study 2's follow-up research which was Study 4 and is discussed in more detail in that project.

A further issue concerning vocabulary knowledge that is addressed by Schmitt (2008) refers to what level is required to read authentic texts. He argues that the baseline for this is around 8,000-9,000 word families and emphasizes that this is a much larger figure as it may seem at first sight, since words families can include a large number of forms (p. 331). He reports, that according to Nation's (2006) calculations this would mean about 34,660 words (p. 332). Furthermore, learners must also know about item usage as well. Schmitt (2008) labels this as the depth of vocabulary knowledge and in his list includes the following aspects: spoken and written forms, word parts, form and meaning, concept and referents, associations, grammatical functions, collocations and constraints on use (pp. 333-334). Looking at the number of required word families and vocabulary depth knowledge, it is no wonder that vocabulary acquisition after a certain level is seen as a daunting task.

### **7.3.3 Context**

The context of the project was the same *Listening and Speaking Skills II* course in the spring semester of the 2014/15 academic year at the Institute of English Studies at the University of Pécs as with Study 1 (see section 7.2.2 on p. 105). As previously addressed, the *LSSII* course is part of six skill development seminars aiming to prepare first year English majors for the *Proficiency Exam* at the end of their first academic year. The project at hand is a direct reaction to students' need for additional vocabulary development and practice in Study 1.

### **7.3.4 Research questions**

The study had altogether three research questions:

- RQ1: How can a blended approach scaffold students' vocabulary development?
- RQ2: What is the level of students' active and passive vocabulary knowledge?
- RQ3: What are the implications for further vocabulary development?

### **7.3.5 Participants**

Study 2 worked with the same participants as Study 1, however, since it was a voluntary project, only a subset of the whole sample completed it. Thus, there were overall 10 students involved in project, out of which eight were female and two male.

### **7.3.6 Data collection instruments**

The study worked with three data collection instruments addressing students' vocabulary development. First, learners completed Nation and Beglar's (2007) online vocabulary size test and provided the results via e-mail. This was followed by five online multiple choice tests conducted on *Edmodo* which were adapted from Nation's (1990) as well as Schmitt, Schmitt and Clapham's (2001, pp. 86-88) vocabulary levels and Martinez's (2011) phrase tests (see Tables C1-6 on p. 250). Finally, students were required to write a reflective essay on a podcast of their choice. Subsequently, these writings were analyzed using the *Vocabprofile* tool on the *Compleat Lexical Tutor* website (Cobb, 2001) to establish students' vocabulary profiles.

### **7.3.7 Procedure**

A crucial point of using a blended approach to redesign the traditionally face-to-face seminar *Listening and Speaking Skills II* course was to consider areas where learners felt they needed further development. As discussed in detail in section 7.2.6.2 (see p. 109), this was done as a result of a needs analysis questionnaire (see Tables A1-3 on p. 221) which pointed to three areas covering, speaking, listening and vocabulary development. Although the first two skills were addressed during the contact sessions and online on *Edmodo*, vocabulary development and practice required further attention.

Vocabulary development was approached from multiple angles. First, students were involved in a mind map extension task where the ECL intermediate and advanced level language exam topic descriptions of Szabó and Collins (2010, pp.154-157; 2011, pp. 208-210) were adapted to an online mind map creation software (see Figures 5 and 6 in section 7.2.6.2 on p. 112).

A second approach measured students' vocabulary level using Nation and Beglar's (2007) diagnostic instrument. This was followed by adapting Nation's (1990)

as well as Schmitt, Schmitt and Clapham's (2001, pp. 86-88) vocabulary levels test and Martinez's (2011) phrase test into five 25 item online multiple choice tests (see Tables C1-C6 see p. 250) which were the primary data collection instruments in the study. Students received information on the level of the given vocabulary item and the test was delivered with the questions in a randomized order (see Figure 7 on p. 113). Overall, ten students completed this optional task and nine the reflective essays.

Additionally, students were also required to write a maximum 1,000-word reflective essay on a podcast of their choice. These were analyzed using the *Vocabprofile* tool on the *Compleat Lexical Tutor* website (Cobb, 2001) through the 25k world level tool based on the *BBC-COCA* reference corpus.

### **7.3.8 Findings**

#### **7.3.8.1 The finding of the online vocabulary tests**

The scores students achieved on Nation and Beglars's (2007) diagnostic test range from 9,300 to 11,800 words with an average of 10,120. These are differences students are likely to have at this level.

Students' performances on the individual vocabulary tests show a varied picture, as Table 15 illustrates. While their overall scores on the tests were quite high, the individual scores have greater differences. Still, as evidenced by the decreasing completion times and constantly high scores in Table 15, it can be concluded that the students did remarkably well on the tests. These findings can be interpreted in two ways.

First, the redesigned multiple choice tests suited students' levels. Second, the results point to the conclusion that items presented in this manner are within the participants' vocabulary knowledge and therefore follow-up projects need to take this into consideration. The primary focus of the study was exploring practice and vocabulary development possibilities. There was no structured lexical extension element of the *LSSII* course. However, incidental vocabulary learning was experimented with in the form of recurring items in the five online vocabulary tests.

**Table 15:** Students' individual vocabulary level scores, test scores, completion times and overall test scores

Vocab. level	Test 1	Test 2	Test 3	Test 4	Test 5
<b>S1</b> (9,300w)	07:50	07:07	05:30	05:30	04:43
98/125 (78%)	22/25 (88%)	18/25 (72%)	19/25(76%)	23/25 (92%)	16/25 (64%)
<b>S2</b> (9,400w)	04:57	04:31	04:08	04:44	03:35
107/125 (85%)	21/25 (84%)	21/25 (84%)	20/25 (80%)	22/25 (88%)	23/25 (92%)
<b>S3</b> (10,900w)	20:33	16:16	14:15	09:23	10:33
105/125 (84%)	22/25 (88%)	21/25 (84%)	19/25 (76%)	20/25 (80%)	23/25 (92%)
<b>S4</b> (11,200w)	07:32	08:08	05:50	06:14	06:29
119/15 (95%)	23/25 (92%)	22/25 (88%)	24/25 (96%)	25/25 (100%)	25/25 (100%)
<b>S5</b> (8,700w)	04:37	04:16	04:18	03:19	03:26
103/125 (82%)	20/25 (80%)	21/25 (84%)	20/25 (80%)	22/25 (88%)	20/25 (80%)
<b>S6</b> (11,800w)	18:47	16:49	17:09	14:15	13:04
111/125 (89%)	21/25 (84%)	23/25 (92%)	20/25 (80%)	22/25 (88%)	25/25 (100%)
<b>S7</b> (10,300w)	15:41	15:11	11:28	10:24	09:07
96/125 (77%)	19/25 (76%)	17/25 (68%)	19/25 (76%)	22/25 (88%)	19/25 (76%)
<b>S8</b> (10,600w)	05:06	04:26	04:28	04:29	03:04
102/125 (81%)	22/25 (88%)	17/25 (68%)	23/25 (92%)	19/25 (76%)	21/25 (84%)
<b>S9</b> (9,500w)	07:48	09:12	09:07	12:04	06:05
103/125 (82%)	19/25 (76%)	19/25 (76%)	19/25 (76%)	23/25 (92%)	23/25 (92%)
<b>S10</b> (9,500w)	08:43	05:03	04:28	06:30	02:46
112/125 (89%)	24/25 (96%)	19/25 (76%)	23/25 (92%)	21/25 (84%)	25/25 (100%)
<b>Mean</b>	21.3	19.8	20.6	21.9	22
<b>SD</b>	1.63	2	1.95	1.66	3
<b>Overall</b>	213/250 (85%)	198/250 (79%)	206/250 (82%)	219/250 (87%)	220/250 (88%)
<b>Overall mean</b>	21.12		<b>Overall SD</b>	2.4	

**Table 16:** The results of the two testing of 12 items in the online vocabulary tests

Items	First testing		Second testing		Results	
	Mean	SD	Mean	SD	Mean	SD
1. AS A RESULT it was done. (2k)	0.9	0.316	0.9	0.316	no change	
2. FOR INSTANCE, it is cheaper. (2k)	1	0	1	0	no change	
3. He just CAME UP TO me. (5k)	0.9	0.316	0.9	0.316	no change	
4. I can DEAL WITH it. (1k)	0.7	0.438	0.8	0.421	+0.1	+0.017
5. I did it AT ONCE. (3k)	0.4	0.516	0.8	0.421	+0.4	+0.095
6. I just did not FEEL LIKE it. (3k)	0.5	0.527	0.8	0.421	+0.3	+0.106
7. I USED TO go. (1k)	0.5	0.527	1	0	+0.5	+0.0473
8. I'll go AS SOON AS I can. (2k)	0.8	0.421	0.8	0.421	no change	
9. IN TIME they bought a house. (3k)	0.4	0.516	0.3	0.483	-0.1	-0.033
10. It has PROVED TO BE important. (4k)	0.8	0.421	1	0	+0.2	+0.421
11. It was CARRIED OUT yesterday. (2k)	0.9	0.316	0.9	0.316	no change	
12. No one knows what it will LEAD TO. (10k)	1	0	1	0	no change	

As Table 16 illustrates, twelve items were presented twice across the five tests. The results indicate that only one item received lower mean and standard deviation values during the second testing, whereas six showed no change and five showcased rising tendencies. This development points to the possibility of incidental learning and



the need for structured vocabulary extension and practice. Addressing these aspects of vocabulary development were cornerstones of Study 2's follow-up project in the form of a corpus-based, interactive lexical extension (see Study 4).

### 7.3.8.2 Findings of the vocabulary profiles analyses

Table 17 summarizes the findings of the vocabulary profile analyses based on students' reflective essays. It was carried out with the *Vocabprofile* tool on the *Compleat Lexical Tutor* website (Cobb, 2001) using 25k sorting based on the *BNC-COCA* corpus.

**Table 17:** Word level tokens in students' reflective essays

Word levels	Students' level tokens (%)								
	S1	S2	S3	S4	S5	S6	S7	S8	S10
<b>K1</b>	554 (81.83)	681 (87.31)	485 (75.19)	832 (83.37)	862 (92.00)	899 (89.36)	601 (86.98)	554 (81.83)	554 (81.83)
<b>K2</b>	60 (8.86)	46 (5.90)	65 (10.08)	95 (9.52)	36 (3.84)	56 (5.57)	39 (5.64)	60 (8.86)	60 (8.86)
<b>K3</b>	31 (4.58)	15 (1.92)	42 (6.51)	31 (3.11)	18 (1.92)	19 (1.89)	19 (2.75)	31 (4.58)	31 (4.58)
<b>K4</b>	10 (1.48)	5 (0.64)	12 (1.86)	1 (0.10)	2 (0.21)	6 (0.60)	5 (0.72)	10 (1.48)	10 (1.48)
<b>K5</b>	6 (0.89)	1 (0.13)	9 (1.40)	3 (0.30)	1 (0.11)	1 (0.10)	5 (0.72)	6 (0.89)	6 (0.89)
<b>K6</b>	2 (0.30)	5 (0.64)	3 (0.47)	3 (0.30)	1 (0.11)		2 (0.29)	2 (0.30)	2 (0.30)
<b>K7</b>	2 (0.30)	3 (0.38)		1 (0.10)			1 (0.14)	2 (0.30)	2 (0.30)
<b>K8</b>			1 (0.16)	1 (0.10)		1 (0.10)			
<b>K9</b>		5 (0.64)	1 (0.16)						
<b>K10</b>		4 (0.51)				1 (0.10)			
<b>K11</b>	1 (0.15)			1 (0.10)		1 (0.10)		1 (0.15)	1 (0.15)
<b>K12</b>		1 (0.13)							
<b>K13</b>	1 (0.15)			2 (0.20)	8 (0.85)			1 (0.15)	1 (0.15)
<b>K14</b>									
<b>K15</b>			1 (0.16)			1 (0.10)			
<b>K16</b>									
<b>K17</b>						1 (0.10)	1 (0.14)		
<b>K18</b>		2 (0.26)	1 (0.16)		1 (0.11)		1 (0.14)		
<b>K19</b>									
<b>K20</b>									
<b>K21</b>	1 (0.15)							1 (0.15)	1 (0.15)
<b>K22</b>									
<b>K23</b>				1 (0.10)					
<b>K24</b>									
<b>K25</b>									
<b>Off-list</b>	9 (1.33)	12 (1.54)	25 (3.88)	27 (2.71)	8 (0.85)	20 (1.99)	17 (2.46)	9 (1.33)	9 (1.33)

The results show that the first 5,000 word levels are represented in all nine learners' writings that completed this task. The 6,000 and 7,000 levels are also strongly present, however, further ones have only sporadic results. Comparing this result with the vocabulary levels test findings where learners had an average of 10,000 words reveals a trend that is in line with the research conducted in this field, namely that passive vocabulary knowledge is higher than active vocabulary (see Webb, 2008).

### **7.3.9 Conclusion**

Based on the results of the vocabulary tests and the open-ended items in the reflective questionnaire, a blended approach has the potential to scaffold students' vocabulary development. However, it needs to follow a different structure than the exploratory tasks used in the present case. The diagnostic vocabulary levels test needs to be moved to the beginning of the semester to determine students' level and the vocabulary lists based on the listening tasks can be turned into multiple choice online tests as well. Also, productive vocabulary development needs more focus as well which could include online tests or a follow-up task to the mind map exercises. Overall, there are a large number of exercises that can be moved to an online space to benefit learners (RQ1).

The students' active and passive vocabulary knowledge levels reveal the same pattern that is addressed in the literature (see Webb, 2008), where their passive knowledge is higher than their active. The findings are, however, promising, as students' final self-assessment (see section 7.2.7.1 on p. 114 for detailed findings) revealed that learners deemed the vocabulary development project successful (RQ2).

The self-assessment and reflective questionnaires contained valuable data for the next blended version of the *Listening and Speaking Skills* course. The most important issue pointed to the need for a smoother integration of online vocabulary development tasks into the course design (RQ3). Based on the results of the online vocabulary tests, the vocabulary profile findings and the scores revealed by the final self-assessment, the pilot project was overall successful.

## **8. Research phase two: Application**

The second phase of the research contains two follow-up studies that addressed the arising issues from Studies 0 and 2. In Study 0 it was identified that in cases when students had direct e-learning experience, it was less effective due to the teachers' limited knowledge of the field and subsequently their usage of available technologies. Similarly, students in that study also expressed e-learning needs that were connected to their indirect exposure.

In the fall semester of the 2013/14 academic year, the first blended learning courses were offered to correspondence students of the English teacher MA program. Tutors' e-learning understanding, experiences, challenges and students feedback on their courses were addressed in a structured interview study presented in Study 3.

Finally, Study 4 is a follow-up project to Study 2 where the vocabulary extension of learners in a blended course was explored using corpus-based word lists, interactive flashcards and online vocabulary tests to scaffold lexical development. It was designed to address vocabulary development, practice and testing in a structured manner.

### **8.1 Study 3: Addressing blending from the perspective of MA teachers**

#### **8.1.1 Introduction**

The present study looks at the implementation of the first blended learning courses at the Institute of English Studies at the University of Pécs in the fall semester of the 2013/2014 academic year. It analyzes and discusses five tutors' experiences with their first blended courses. Central focus is given to participants' e-learning understandings, the phases of course implementation, challenges and student feedback.

#### **8.1.2 Context**

The context of the research was the English Department at the University of Pécs. Six previously only face-to-face courses were redesigned as blended courses for correspondence students in the MA in TEFL program. All six courses took place in the

2013/14 fall semester and included the following seminars: *New Englishes*, *Portraits of British Canonical Authors*, *Teaching Culture*, *Narratives in TEFL*, *Instructed SLA* and *Teaching Vocabulary*. As a former student of this MA program between 2010 and 2013, I experienced the traditional teaching of these courses with same tutors, except the *New Englishes* seminar.

### **8.1.3 Research questions**

The research questions target different phases of blended course implementation and range participants' e-learning concepts to course delivery. These aspects include the stages of utilizing a blended framework: preparation, in progress, assessment, reflection and feedback. Thus, the present study intends to find answers to the following research questions:

- RQ1: How do the participants understand e-learning?
- RQ2: How did they design their blended learning courses?
- RQ3: What challenges did the blended learning courses pose to teachers?
- RQ4: What was the feedback on the blended learning courses?

### **8.1.4 Participants**

The participants were teachers of six blended learning courses. For ethical reasons they are referred to with the following pseudonyms listed next to the courses they taught (*Teaching Vocabulary* and *Instructed SLA* were taught by the same person, hence the same pseudonym):

- *Teaching Culture*: Diana
- *Narratives in TEFL*: Lucy
- *Instructed SLA/ Teaching vocabulary*: Alice
- *New Englishes*: William
- *Portraits of British Canonical Authors*: Elisabeth.

### **8.1.5 Data collection instrument**

The study used qualitative data collection in the form of single session, semi-structured and structured interviews. The former was applied in the case of Diana and Lucy where the interviews happened in person. The latter was present in the interviews conducted

via e-mails with Alice, William and Elisabeth. Although two of the five interviews involved semi-structured data collection, the overall structure and sequence of the items was the same (see Appendix D for interview items on p. 257). The only differences were that follow-up and clarification questions were included solely in the semi-structured interviews.

As Creswel (2004) argues, qualitative research focuses on “emerging approach, text and image data” through gathering “participant meanings” whereby the focus is on a “single concept or phenomenon” (p. 19). He further claims that this approach includes “participatory knowledge claims, narrative design, and open-ended interviewing” (p. 21). This frame was implemented with the semi-structured interviews to gain a better understanding of tutors’ experience with their blended courses as it elicits a narrative approach which provides a better frame for the interviewees’ concepts. However, there was also the issue of comparability among the teachers’ answers which was addressed in the frames of a structured interview approach.

Dörnyei (2007, p. 135) calls attention to the issue comparability in interview studies, which can be reached in the form of structured interviews. A structured design makes it possible to carry out a side by side analysis of participants’ answers (Dörnyei, 2007, p. 135). Hence, focus points such as participants’ approaches to e-learning, course designs, experiences gathered with blending and personal stories about their first such course were major areas covered in the interview items.

Creswell (2004) also argues that narrative research can be used in qualitative research, meaning that “the researcher studies the lives of individuals and asks one or more individuals to provide stories about their lives” (p. 15). Although the interview questions at times triggered such responses, a purely narrative analysis was not the focus of the present study. Of course, narrative descriptions were analyzed as well and led to the identification of a number of patterns.

### **8.1.6 Procedure**

The construction of interview questions involved the examination of blended course structure (see the studies in Tomlinson & Whittaker, 2013) combined with personal e-learning experience gathered through MOOC sites such as *Coursera*, *WizIQ* and *edX* as well as identifying key areas of blended instruction. This led to four major areas present in the research questions: e-learning understanding, blended design, challenges and

students' feedback (see Appendix G on p. 257).

Before interviewing the participants individually, a pilot session was held with Diana to assess whether there are any further issues or questions that need to be changed or removed. The items proved to be suitable for the research goals as sufficient data were gathered from Diana's responses. Diana's and Lucy's interviews were tape recorded and the remaining participants chose to answer the questions via e-mail. Because of the piloting process, Diana was not interviewed a second time since that would change the single session structured design of the research. Each participant was informed about the anonymous nature of the study prior to being interviewed either in person or via e-mail (see interview transcriptions in Appendix E on p. 258).

The interviews were conducted between June and August of 2014. During the interviews, participants received the questions as well. After transcription, the interviews were analyzed to pinpoint any traceable patterns in the answers. These offered valuable insight into the teachers' understanding of the blending process and together with Study 6 provided information on how the blended version of the *Listening and Speaking Skills II* course could be designed for correspondence students.

### **8.1.7 Findings**

The findings of the study are presented following the individual research questions. These include the participants' e-learning understanding, their blended course design, the challenges they came across in the various phases from planning to implementation and assessment and finally, student feedback. The issues mentioned by the tutors are discussed side by side with reflections on the emerging patterns in the responses.

#### **8.1.7.1 Participants' understanding of e-learning**

Diana and Lucy's e-learning understanding was highly similar. Diana argued she had general information about e-learning, that it included regular e-mail communication with students and presenting materials via computer. She further explained having gathered information from colleagues, conference talks and *Google*. The latter was the same with Lucy as well. Furthermore, she also participated in a talk by a specialist of the field. William had some form of theoretical background on e-learning through a previous pedagogy course, as he explains. Elisabeth only gathered information on e-learning primarily through discussions with her colleagues and only secondarily in the

form on online searches. The most in-depth e-learning understanding was presented by Alice who developed her knowledge through the same talk mentioned by Lucy. However, Alice also turned to an instructional reference work and participated in two online courses in Pécs about e-learning design and a *Coursera* MOOC about statistics to gather hands-on experience.

Previous experience with e-learning was listed by Diana in the form of a blended course in the U.S. in 2001. In the case of Lucy, prior experience was detailed as online lectures from Stanford University and *TED* presentations. As previously mentioned, Alice deliberately sought out e-courses and a MOOC to gather experience. All five tutors claimed having no e-learning experience prior to teaching their respective courses. However, their answers revealed, similarly to students in Study 0, that their experiences are characterized mostly by indirect exposure.

The tutors also had some understanding of e-learning in general, as the benefits in terms of time management were present in Lucy's, Alice's and William's arguments. However, the lack of personal contact was also a prevailing issue throughout all five interviews. Furthermore, all participants expressed concerns about delivering their courses in an e-learning format.

Overall, the tutors can be put into two groups based on their e-learning understanding. The first includes Diana, Lucy, William and Elisabeth and is characterized by primary indirect e-learning experiences which they gathered from discussions with colleagues, e-learning talks and various online sources. The second group is represented by Alice who participated in a number of e-learning courses and a MOOC to gather direct experience for her blended courses.

#### **8.1.7.2 Participants' blended course design**

Blended course design represents the bulk of the data from the interviews. Each participant provided a detailed picture of their process and there were a number of common trends. The most noticeable from these concerned the university's decision to provide correspondence students with blended courses, which was mentioned in all interviews as the driving force behind blending. This makes sense as the time and space limitations were among the main reasons for blended instruction discussed in section 3.2.3.1 (see p. 28). In all cases, the five contact sessions common for the correspondence program were reduced to two and the remaining time was spent with

various online and home assignments.

A clear distinction can be drawn again between Alice and the other four tutors in terms of blended course design. Diana, Lucy, William and Elisabeth all argue that they implemented their blended courses primarily by restructuring their face-to-face materials and adding e-learning elements secondary. Alice, however, restructured her course in an e-learning fashion as the primary goal and built assignments around this core.

The blended design of Diana for her 30 students meant planning activities, assignments and questions to be applied on *CooSpace*, the now obsolete content management system (CMS) of the University of Pécs. She explained that the process involved creating significantly more questions than in the case of the traditional version of the course and also included the writing of manuals. She used a number of videos to complement reading materials. Students were graded based on their readings and their final assignment and feedback happened on *CooSpace*.

Lucy taught a *Reading and Writing Skills* course together with the *Narratives in TEFL* seminar and had altogether 30 students; 10 and 20 respectively. She explained that the two contact sessions were held at the beginning and in the middle of the semester. She also used already existing materials and readings, however, there was also a forum utilized on *CooSpace*. In the reading and writing course students were assessed based on their assignments and their comments on each other's work. This was extended in the narratives course by not only commenting on readings but also reacting to peers' comments in terms of language teaching. The final assignment was also completed using *CooSpace*. A further issue addressed by Lucy concerned providing students with continuous feedback.

William designed his course similarly to Lucy. The first contact session was used as an introduction for the nine students and the second provided the context for the student presentations. What is striking in William's course design is the inclusion of virtual office hours that are a staple of a number of MOOCs, and online classes on Saturdays. He also explained that the materials for the course were also uploaded to *CooSpace*. Furthermore, he added that and once students decided their presentations topics, he provided them with further sources either via *Skype*, *GTalk* or e-mail.

Elisabeth was the only tutor that kept the inclusion of e-learning elements in her blended course deliberately to a minimum. Eight students participated in her course and she decided which sessions should be moved online based on the required student



involvement. The online element included uploading the materials to *CooSpace* and an increased number of response papers to counterbalance the missing contact sessions. While communication happened on *CooSpace* and students were required to participate in peer evaluation, there were no further e-learning elements included whatsoever.

Alice showcased the highest level of e-learning understanding from all participants. She used materials she developed with the *Exe editor* on *CooSpace* and organized the face-to-face and online sessions in a way to resemble the 12/13-week-long semester. She uploaded her materials to *CooSpace* in Scorm format with interactive learning as a goal. Her inclusion of forums to discuss the tasks and readings was driven by a community forming aim. Similarly to Lucy and Elisabeth, students were assessed based on their forum comments and tasks.

Participants' approaches to e-learning are in close relationship with their levels of motivation, technological socialization and willingness to use e-solutions to reach educational goals. Although every tutor expressed positive attitudes about blended learning, Elisabeth's course design showed that she was probably the least willing to apply blended learning. Diana, Lucy and William included various elements to guide and support their learners' progress online. However, the platform was only fully utilized by Alice who instead of applying her previous materials to the online sessions opted for developing interactive materials.

### **8.1.7.3 Challenges participants faced**

Tutors' challenges can be sorted into four groups: time issues, students' willingness to use technology, lack of contact sessions and technological problems. Although Diana, Lucy, Alice and William mentioned that the blended design allowed for solving timetable issues, with the exception of William they agreed that course design and implementation took longer than they had imagined it would.

Learners' willingness to use technology was present in two ways. It involved either the lack of student involvement in the tasks or learners being part of the digital immigrant generation. Diana argued that using technology was not natural for her students which resulted in learners ignoring *CooSpace* as a platform and turning in assignments via e-mail. This led to issues in terms of administration and correction.

Lucy mentioned that her students were shocked when learning about the blended approach. She also addressed how language issues became more apparent in the online

space and how she opted to use it as a methodological tool in the assessment criteria. Similarly, Lucy also talked about how students could be grouped based on their willingness to use technology and their motivation to think along the blended paradigm.

Alice expressed having expected some level of student resistance due to the online aspect. She explained that for most of the students, the online element worked well. However, those learners who had problems with the interactive approach even asked for the materials as *Word* files.

William faced a similar issue with students not making use of the virtual office hours and decreasing online involvement. Elisabeth only expressed concerns with how oral communication had to be reduced. This is understandable as she made use of the platform in a way that was already familiar to students, hence no technological problems arose.

The reduction of contact sessions from five to two resulted in a prevailing issue with students which all tutors except for Alice indicated. This involved not only missing social interaction but the lack of feedback in terms of how well the students understood the materials as expressed by Diana, Lucy and Elisabeth and motivation issues listed by William.

Finally, technological problems were related to three main issues. First, tutors had not been familiar with all the capabilities of *CooSpace* as listed by Diana, Lucy and Elisabeth. Second, uploading and managing the materials took up a lot of time and updates in the programming can lead to confusion, as directly expressed by Lucy. These issues were coupled with the need for professional support as mentioned by Diana, Lucy, Elisabeth and Alice. Furthermore, Alice also argued for the issue of missing financial appreciation for content development. Overall, only Alice mentioned that *CooSpace* worked fine for her and Elisabeth argued that it suited her needs.

#### **8.1.7.4 Feedback participants received**

Student feedback was addressed in two manners. It was either present through interaction with students in the face-to-face and online sessions, which was the case for Diana, Lucy, William and Elisabeth. However, Alice opted for a focus group interview.

A major issue was articulated by Diana and Lucy by referring to students not giving meaningful criticism on materials and tasks. As they explained, this is related to how Hungarian students behave in educational settings but they also emphasized that it

hinders the tutors' understanding of how well their students were able to make sense of the readings. Diana argued that a video blog task could provide a solution for this as students would record their thoughts about their readings and upload it for peer feedback. She also expressed that students appreciated the tasks in her course.

In the case of Lucy, the positive effects of the forum working as a support system were discussed and she explained that a follow-up project combined with Diana's course could involve a group-based approach to projects. Also, her students expressed their need for more contact. Appreciation of the online materials was also a significant finding in the case of Alice and William.

Alice explained that her students enjoyed the forum discussions and the interactive materials. However, somewhat contradictory to the aforementioned points, Alice's learners would not like to have further blended courses. Alice lists many advantages in terms of teaching, content development, tracking students' involvement and providing them with a structured context where they can work from home and help each other. However, she also highlighted that work load may be an issue for both learners and tutors.

William mentioned that an important aspect of students' feedback concerned that they could incorporate the materials into their teaching. However, he also addressed that although students found online learning an engaging experience, their level of interest was rather low. William also detailed how a subsequent version of the course would opt for more consistent roles for online platforms.

Finally, similarly to the other tutors, Elisabeth mentioned how the uneven workload during the semester was a prominent part of students' feedback. Overall, she argued that the blended approach was beneficial in terms of writing development and online communication but also called attention to the lack of in-class communication and a dominance of written works.

### **8.1.8 Conclusion**

Participants displayed different levels of e-learning understanding which were dominated by indirect exposure and limited personal experience in the case of Diana, Lucy, William and Elisabeth and characterized by multi-level personal and professional experience with Alice (RQ1). This pattern was also reflected in the number e-solutions tutors included with most adapting their previous face-to-face materials instead of

designing online solutions like Alice (RQ2). The most important challenges teachers faced concerned technological problems and students' low level of e-learning engagement and their similarly limited willingness to use technology (RQ3). Only in the case of Alice was a structured approach to feedback present, however, each tutor could explain how their students appreciated online communication and a number of tasks but would rather have welcomed more contact sessions (RQ4).

## **8.2 Study 4: Addressing structured vocabulary development and practice**

### **8.2.1 Introduction**

Study 4 is a follow-up project to Studies 1 and 2. It addresses the vocabulary development aspect of the exploratory blended learning studies concerning the *Listening and Speaking Skills* seminars. Study 1 gathered valuable responses from the learners and one of the most important factors concerned vocabulary development. Study 2 established that while adapting vocabulary tests to the course's online environment on *Edmodo* is possible, it only covered practice and not instruction or development needs. For this reason, Study 4 opted for a more complex approach whereby the findings of corpus linguistics were applied to vocabulary extension and e-learning provided the frames for delivery, practice and testing.

### **8.2.2 Theoretical frame**

Vocabulary size and depth was already addressed in section 7.3.2 (see p. 124). However, due to the goals of the study at hand, a number of issues require further discussion. Being familiar with and using the required vocabulary items are challenges all learners face. These issues are not limited to the L2 context but can prove more difficult if students only come across the target language in classroom contexts limited weekly occasions. As Brezina and Gablasova (2015) argue, the challenge for beginners is finding the best starting point (p. 1). Issues like learners' vocabulary size, how much

should be taught about words and how can learners pick up vocabulary knowledge the easiest way have been at the center of research and various theories exist.

### **8.2.2.1 Required vocabulary size and depth**

As addressed in Study 2, Schmitt (2008) analyzed the literature's points on required vocabulary knowledge. Nation (2006) looked at the lexical coverage of different genres such as newspapers, novels, children's movies and unscripted spoken English, and concluded that at the ideal coverage, which he marks at 98%, in written texts require 8,000-9,000 whereas in spoken 6,000-7,000 word families (p. 79). Schmitt (2008, p. 331) arrived at the same conclusion.

Webb (2008) addressed previous word family research which argues that smaller sizes, ranging from 2,000 to 5,000 can also be acceptable for understanding texts (p. 80.) This does not contradict Nation's (2005) and Schmitt's (2008) findings as they argued for an ideal coverage of 98% where the numbers they found are understandable. However, Webb (2008) makes a reasonable comment, namely that lexical coverage studies had their primary focus on receptive and not productive knowledge (p. 80).

To measure correlations between receptive and productive vocabulary knowledge, Webb (2008) designed a test where he selected 180 words from the *COBUILD* dictionary based on "frequency and overlap between first language (L1) and L2 meanings" (2008, p. 83) covering the first 6,000 words. Using these items he designed a receptive and productive test, where the latter was a translation task to measure the aforementioned items. Webb worked with altogether 120 university level Japanese EFL learners who ranged from beginner to advanced levels (pp. 82-83). He found that students' receptive knowledge was higher than their productive (p. 92).

Laufer, Elder, Hill, and Congdon (2004) explain that arguably testing vocabulary in context is the most valid way of measuring vocabulary knowledge (p. 204). Furthermore, they add that decontextualization can also solve some issues that may arise from presenting items in context. Laufer et al. (2004) concluded the topic with a possible compromise which is a "test that is decontextualized but that nevertheless measures different dimensions of word knowledge" (p. 204). These approaches were

taken into consideration when designing the online and in-class vocabulary tests for the present study which are discussed in subsequent sections.

### **8.2.2.2 Applying corpus linguistics to vocabulary development**

Corpora can be highly versatile tools in language teaching and many have been compiled to meet different criteria and purposes. First, as Bonelli (2010) argues, corpora can be applied in a contrastive manner, whereby learner language and a selected corpus reflecting the given language norm are put side-by-side (p. 24). Such an approach would represent a comparative or parallel corpus study (Bonelli, 2010, p. 22). These projects usually involve an established corpus like the *British National Corpus (BNC)* or *Corpus of Contemporary American English (COCA)* to see where the learner language differs from the norm, what recurring errors are present and whether these are idiosyncrasies or form a pattern which can be attributed to L1 interference or cultural background of the learners. Also, learner corpora make it possible to track the development over time (Bonelli, 2010, p. 22) and can have important pedagogical implications for productive skill development (see Horváth, 2001).

Looking at the general feature of corpora, Timmis (2015, pp. 9-13) argues that there are two main datasets that can be gained from a corpus: quantitative and qualitative. The first category covers the frequency and token counts, as well as the type of collocations and grammatical structures present in the corpus. The latter focuses on how specific differences emerge in the structure.

The second usage of corpora in vocabulary teaching that is discussed in this study comes from the practical nature of corpora being collections of texts. As the larger ones encompass the language use of different genres, including written and spoken genres as well, it is a logical next step to generate frequency lists that represent the required word families or the ideal language coverage of language one should be familiar with. This idea itself is not new. As Brezina and Gablasova (2015, p. 1) discuss, wordlists are applicable for straightforward learner use as well as learning material creation. In the past, one of most widely used such lists was Wests's (1953) *General Service List (GSL)*.

In the last more than sixty years there were a number of studies which updated West's (1953) original list. As Brezina and Gablasova (2015, p. 2) explain, West's *GSL* was an updated version of a previous list from 1936. As a result, the *new-GSL* list proposed by Brezina and Gablasova (2015) focused on the "existence and stability of general vocabulary", by following a purely quantitative compilation method (pp. 2-3). They constructed a common lexical core of 2,122 words based on the overlaps of the *LOB*, *BNC*, *BE06* and *EnTenTen12* corpora. The final step in Brezina and Gablasova's (2015) project was putting together the *new-GSL* itself, with contains 2,494 items covering 2,116 shared and 378 current lexical items (pp. 13-14).

Browne, Culligan, and Phillips' (2013a) project was very similar to Brezina and Gablasova's (2015). As Browne (2014) explains, they also set out to update West's (1953) list, however, one of the goals in this project was to construct a list of crucial high-frequency words that not only offer high level text coverage, but also aids language learning (p. 2). The result was the *New General Service List (NGSL)*.

There are many overlaps in the above two updating projects. Browne (2014) even mentions not having known about Brezina and Gablasova's (2015) research and addresses the major difference that their update on the *GSL*; the *new-GSL*, was done by an exclusively quantitative method (p. 2). However, Browne et al.'s (2013a) *NGSL* is not simply a lemma list but also covers the most frequent word families. As Browne (2014) emphasizes, the compilation of the *NGSL* happened through the 273 million word *Cambridge English Corpus (CEC)* and offers 90.34% lexical coverage of said corpus with its overall 2,368 word families and 2,818 lemmas (pp. 6-7). While the *new-GSL* and *NGSL* take care of the most frequent words, there is a significant other vocabulary set that university students come across needs similar focused analysis: the academic vocabulary.

Similarly to the *GSL*, the *Academic Vocabulary List (AVL)* was also a project that underwent a number of updates. As Gardner and Davies (2014) explain, the first major step was Xue and Nation's (1984) work on combining the lists created in the 1970s into the *University Word List*. This was followed by Coxhead's (2000) *Academic World List (AWL)* which was a more representative collection as Gardner and Davies (2014, p. 306) discuss. Coxhead's (2000) list contains 570 word families and 3,000 words. Gardner and Davies' (2014) *new Academic Vocabulary List (new AVL)* contains

3,000 lemmas from 2,000 word families which were compiled from a 120-million-word corpus. As Gardner and Davies (2014) explain, the *new AVL* should be primarily used in English for academic purposes settings (EAP) (p. 324).

Browne, Culligan and Phillips (2013b) also developed an academic word list to accompany their *NGSL* and dubbed it the *New Academic Word List (NAWL)*. Their approach was primarily based on 249 million word *CEC Academic* corpus, which covered the written portion of the *NAWL*. However, Browne et al. (2013b) also included the *Michigan Corpus of Academic Spoken English (MICASE)*, the *British Academic Spoken English (BASE)* corpus as well as selections from the top 100 best-selling textbooks, resulting in a 288 million-word corpus altogether (p. 1). The complete list contains 963 words which cover together with the *NGSL* 92% of the compiled academic corpora (Browne et al., 2013b, p.1).

The logical question after familiarizing oneself with these lists, their purposes and how they were compiled is of course which ones to use. After careful consideration two were selected: Browne et al.'s (2013a) *NGSL* and Coxhead's (2000) *AWL* list. As the *NGSL* was designed to be used by language learners, it was perfectly suited for the vocabulary development goals of the project at hand. The *AWL* has received critique of the years as Gardner and Davies emphasize (2014, pp. 307-311), however, as the participants of the study were all first- and second-year English majors, preparing them for an EAP setting was not a priority. For this reason, the *new AVL* and the *NAWL* were discarded. Moreover, the *AWL* offered a complementary set of items to the *NGSL* which were used to provide the participants with an overall introductory set of vocabulary to the academic field as they would receive training on the terminology of the different literary, historic and linguistic terms throughout their studies.

### **8.2.3 Context**

The context of the study was the skill development course *Listening and Speaking Skills I* at the Institute of English Studies at the University of Pécs. As explained previously, this is part of a set of six compulsory preparatory courses for the *Proficiency Exam*. The blended *Listening and Speaking Skills I* course in the 2015/16 fall semester was a follow-up to a pilot project conducted in the 2014/15 spring semester, presented in Studies 1 and 2.



## 8.2.4 Research questions

The study was centered on the following research questions:

- RQ1: How does vocabulary instruction using e-materials contribute to students' vocabulary development?
- RQ2: What kind of measurable changes take place in the vocabulary of the students?

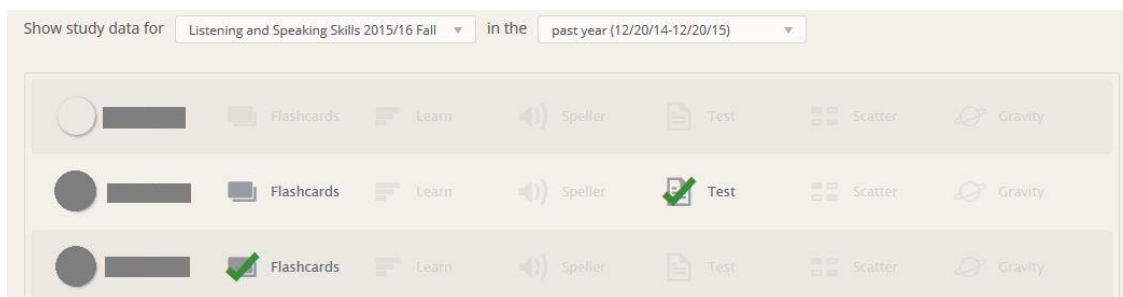
## 8.2.5 Participants

There were overall 17 first- and 3 second-year English major participants of the project: 14 female and 6 male students. Twelve were from the three-year BA and eight from the five-year teacher training program. The students were between the ages of 18 and 21 with an average of 20.22 years.

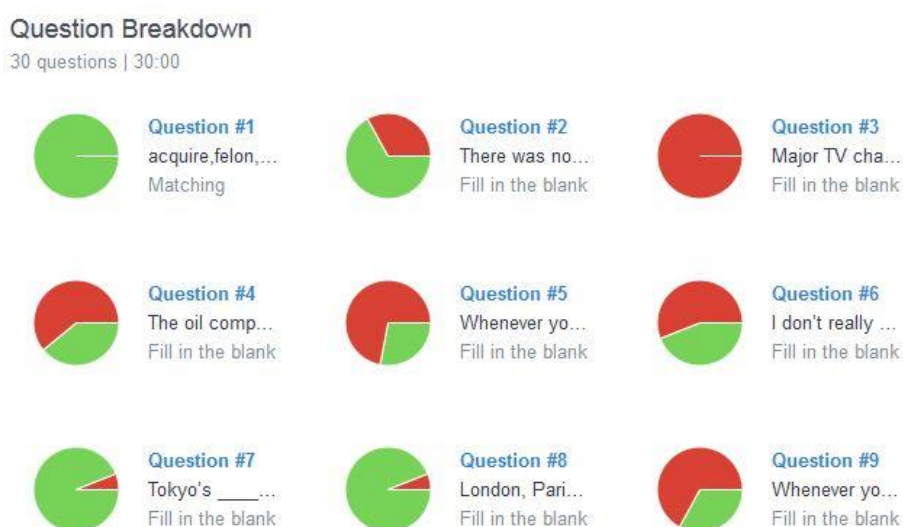
## 8.2.6 Data collection instruments

### 8.2.6.1 Online platforms

The *Listening and Speaking Skills I (LSSI)* course which provided the context for the project at hand, was delivered in a blended way. Following the frame established in Study 1, face-to-face sessions were complemented by two online platforms, *Edmodo* and *Quizlet*. Both were selected for similar reasons. First of all, they do not require a subscription fee. Second, both are designed for e-learning purposes and have a number of features available for task design (*Edmodo*), instruction and practice (*Quizlet*). Third, they provide feedback and statistics on the results of tests as rankings and pie charts (*Edmodo*) as well as which of the available practice options students used (*Quizlet*) (see Figures 8-9). Fourth, both platforms are available as mobile applications as well, which support self-paced learning. Finally, both *Edmodo* and *Quizlet* are available in English and thus provide students with authentic language contexts.




**Figure 8:** Example for *Quizlet*'s feedback on the features students used for practice



**Figure 9:** Example for *Edmodo*'s pie chart statistics for the individual test items

### 8.2.6.2 The vocabulary tests

The data collection instruments in the project fall under two categories: three online and one final in-class vocabulary tests. The online tests were designed to follow Laufer et al.'s (2004) points about providing contexts to vocabulary items as well as following a complementary decontextualization approach (see section 8.2.2.1 on p. 141). Overall, each of the online tests included 50 items from each month's covered vocabulary, from which 25 were gap-filling type sentences and the 25 matching tasks (see Figures 10-11). These tests measured how familiar the students were with the vocabulary items in the first, second and third months of the semester. The online tests were administered on *Edmodo* as the site gave immediate feedback to students through automated scoring. Test completion was limited to a 30-minute window and students' completion times and scores provided feedback on the test items.


[Redacted]
**38/50**  
Total Points:

Time Taken: 24:21 | Turned in Nov 18, 2015 @ 5:34 PM  
 Graded | Delete

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
more ▾

Question Total: 5 points

Match each letter with the correct answer.

<div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;"> <span style="background-color: #ccc; padding: 2px 5px;">A</span> acquire         </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;"> <span style="background-color: #ccc; padding: 2px 5px;">B</span> felon         </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;"> <span style="background-color: #ccc; padding: 2px 5px;">C</span> prohibition         </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;"> <span style="background-color: #ccc; padding: 2px 5px;">D</span> haunted         </div> <div style="border: 1px solid #ccc; padding: 5px;"> <span style="background-color: #ccc; padding: 2px 5px;">E</span> regulation         </div>	<div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;"> <span style="background-color: #ccc; padding: 2px 5px;">1</span> to come to have something  <span style="float: right; font-size: x-small; background-color: #4CAF50; color: white; padding: 2px 5px;">Correct Answer</span> </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;"> <span style="background-color: #ccc; padding: 2px 5px;">2</span> a criminal  <span style="float: right; font-size: x-small; background-color: #4CAF50; color: white; padding: 2px 5px;">Correct Answer</span> </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;"> <span style="background-color: #ccc; padding: 2px 5px;">3</span> a law that stops something from being used or done  <span style="float: right; font-size: x-small; background-color: #4CAF50; color: white; padding: 2px 5px;">Correct Answer</span> </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;"> <span style="background-color: #ccc; padding: 2px 5px;">4</span> infested with ghosts  <span style="float: right; font-size: x-small; background-color: #4CAF50; color: white; padding: 2px 5px;">Correct Answer</span> </div> <div style="border: 1px solid #ccc; padding: 5px;"> <span style="background-color: #ccc; padding: 2px 5px;">5</span> a law that says something should be done  <span style="float: right; font-size: x-small; background-color: #4CAF50; color: white; padding: 2px 5px;">Correct Answer</span> </div>
--	---

**Figure 10:** Example for the matching question type in the online vocabulary tests


[Redacted]
**38/50**  
Total Points:

Time Taken: 24:21 | Turned in Nov 18, 2015 @ 5:34 PM  
 Graded | Delete

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
more ▾

Question Total: 1 point

There was no wind that day, nothing moved, even the flag was 
Correct Answer

**Figure 11:** Example for the gap filling question type in the online vocabulary tests

The final in-class test aimed to assess students' overall lexical development. For this reason, 25 items were selected from the 965 words (see Appendix G on p. 283 for the full categorized list) and presented in Wesche and Paribakht (1996, p. 37) *Vocabulary Knowledge Scale (VKS)*. As Paribakht and Wesche's (1997) explain, the *VKS* measures vocabulary knowledge depth in five distinct points. These range from unknown words to correct usage in sentences (p. 187). Furthermore, as Wesche and Paribakht (1996) emphasize, the *VKS* is suited to pinpoint the first phases of vocabulary acquisition in the form of self-assessment (p. 29). The aforementioned categories look the following way in Wesche and Paribakht's (1996) *VKS*:

- I. I don't remember having seen this word before.
- II. I have seen this word before, but I don't know what it means.
- III. I have seen this word before, and I think it means \_\_\_\_\_. (synonym or translation)
- IV. I know this word. It means \_\_\_\_\_. (synonym or translation)
- V. I can use this word in a sentence: \_\_\_\_\_. (If you do this section, please also do section IV). (p. 37)

The *VKS* was previously tested at the University of Pécs in the *Language Practice* course, a title for an amalgam of the listening, speaking, reading and writing development courses that existed before the splitting into two-two skills. In this case, to measure vocabulary development through reading, a further category was added as a fourth option and the synonym/ translation and sentence choices were moved to the fifth and sixth ones respectively. This addition was concerned with identifying the context of word acquisition (Lehmann, 2007, p. 24). Although it is an interesting extension on the scale, it would not have made sense in the present context as the focus was on other areas.

The scale used in the study presented in Appendix F (see p. 281). Here one slight modification was made to the test, namely the instruction in option V to complete IV as well has been removed to gain an idea whether the participants would choose to answer both to show their understanding of the covered vocabulary (see Table 18). As this was a scored test and participants understood that completing both IV and V would yield the most points for each item, they opted for this solution hence supporting the initial claim of the test designers to include both.

**Table 18:** The slightly modified *Vocabulary Knowledge Scale* marking options used in the final vocabulary test

<b>I.</b> I don't remember having seen this word before (✓)	<b>II.</b> I have seen this word before, but I don't know what it means (✓)	<b>III.</b> I have seen this word before, and I <b>think</b> it means: (synonym or translation)	<b>IV.</b> I <b>know</b> this word. It means: (synonym or translation)	<b>V.</b> I can use this word in a <b>sentence</b> . (Write a sentence.)
---	---	---	--	--

### 8.2.7 Procedure

Similarly to the pilot blending project discussed in Studies 1 and 2, a blended approach was taken in the present case as well. Following the established blending trend in prior studies, all face-to-face sessions were kept and students were presented with obligatory and optional online tasks. Based on the findings of Studies 1 and 2, the first step was extending the e-learning platforms to suit the vocabulary development needs of the project.

In the previous blended version of the course the website *Edmodo* was chosen as the preferred virtual learning environment. During Studies 1 and 2, task types that could be moved to this online space have been piloted. After analyzing the results of the student satisfaction questionnaire in Study 1 and a needs-analysis in the study at hand, the online element of the course was improved and extended (see Study 5 on p. 161 for a detailed analysis). In this course as well, one of the weekly two listening exercises was turned into an online task and there was also an optional practice listening task presented to students every week.

A returning finding from the questionnaire in Study 1, also present in the current needs-analysis, was the need for vocabulary development. In order to address it, *Quizlet* was chosen as a way for interactive vocabulary instruction and practice and *Edmodo* was used for testing. The underlying frame connecting the online elements with classroom applications was cognitive interactionism, which, according to Sankó (2006, p. 157), focuses on “input, interaction and output in the SLA process”.

### 8.2.7.1 Vocabulary item selection

As discussed in section 8.2.2.2 (see p. 142), two lists were chosen for the vocabulary development in the project at hand. These were Browne et al.'s (2013a) *NGSL* and Coxhead's (2000) *AWL*. As both are based on word families, certain selection criteria had to be followed.

The baseline for vocabulary instruction and development was establishing a number of weekly items that participants could work with without being overwhelming. From the start this meant three kinds of weekly vocabulary sets. The first group concerned the combined *NGSL* and *AWL* lists. The second flashcard set included items from the weekly listening tasks, which were in the second half of the course complemented by words from Nation and Beglar's (2007) diagnostic test. The final set involved vocabulary lists put together by the students which covered items they deemed necessary from their own presentations to their peers.

As the number of presentations would vary between one and two on each weekly occasion, the minimum number of weekly items was set at 70 words and the maximum at 90. During the semester, this meant a total of 965 items (see Table 19 and Appendix G on p. 283), and an average of 74 words per week. The second criteria was only selecting head words and not adding derived forms. Eventually, some of these made it also to the final list (see Appendix G) as they were added by the students or were present in the listening vocabulary lists.

**Table 19:** The distribution of the vocabulary items used during the semester

<b>Selected items from the <i>NGSL</i></b>	<b>Selected items from the <i>AWL</i></b>	<b>Selected items from the Nation and Beglar (2007) test</b>	<b>Vocabulary of the listening exercises</b>	<b>Vocabulary of the student presentations</b>
1 <sup>st</sup> 1,000: 27	216	30	135	380
2 <sup>nd</sup> 1,000: 86				
3 <sup>rd</sup> 1,000: 91				

### 8.2.7.2 Vocabulary instruction

The findings of the student satisfaction questionnaire of the previous course and the needs-analysis for the present one indicated that students required more focused vocabulary instruction and extension. Thus, finding such a solution was a primary goal for the revised blended *LSSI* course. Due to the blended approach, flashcard software was a logical choice as it would give students freedom and flexibility in learning and practicing. There are a number of solutions available both online and offline, like *Anki*, *FlashcardMaschine* and *GoConqr* for example, but only one had all the required function for the present project, *Quizlet*.

The reason *Quizlet* was chosen as the platform for vocabulary instruction is that it has a built-in-feature that pronounces the contents of the flashcards thus making vocabulary learning, together with its practice modes more interactive and enjoyable. Furthermore, sharing content and inviting students is very intuitive on the website. Flashcards on *Quizlet* follow a straightforward principle. One can add the lexical item on one side of the card and the description on the other (see Figure 12).

To provide learners with further scaffolding for vocabulary items, two features were added beyond the definitions of the words: the word-class and a sample sentence. The *Merriam-Webster* as well as the *Oxford* online dictionaries were used for the definitions and while the *COCA* corpus was chosen for more contemporary words, the bulk of the sample sentences were from the *British National Corpus (BNC)*. This structure was applied for the *NGSL+AWL* and the listening and the Nation and Beglar (2007) sets. Students were also asked to follow this method of compilation for their flashcard sets. Although learners received a list of reliable online dictionaries, they were allowed to use other ones as long as they could produce meaningful sets.



**Figure 12:** The two sides of a sample flashcard from the first *NGSL + AWL* set on *Quizlet*

### 8.2.7.3 Vocabulary test development

Students knew from the start of the semester that they would have four vocabulary tests in total: three online and one final in-class test. These were based on the flashcard sets that covered the *NGSL+AWL*, listening tasks, added Nation and Beglar (2007) items and presentation vocabulary lists. In the online tests the items were equally selected from the corresponding sets for that month, thus having 25 teacher- and 25 student-set-based words. Every online test was constructed using 25 gap-filling and 25 matching questions. However, the aim of representing each of the four word-classes found in the lists, nouns, verbs, adjective and adverbs, was not possible as their distribution was far from equal (see Table 20).

For the reason of unequal word class distribution, the test item selection rationale was to include words that were prominent in the student lists and would represent the gist of the presentations. The second criterion was selecting words similar in meaning or description that stand for different notions (e.g., *regulation-prohibition*), which were used with the matching items. Laufer et al.'s (2004) claim about testing vocabulary in context was used for the gap-filling items (see Figures 10 and 11 on p. 147).

**Table 20:** The overall number of word-class items in the whole vocabulary set

Vocabulary set	Number of items			
	Noun	Verb	Adjective	Adverb
<i>NGSL+AWL</i>	188	98	86	19
Listening tasks	77	57	29	1
Items from the Nation and Beglar (2007) list	19	1	9	1
Student presentations	259	60	57	4
<b>Overall (N=965)</b>	<b>543</b>	<b>216</b>	<b>181</b>	<b>25</b>

### 8.2.7.4 Assessment of the vocabulary tests

The reason for moving the tests to *Edmodo* was its automated scoring feature with preset gap-filling and matching item types. Furthermore, a time limit of was also needed. With each 50 word online quiz this meant a limit of 30 minutes as that would give students enough time to complete the tests. The time completion results confirmed this.



A post-test correction protocol was used during data collection and a pattern of minor mistakes emerged. For this reason, if the only mistake was the omission or incorrect doubling of a letter, the solution was accepted as correct in the post-correction phase. This was the case three times in test one, four with test two and eight with test three. As these corrections represent overall 0.5% of all solutions (N=2,850) they would not have made a statistical difference either way. However, they do show that the students indeed knew the items and their mistakes could have been caused by typos or were related to by problematic context sentences (further discussed in section 8.2.8).

In the case of the final in-class test, a different assessment method was implemented as it was a 30-minute-long paper and pencil test. Here the VKS (Wesche & Paribakht, 1996, p. 37) categories were scored the following way:

- I. *I don't remember having seen this word before:* 0 points
- II. *I have seen this word before, but I don't know what it means:* 0 points
- III. *I have seen this word before, and I think it means (synonym or translation):*  
1 point if the synonym or translation was correct.
- IV. *I know this word. It means: (synonym or translation):* 2 points if the synonym, translation or multi-phrase unit either in Hungarian or English was correct. However, no extra points were awarded for presenting both and students were also instructed not to fill III and IV together (see Appendix F on p. 281).
- V. *I can use this word in a sentence:* 4 points. The number of grammatical errors (e.g. wrong use of plural forms) was deducted from the overall score. Also, the synonyms and the sentences (III or IV + V) had to make sense together. However, cases where the sentence was correct but the synonym was not, or vice versa, points were added depending on the grammatical acceptability of students' solutions.

As discussed in section 8.2.6.2, the instruction of having to fill out IV in the case of V as well in the VKS has been removed. However, most participants still completed the test this way. The maximum score has been set for 100 points (25 x 4 points for the sentences), but most students completed both III or IV and V together which granted them extra points with every correct item. Thus, the scored maximum was set for 100 points but the possible maximum was 150. Although this decision can be seen as a

judgment error in test design, it was left in the test intentionally as a motivational factor to gather the most possible data about students' vocabulary knowledge.

### **8.2.8 Findings**

In this section, the findings of the online and in-class vocabulary tests are presented. However, some limitations need to be addressed before discussing the results of the analysis. The present study contains data collected from the productive and receptive vocabulary test items that twenty learners completed during a semester. Therefore, two issues need to be considered. One, this sample is not representative for the whole first- or second-year English major population in Hungary and should therefore be viewed as more representative to students at the University of Pécs. Two, although this major limitation is present, it was never a goal of the project to be generally representative, however, it is representative for the tested vocabulary items.

#### **8.2.8.1 Analysis of the online vocabulary tests**

During the analysis of the quantitative data of the online vocabulary tests, a number of patterns emerged. These were grouped into five tables for each test based on the successful completion rate of the items covering the 0-20, 21-40, 41-60, 61-80 and 81-100% correct solutions (see Table H16 on p. 295 for an overview of item completion). Although these were compulsory tests for all students, only the second online test was completed by all 20 participants. In the case of the first only 19 and in the third 18 students did so. While these rates did not significantly affect the sample, it is reflected in the overall grouping of the scores and is indicated in each table. Besides the standard deviation and mean scores, the number of correct, incorrect and not completed items was also added to highlight problematic words that require further attention. Correct solutions were counted as 1 and omitted or false ones as 0.

##### **8.2.8.1.1 Results of the first online vocabulary test**

Tables H1-5 display the grouped statistics for the first online test. The overall findings indicate that out of the 50 tested items students were able to complete 27 within the 81-100% range. However, it is important to note that 22 words were from the matching

items (highlighted in italics Tables H1-5) and only five from the gap filling sentences which means an 81-19% distribution. Overall, 54% of the solutions for the first test are in this category (see Table H1 on p. 289).

The categories below 81-100% completion follow a decreasing trend with 9 (61-80%), 7 (41-60%), 6 (21-40%) and only one item with the below 20% solution (see Tables H2-5 on p. 289). All of the remaining matching items are found in the 61-80% range, with the highest mean values, representing 33% of the sample. *Merge* and *mishaps* were the most problematic words here with the lowest scores in all categories (see Table H2 on p. 289) with both being words from the listening sets. The items presented in the last three tables for this test showcase the most problematic words in the set. *Appropriate* and *interfere* were the items with the lowest scores in the 41-60% sample. The former was from the *AWL* and the latter from the listening list (see Table H3 on p. 290)

As for the penultimate category in the first online vocabulary test, altogether three items, *bargain*, *retirement* and *sequence*, were challenging for the students. These were words from the *AWL*, listening exercises and the *NGSL* 2k lists respectively (see Table H4 on p. 290). The last item that needs attention is the one with a 90% false answer score and only one correct solution. *Comprehensive* is an item from the *AWL* and this range can mean one of two things: the item was either instructed in a context that was not meaningful for the students or the gap filling sentence was flawed (see Table H5 on p. 290)

#### **8.2.8.1.2 Results of the second online vocabulary test**

The second online vocabulary test provided the clearest picture about the knowledge of the sample as it was completed by all 20 participants (see Tables H6-10 on p. 291). Similarly to the 81-100% range in the first test, the matching items make up the most of the 28 solutions, namely 85%. This also means that, just like in the previous test, students were able to make sense of the matching items and there was little confusion (see Table H6 on p. 291).

Only one matching item is present in the 61-80% group and two words, *ancestor* and *outskirts* provided the most challenge for the participants. The former is an *AWL*

item and the latter a listening exercise word. The 81-100 and 61-80% categories cover an overall of 70% percent of all items in this test meaning that participants were, for the most part, able to successfully complete it (see Table H7 on p. 291).

There are two items in the 41-60% set that require attention due to their low completion scores: *manufacture* and *preparation*. The former is a more special case as it was not only part of the *NGSL* 2k list but was also listed in one of the student sets. *Preparation*, on the other hand is part of the 3k list and its frequency could explain the scores it received (see Table H8 on p. 292).

As was the case previously, there are two words that somewhat stand out from the overall sample: *attach* and *barely*. The former was part of a listening set and the latter is an item from the *AWL*. These words also differ from the rest with significantly high omission ratio. For some reason, 25% and 30% of the participants simply choose to leave out these items. This means that even if they were familiar with the words, the context itself could have had a negative effect on their task completion (see Table H9 on p. 292).

Finally, there are three words in this test that require further inspection due to their low representations: *advertising*, *scenario* and *verdict*. The second is an *AWL* item and the other two are from student presentations. The omission percentages here are quite low even for this range implying that the problem was most likely with the wording of the gap filling context sentences (see Table H10 on p. 292).

#### **8.2.8.1.3 Results of the third online vocabulary test**

The third online vocabulary test was completed by 19 students (see Tables H11-15 on p. 293). As with the other two tests, the 81-100% range covered more than half, namely 52% of the words in this set. Continuing the established trend, 23 out of the 25 matching items were in this group. Similarly, this also means that the gap-filling words were underrepresented (see Table H11 on p. 293).

The trend continuation is also perceivable with the 61-80% range. The matching items that were absent from the previous set, can be found here. Also, the two lowest scored words require attention which are *banish* and *crowbar*. While the former was listed in a student presentation set, the latter is a 10k word from the Nation and Beglar

(2007) list. Considering their frequency range and that 60% of the students could use them they are not seen as overly problematic items (see Table H12 on p 293).

Looking at the middle list, the two items worth further analysis are *concern* and *fortress*. While the latter was from a student presentation list, the former word was presented twice in the form of a *NGSL+AWL* and also a student list. Also, *concern* shows an important point in the case of vocabulary acquisition. Students seeing words multiple times is argued to be beneficiary for their development. However, the equal distribution of correct and incorrect solutions here provides a counterargument. However, this can also be a side effect of the number of items students were presented with weekly (see Table H13 on p. 294)

The last but one category has also two items that represent the lowest margin of their range: *prominent* and *remarkable*. What is worth noting about *prominent* is that it is one of the few items which also appears in a derived form as *prominently*, both in the student lists. *Remarkable* was present in the 3k *NGSL* set (see Table H14 on p. 294).

Only two items were in the final category of the third online test: *flagship* and *grand*. The former was also listed in a student presentation set and the latter in the 3k *NGSL* list, similarly to *remarkable* in the previous category. However, it must be noted that *flagship* is the only word from the 150 items without any correct solutions which means that the context it was used in was not appropriate in the test (see Table H15 on p. 294).

#### **8.2.8.2 Analysis of the final (in-class) vocabulary test**

The goal of the final in-class paper and pencil vocabulary test was to assess students' lexical mastery throughout the semester. Overall, 25 words were selected from which 13 appeared at least twice in the whole vocabulary set. These included: *audience*, *bargain*, *common*, *contemporary*, *discipline*, *ensure*, *establish*, *genuine*, *manufacture*, *primarily*, *purpose*, *scholarship* and *volunteer*. The selection rationale for the items was that their second or higher listings could imply that they were seen as scaffolding words in a number of student presentation lists. As already discussed in section 8.2.6.2 (see p. 146), the *VKS* (Wesche & Paribakht, 1996, p. 37) was chosen to measure depth of

knowledge with the 25 items. The selected words covered all four word-class types (noun, verb, adjective and adverb) that were present in the flashcard decks.

Table H17 (see p. 296) presents the findings of the final test which was completed by 19 students. The results of the *VKS* were analyzed as follows. While correct synonyms and translations received different scores in the test depending on whether students put them in category III ('I think I know') or IV ('I know'), here they were rated equally and listed in the corresponding columns based on the word-classes used. It was often the case that students used a number of synonyms and descriptions, even both in Hungarian and English and were counted individually. This resulted in the total number of these solutions being higher than the overall number of participants. Correct sentences were also categorized based on the word-classes of the items used in them.

Two additional columns were added to Table H17 where all the sentences for the given item, even the incorrect ones, were analyzed using the N-gram and keyword tool on the *Compleat Lexical Tutor* website (Cobb, 2001). Only two-string N-grams with the highest number were listed together with the most frequent keywords which were not the target items. In cases where the assessed words appeared, their boxes were left blank. The keyword ratio is displayed as well, but it must be noted that with all items this meant a maximum of 19 sentences, making the sample texts rather small and around the 200-word count. According to the keyword tool, the results should be understood the following way: 0.001 means the high frequency keywords while 0.009 the low ones.

A number of patterns are visible in Table H17. *Audience* seems to have been the least problematic item on the test as all participants were able to write meaningful and grammatically correct sentences with it. It also has a large number of English phrases and Hungarian synonyms present at the same time. *Justification* is on the other end of this continuum. Although it was *discipline* where three students marked not having seen the item, the synonyms and sentences suggest that at least two-third of the sample was able to use it. However, in the case of *justification* there were only four correct synonyms and three meaningful sentences. The problem with this item was that many students backtracked its meaning from *judge* and ended up writing sentences in

connection with legal punishments, hence *prison* becoming the most frequent keyword. There were two more words where similar problems led to lower representations.

With *leisure* a number of students grasped its meaning by simply referring to *cool* or *comfortable*. Finally, *manufacture* showcased Hungarian interference mistakes where it was described as *manufaktúra*. In Hungarian this means a small scale handcrafting factory. To establish whether the item has made its way with this usage into the English language the noun phrase *local manufacture* was run through the COCA corpus's database. According to the overall 9 findings, there are no such meanings as in the search results *manufacture* was used as a synonym for construction.

There is a further issue that needs to be addressed in connection with the synonyms/ translations and the sentences. Twenty out of the 25 items show a rather equal distribution of world-classes both in the synonyms/translations and the sentences columns. The words where larger mismatches can be found are *leisure*, *neglect*, *quote* and *waste*. This is quite evident in the case of *neglect* where together with the synonyms, translations and phrases there were also five noun meanings listed. However, in the solutions only one such could be found and also *neglected* as an adjective.

Overall, both the online and in-class vocabulary tests provided feedback on the items used in them and highlighted trouble areas which needed further attention. The next steps could involve further examining the lowest scoring areas where the context sentences for the gap filling items might have been misleading as well as broadening the range of the VKS test which was limited by to time constraints. Due to a 30-minute limit, only 25 items could be tested, however, extending it to 50 items, as in Lehmann's (2007) study, could give further insights into vocabulary depth knowledge.

### **8.2.8.3 Students' vocabulary profiles**

The final part of discussing the results is detailing the overall vocabulary profile of the students to determine how the treatment affected their vocabulary knowledge. Table H18 (see p. 297) summarizes the findings of the semester long project. In the beginning of the semester, students had to complete Nation and Beglar's (2007) diagnostic test and scored an average of 10012.5 words. At the end of the semester, the test was repeated which resulted in an average of 10707.14, an increase of 694.64 words. Unfortunately,

it was not completed by all students in either instance so a side-by-side comparison was only possible in the case of ten students. From this small sample eight participants show vocabulary growth and two decrease.

All three online vocabulary tests show similar standard deviation and mean values, despite the varying number of participants. The SD values of 7.521, 5.369 and 5.583 are quite reasonable and the test scores of 37.368, 37.75 and 37.333 mean that on average each student could complete the tests with a 74% pass grade. The results of the VKS in the final in-class vocabulary test show a somewhat different picture. As already discussed, the maximum score was set at 100 points; however, by adding correct synonyms and writing sentences, students could achieve 150 points. This explains the SD value of 25.567 due to some tests having a difference of almost 90 points. The average score of 109.157 illustrates that students were able to surpass the set maximum score. However, it also means that the scoring might have to be reconsidered.

Finally, every answer was analyzed with Davies' (2012) *Words and Phrase* tool to calculate frequency and vocabulary distribution on the 1-500, 501-3,000, 3,000+ words and academic registers (see Table H18 on p 297). The word counts varied from student to student, however, from the overall of 2,374 about 125 words can be seen as average. The categories were not all equally represented with the 1-500 one covering about 60% of each student's solutions. Finally, the 501-3,000 registers and above categories contained about 15-15% of the words, and the academic register was responsible for the remaining 10%.

### **8.2.3 Conclusion**

The study presented the details of a semester long vocabulary development project. It discussed how this approach fits into the general frame of corpus-based vocabulary instruction in the case of university-level language skill development courses in a blended learning frame. The findings indicate that, based on the results of the pre- and post-treatment vocabulary levels tests, students lexical knowledge increased. As the items were exclusively presented in online format, it can be stated that the *Quizlet* flashcard sets contributed to learners' greater vocabulary knowledge (RQ1). There was also a measurable average increase of almost 700 words by the end of the semester (RQ2) proving that the project reached its goal.



## **9. Research phase three: Evaluation**

The final research phase rounded out the previous stages through evaluation and contains two projects. Study 5 was a questionnaire study addressing student satisfaction through open- and closed-ended items, similarly to Study 1. This project was concerned with the redesigned and extended version of the *Listening and Speaking Skills* seminar based on the findings of Studies 1 and 2. Study 6 is linked to Studies 3 and 5 in that it explores the teacher side of the blended *LSS* course's implementation in the correspondence program.

### **9.1 Study 5: Student satisfaction in the redesigned blended learning *Listening and Speaking Skills* course**

#### **9.1.1 Introduction**

The project at hand details the findings of a questionnaire study that collected information on student satisfaction and areas that need further attention in the revised version of the blended *Listening and Speaking Skills I* course. The study addressed differences between the *LSSII* seminar in Study 1 and *LSSI* in the current project. A major change between Studies 1 and 5 concerned changing data collection from a paper-and-pencil questionnaire to an online solution.

#### **9.1.2 Context**

The context of the study was the same *Listening and Speaking Skills I* seminar as in Study 4. In redesigning the blended course, based on the findings of Studies 1 and 2, vocabulary development was a key aspect which was integrated to the overall delivery. Otherwise, the goals of the *LSSI* course were the same as the *LSSII* seminar. These considered addressing listening, speaking skills and vocabulary knowledge development through a blended approach.

#### **9.1.3 Research questions**

The study had the following four research questions:

- RQ1: What is participants' assessment of the blended approach?
- RQ2: How do participants assess their own skill development?

- RQ3: How feasible is a blended approach in face-to-face seminars?
- RQ4: What further challenges are there for face-to-face blended projects?

#### **9.1.4 Participants**

There were 13 participants of the study which was a subsample from the students in Study 4. Ten female and three male students completed the questionnaire with an average age of 19.23 years. Eight of the students were from the three-year English BA and five from the five-year teacher training program.

#### **9.1.5 Data collection instruments**

Data collection involved two questionnaires using the *Qualtrics* website. The first was a needs-analysis and also represented the piloting of *Qualtrics*. As the website provided a detailed picture of participation and dropout rate, descriptive statistics and sorted answers, it was deemed suitable for the student satisfaction questionnaire at the end of the course. Similarly to the end-of-term questionnaire in Study 1, this one also included open- and closed-ended items.

Mackey and Gass (2005) explain a limitation in connection with questionnaires which are completed at the end of an instructional time period, namely lacking comparability (p. 150). However, comparability was present through the results of Study 1 as one of the goals of both Studies 1 and 5 was explicitly addressing students' views on their own skill development.

The questionnaire design followed Dörnyei's (2003) guidelines. This included exploring item options (see Dörnyei, 2003, pp. 8-9), the four page space and 30 minute time limit he advised for completion (p. 18), confidentiality (p. 23), title, (p. 25), instructions (p. 26), identifying research problems and what the questionnaire will cover (p. 31), the benefits of multi-item scales (p. 34), closed-ended items (pp. 35-46), open-ended items (pp. 47-50), wording (pp. 52-55) and finally, grouping and ordering items (pp. 59-62).

The questionnaire started with a description of the project and explained that the goal of it was to gather data about student satisfaction which would be used to improve the course. It included an anonymity disclaimer based on Oppenheim (1992, pp. 104-

105 cited in Dörnyei, 2003, p. 23), a notice that item types are explained in the various sections and an estimated time frame for questionnaire completion. Following Dörnyei's (2003) points of how multi-item scales increase the reliability of the gathered data (p. 34), such an approach was employed with a number of questionnaire items.

The questionnaire contained Likert-scale, multiple choice, scale and open-ended items (see Table 21 for the item lists). The six-point Likert-scale items applied Dörnyei's (2003, p. 29) descriptions and were used instead of the four-point scale in Study 1 to gain a deeper understanding of students' views. The scale included the following options: strongly agree (1), disagree (2), partly disagree (3), partly agree (4), agree (5) and strongly agree (6). Following Dörnyei (2003, p. 39), the scales followed a seven-point approach with two extremes in the form of easy-difficult, useless-useful, not beneficial-beneficial at each end of the respective continuums.

**Table 21:** List of the item types used in the various questionnaire sections

Section	Type and number of items			
	Likert-scale	Multiple choice	Scale	Open-ended
In-class tasks	2	1	-	1
Online tasks	1	1	2	1
Edmodo	1	2	4	5
Quizlet	-	2	-	3
Feedback	1	1	-	1
Overall impressions	-	-	-	4
General information	1	3	-	-

The questionnaire was made up of seven sections: the in-class tasks, online tasks, *Edmodo*, *Quizlet*, feedback, overall impressions and basic, non-identifiable information on the participants. There were a total of 37 questions (see Table 21). However, the Likert-scale as well as the scale items included number of statements which amount to 106 items in total. In Study 1, the end-of-semester self-assessment was completed during the last session of the course. In the present study, it was included in the final section of the questionnaire following Dörnyei (2003, p. 61).

### 9.1.6 Procedure

As the study at hand was a follow-up project, it retained some of the features that were successfully implemented in Studies 1 and 2. Special focus was placed on improving problematic areas. In terms of the in-class tasks this meant that students had to present a topic of their choice in 10 minutes as well as two picture talks. They were also involved in a number of individual and group-based discussion tasks. Students also had weekly in-class listening tasks and were required to complete a second one online by the end of the respective week. *Edmodo* was kept as the online hub for the course and similarly to Study 1, was used for the compulsory online and practice listening tasks. The major difference between Studies 2 and 5 was the structured vocabulary development aspect discussed in Study 4. This meant that vocabulary instruction and practice happened online on *Quizlet* and *Edmodo* was used for the three online vocabulary test. Finally, students completed a final in-class vocabulary tests at the end of the semester.

As for data collection possibilities for the student satisfaction questionnaire, the first step of the study involved finding an online solution where students can complete questionnaires anonymously and can also return to them if they do not have time to finish all items. Furthermore, having built-in statistical tools was also required. *Google's* questionnaire-creating solution was considered; however, it did not fulfill all requirements as questionnaires have to be completed in one go and the statistical tools are basic. For this reason, *Qualtrics* was piloted in the form of a needs-analysis and was found to be reliable. The website allows participants to continue the questionnaires within a two-week window and presents the results to the instrument creator with the minimum and maximum, mean, variance, standard deviation values and the number of total responses.

Item analysis involved the automated descriptive statistics provided by *Qualtrics* and qualitative content analysis of the open-ended items. As addressed previously, *Qualtrics* provides a wealth of statistical data for each item. From these only the mean and standard deviation values were included in the descriptive tables found in Appendix I (see p. 298).

## 9.1.7 Findings

### 9.1.7.1 Findings of the needs-analysis questionnaire

Similarly to Study 1, the needs analysis questionnaire was an essential part of the course design. Building on the results of the student satisfaction questionnaire in the previous project, it provided the baseline for content development and online platform applications. The supplementary tables to needs-analysis in the present study can be found in Appendix I (see p. 298) and are referred to throughout the discussion.

The needs-analysis questionnaire was completed by 18 students, 6 male and 12 female. Twelve of the participants were from the BA and 6 from the teacher training program. Their average age was 19.27 years. Seven students indicated that they had experience with e-learning while the remaining 11 did not. Students' primary gadget for e-learning was *laptop* (14), followed by *smartphone* (6), *PC* (5) and finally, *tablet* (3). One participant indicated in the open-ended item the usage of *PC and smartphone together* (see Table I1 on p. 298).

Considering students' listening skill, the mean value of 2.33 based on a four-point Likert-scale indicated that participants assessed this skill as moderately developed. Learners' self-developing strategies included *watching movies* (13), *TV series or shows* (8), *online videos* (3) *podcast* (1), *lectures* (1) and *people speaking in English* (1). They also indicated *listening to songs with lyrics* (12), *their teachers* (1) as well as *reading books, news and short stories* (1). Students listed needing help in *listening development* (5), *speaking development* (4), *vocabulary development* (4), *confidence building* (2), *information processing development* (2), *accents* (2) and *practice* (1) (see Table I2 on p. 299).

Learners' assessment of various aspects of their speaking skill mirrors the moderate mean scores in the listening section with the *presentation skill* being the highest (2.72) and *pronunciation* the lowest (2.22). *Communicating with foreign relatives and friends* (7) as well as *speaking English* (6) were the most prominent strategies applied by the participants. Other methods included *talking to oneself in English* (1), *inner translation* (1), *watching videos/ films* (1), *reading* (1) *speaking during classes* (1) and *singing* (1). Students listed requiring help with *confidence building* (5), *pronunciation* (2), *grammar* (2), *vocabulary* (1), *fluency* (1) and explained that in case of a *competent teacher* (1) and *practice opportunities* (1) they see

themselves developing their speaking skills (see Table I3 on p. 300).

In evaluating their use of grammar, students continued the established trend with a mean value of 2.39. They were able to address specific issues of their grammar knowledge that need improvement which included *tenses* (4), *identifying specific mistakes* (1) and expressing *a need to follow rules* (1). Students also indicated their *need for exercises* (2), *help* (1). The participants also called attention to *specified outcomes* (2) such as accurate grammar usage and being able to apply it to express their thoughts properly (see Table I4 on p. 302).

The final area that required self-assessment was vocabulary. Based on the mean value of 2.41, it can be argued that students were most confident in their vocabulary knowledge. This is supported by their detailed description of vocabulary extension strategies which include *reading* (7), *watching movies* (5), *using dictionaries* and *looking up words online* (4), *listening to music with or without lyrics* (3), *general learning* (3), *writing in their vocabulary booklets*. In terms of practice opportunities learners also listed *practice* (2), *blogging* (1), *surfing on the Internet* (1), *talking with friends from abroad* (1) and *listening to speakers* (1). Concerning their development needs, students almost unanimously expressed vocabulary development as their primary area that requires help with one student indicating a more medium focused approach with games and movies (see Table I5 on p. 303).

When asked about their expectations of the course itself, students expressed their goal of *skill development* concerning primarily *listening* and *speaking*, followed by specified areas. Overall, *listening skill development* was seen as the most important (7), followed by *speaking* (6), *general skill* (3) and *vocabulary* (2) development. *Specific task types* (1), *mood* (1) and *the intention of passing the Proficiency Exam* (1) were also listed. The time students intended to spend weekly on course preparation ranged from 1 to 8 hours. Learners mostly wanted to *enjoy the course* (4) and the *presentations* (2), *improve in general* (4) and develop their *vocabulary* (1). Moreover, participants identified *preferred task* (2) and *content types* (2) as well as their *need for good grades* (1), and *fun* as a motivating factor (1) (see Table I6 on p. 304).

### **9.7.1.2 Findings of the online student satisfaction questionnaire**

The findings of the student satisfaction questionnaire are discussed in the individual sections. The supplementary tables displaying the student answers as well as the mean and standard deviation values can be found in Appendix J (see p. 306) and are referred to throughout the discussion. Whereas the student satisfaction questionnaire in Study 1 and the needs-analysis questionnaire in this study used four-point Likert-scales, the final student satisfaction questionnaire applied six-point Likert-scales. In the case of the scale items, seven-point scales were used with two extremes at each end of the continuum. The multiple-choice item results are listed if they reached at least seven markings. The multi-item scale data are discussed using comparative analysis.

#### **9.7.1.2.1 Findings of the in-class tasks section**

This section gathered data in the forms of multi-item scales about the perceived usefulness, difficulty and associated qualities of the various tasks. Students' answers mean values indicated that they found all of the tasks beneficial for their language development as mean values are between 4.54 and 5.15. *Listening tasks* (5.15) and *picture talks* (5.08) were seen as the most beneficial activities. They were followed by the *presentation task* (5), *weekly lessons* (4.85), *discussion tasks* (4.77), *group tasks* (4.69) and *listening to classmates' presentations* (4.54) (Q1).

The results of the perceived difficulty of the tasks revealed that students did not find the in-class tasks particularly challenging for the most part. The *presentation* and *picture talk* tasks were seen as the easiest (2.62), followed by *group tasks* (3), the *final vocabulary test* (3) and *discussion tasks* (3.08). What is striking is the huge difficulty spike of the *listening tasks* compared to the others with a mean value of 5.62 (Q2).

These findings are supported by Q3's results, in which *listening tasks* were seen as useful (7) but difficult (10). Looking at the highest markings, students argued that they found the *presentation tasks* useful (10) and interesting (9), the *picture talks* useful (10), the *group tasks* fun (7). The *listening* and *final vocabulary test* were also seen as useful with 7 and 8 markings respectively.

The three answers to the open-ended item revealed that participants liked the course and enjoyed participating in it. However, students also noted that while overall beneficial, the deadlines for the online listening tasks were problematic (Q4).

Overall, students found the in-class tasks beneficial for their language development, which was consistent throughout the multi-scale items of questions 1-3. The emerging trend that requires further analysis is the high perceived difficulty level of the listening tasks reported by students (see Tables J1 and J2 on pp. 306-307).

#### **9.7.1.2.2 Findings of the online tasks section**

The online tasks section of the questionnaire followed the same multi-item scale structure of the in-class tasks. Here the mean values show a more varied picture than in the previous section, indicating that students preferred the contact session tasks more.

*Online vocabulary tests* were seen as the most beneficial (4.92), followed by the *compulsory online listening tasks* (4.85), *creating online vocabulary flashcards* (4.69) and the *home practice listening tasks* (4.62). *Peer reviews helping the classmates' language development* (3.62) was rated higher than *writing peer reviews* (2.85). The video lessons on *Coursera* (2.31) and presentations on *TED* (2.77) were represented with the lowest values. This finding is consistent with Study 1. These results indicate that learners were more motivated by tasks where they had a more active role (Q5).

Considering the difficulty level of the online tasks, students' answers illustrate that they found the online tasks more difficult than the in-class ones. *Creating a vocabulary flashcard set* (2.69) and *vocabulary flashcard sets* (3.62) were seen as the easiest requirements. Compared to these tasks, there is significant increase in perceived difficulty in connection with *online vocabulary tests* (4.23), *home practice listening tasks* (4.69) and *compulsory online listening tasks* (4.77). This is in line with the findings of the in-class listening tasks as those were also identified as difficult (Q6).

Question 7 looked at how useful the students found specific online tasks. Contradicting Q5's results, *Coursera* (3.31) and *TED* videos (4.08) were found to be useful even though previously they were seen as moderately beneficial for language development. *Writing peer reviews* (3.62) was seen as somewhat useful whereas the *online vocabulary tests* (5.69) were identified as highly useful (Q7).

Students reported finding the *home practice listening tasks* (7), *vocabulary flashcards* (10) and the *compulsory online listening tasks* (8) useful. The latter was also identified as difficult (7) and beneficial (7) which supports the findings of the previous section (Q8). Similarly to the open-ended item in the previous section, the deadline



problem of the compulsory listening task was mentioned by two students (Q9).

As for online tasks, learners identified almost every task as either beneficial for their development or useful, and in most cases even both. However, based on their answers, the level of interaction and involvement were major variables in their assessment. Higher involvement levels correlated with tasks being identified as beneficial and useful for language development (see Tables J3 and J4 on pp. 307-309).

#### **9.7.1.2.3 Findings of the *Edmodo* section**

Registration on *Edmodo* was seen as very easy by students (1.85) (Q10) and they also found the interface of the site easy to navigate (1.23) (Q11). Learners had access to a number of folders on *Edmodo* containing links to grammar, vocabulary, listening and speaking development. According to their responses, they primarily used it for *skill development* (8). Other categories included *additional practice* (3), *participating in online courses* (2), *exploring new websites* (1) and *all of the above* (1). Students did not use the contents of the folders to *try out new software* or to *watch instructional videos*. Some markings also indicated that two learners did not know about the folders (Q13).

The results of questions 15-17 illustrate that students found the *online vocabulary tests* difficult (4.92), highly useful (5.77) and highly beneficial (6). In Q18 learners also expressed that they encountered a small number of errors on *Edmodo* rather frequently (3.62), however, the negative effects this had on their task completion was moderately significant (2.92). Moreover, students would recommend *Edmodo* to be used in other courses (4.38).

The open-ended items of the section (Q12, 14, 19-21) showed a mixed picture. There were two arguments concerning how first usage of the site was difficult but they eventually got used to it and understood its place in the course design. One student explained not having known about the folders on *Edmodo* and one emphasized the large number of problems with the website. Three learners recommended *Edmodo* based on the tasks, simple usage and the number of available options on the website.

*Edmodo* was seen as a useful hub for the online tasks for the most parts and made it possible to add the online element to the course in the form of a website that is easy to navigate and access. However, the site requires technical help from the teacher as freezing or crashing during task completion can affect students' scores negatively.

Only some of the students made use of this possibility (see Tables J5 and J6 on pp. 309-310).

#### **9.7.1.2.4 Findings of the *Quizlet* section**

*Quizlet* provided the instruction and practice platform for the vocabulary items covered in the course (see Study 4 on p. 141). Similarly to *Edmodo*, the interface was seen as easy to navigate (1.38) (Q22). Based on their indications, students overall found the website highly useful (Q24). Learners marked *creating vocabulary flashcards* as useful (10) and beneficial (7), *being able to listen to the flashcards* as useful (7) and beneficial (7), *practice features* useful (7), *the vocabulary sets of the classmates* useful (11), *learning new words this way* as useful (11) and beneficial (9), *knowing the word type* as useful (9) and beneficial (7) and finally, the *sample sentences* as useful as well.

The open-ended items (Q23, 25 & 26) revealed that two students had problems with the user interface of *Quizlet*. Learners used mostly *online* (4) and *printed dictionaries* (1) or *Google translator* (1) when preparing their flashcards. One participant argued that the experience with *Quizlet* was worse than *Edmodo* and another stressed that learning words this way was highly beneficial.

Based on the above results, it can be argued that *Quizlet* was a somewhat unusual platform for some learners. However, their markings in Q24 point to the platform successfully functioning as social vocabulary flashcard website that was beneficial in terms of vocabulary development (see Tables J7 and J8 on pp. 310-311).

#### **9.7.1.2.5 Findings of the feedback section**

The items in the feedback section of the questionnaire all have positive ratings. As the results of Q27 show, students found the *feedback from two teachers* on their presentations (5.15) the most beneficial which is followed by the *teacher feedback in-class* (5.08). Feedback from *classmates in-class* and during *peer assessment* were assessed equally important (4.46).

In the case of the multiple-choice items, the same pattern was visible (Q28). *In-class teacher feedback* was seen as useful (8) and beneficial (9) and *feedback from two teachers on presentations* was even more useful (10) and equally beneficial (9). While

*in-class feedback of classmates* was seen as moderately useful (5), *peer-reviews* were assessed as beneficial (8). The reason for this trend can be found in the open-ended item (Q29) which explains that although one learner found feedback in general helpful, one did not realize that there was in-class feedback and another student illustrated how peer-reviews were confusing at times.

The important role of feedback was understood by the students and they expressed the various levels of how useful they found in-class feedback from their teacher and classmates and two raters and their peers online. The inclusion of students in the feedback process arguable affected their own views of assessment positively (see Tables J9 and J10 on p. 312).

#### **9.7.1.2.6 Findings of the overall impressions section**

Students' overall impressions of the course were quite positive (Q30). They indicated their *enjoyment of the course* (4.85) and that they were able to *develop their English proficiency* (4.77). Students also argued that they saw the *online element as beneficial for language development* (4.54). Learners also expressed that they *would recommend Edmodo* (4.46) and *Quizlet* (4.31). Furthermore, participants *would like to have more courses with online elements* (4.31).

In the open-ended items (Q31-34) students expressed their more detailed assessment of the course. Four students argued that they liked the course design and describe that they have no required changes. Six learners emphasized their need for further argumentative and speaking tasks. One participant argued in general that there were too many tasks, one expressed his/her disliking of the online elements, one student listed too many presentation tasks as an issue and the listening tasks appeared here as well in term of their difficulty and as online listening tasks. The need for more sympathy was also listed.

The overall impressions section revealed that students enjoyed the course and were able to develop their language skills. Learners identified the online element of the course as a scaffolding instrument and would recommend the two platforms for other courses as well and are open for online elements (see Tables J11 and J12 on p. 313).

### 9.7.1.2.7 Findings of the general information section

The final section of the questionnaire collected non-identifiable statistical data from the participants and included the end-of-term self-assessment. The average age of the participants was 19.23 years (Q35). Overall, 10 female and 3 male students completed the questionnaire (Q36). Eight students were from the English BA while five from the teacher training program (Q37) (see Table J13 on p. 314).

**Table 22:** Comparison of the skill self-assessment completed at the start (four-point) and at the end of the semester (six-point)

Skills	Four-point Likert scale mean value	Conversion to a six-point scale	Six-point Likert scale mean value	Change
1. presentation skill	2.22	3.33	4.92	+1.59
2. argumentative skill	2.5	3.75	4.31	+0.56
3. pronunciation	2.72	4.08	4.31	+0.23
4. vocabulary	2.72	4.08	4.92	+0.84
5. grammatical accuracy	2.39	3.58	4.15	+0.57
6. effective communication	2.56	3.84	4.54	+0.7
7. discussion skill	2.56	3.84	4.23	+0.39
8. critical thinking	-	-	4.38	
9. assessment skill	-	-	4.62	
10. self-assessment	-	-	4.54	
11. listening skill	2.33	-	-	

Students' assessment of their skills shows a highly positive picture (Q38). They indicated that their *presentation skill* (4.92) and *vocabulary* (4.92) have developed the most. This is followed by their *assessment skill* (4.62), *self-assessment* (4.54), *critical thinking* (4.38), *argumentative skill* (4.31), *pronunciation* (4.31), *discussion skill* (4.23) and *grammatical accuracy* (4.15).

Table 22 presents the comparison of students' self-assessment at the start and at the end of the semester. As the two questionnaires used a four- and a six-point Likert-scale to measure self-assessment, these had to be brought to a common value. For this reason, the values of the first scale were multiplied by 1.5 as this is the mathematical difference between four and six. Both questionnaires contained items that were unique

to them, so only those ones are discussed that could be compared. In Study 1 students received their own self-assessment from the beginning of the semester when doing their final evaluation of their development. In the present case, this was omitted to limit the influence of their previous ratings. In each of the first seven skills, there was measurable development in every case. The most notable from these are *presentation skill* (+1.59) and *vocabulary* (+0.84). These are followed by *effective communication* (+0.7), *grammatical accuracy* (+0.57), *argumentative skill* (+0.56), *discussion skill* (+0.39) and *pronunciation* (+0.23). The results mean that learners indicated that they were able to develop their English proficiency among a number of skills.

### 9.1.8 Conclusion

Students were open to the combination of face-to-face and online approaches to language skill development. Although participants had some technical difficulties with the platforms, they were motivated to have more courses with online components (RQ1). The assessment of their skill development is overwhelmingly positive with significant changes present in the pre- and post-self-assessments (RQ2).

Blending is a feasible approach for complementing face-to-face sessions as it enables skill development and access to various supplementary websites, videos and applications outside of the classroom. This way students can spend further time on areas they find did not get enough attention in the classroom or that they wish to further develop themselves (RQ3).

Study 5 continued and built on Study 1's findings. It established that *Edmodo* and *Quizlet* are reliable online learning platforms for language skill development seminars. Both offer possibilities that are currently missing from the new LMS of the University of Pécs, *Neptun*. Until these are integrated into *Neptun* that website will serve primarily as a content management system and a databank. This is probably the major challenge of future projects as some students who are digital immigrants might display resistance when required to master the use of additional learning platforms. The development of digital skills was a secondary goal of Studies 1 and 5, however, in forthcoming projects it will likely become more emphasized as language skill development lends itself to CLIL approaches to digital literacy development (RQ4).

## **9.2 Study 6: Teacher challenges in correspondence blended skill development**

### **9.2.1 Introduction**

Study 6 represents the final project in the blended learning approach to listening and speaking skills and vocabulary knowledge development by applying it to a correspondence seminar context. It explored various issues of correspondence course integration possibilities in the form of an interview study. The results of the interview were compared with those conducted in Study 3.

The *Listening and Speaking Skills* seminars discussed in Studies 1 and 5 both included a feedback element where students received evaluations from two teachers about their presentations. In the case of Study 6, the correspondence *Listening and Speaking Skills II* seminar was carried out by the second evaluator. As an English teacher, a second-year doctoral student of applied linguistics, and an observing participant in the aforementioned courses, she was the perfect candidate for this study. The underlying reasons can be found in that as the second evaluator she experienced the face-to-face sessions and also explored the online environments. The overall goal of Study 6 was to investigate how such a background is sufficient for blended implementation and what level of further training might be required to apply the blended frame for skill development in the whole correspondence program.

### **9.2.2 Context**

The context of Study 6 was the correspondence version of the *Listening and Speaking Skills II* seminar in the spring semester of the 2015/16 academic year. The goals of the skill development courses in this program are identical with those identified in the face-to-face curriculum. However, the major difference besides the limited number of contact sessions concerns an increased level of heterogeneity in the students' age, educational and work backgrounds and even goals compared to the face-to-face program.

### 9.2.3 Research questions

Study 6 was constructed around the following three research questions:

- RQ1: How did the participant design the course for blended instruction?
- RQ2: What was the level of student engagement?
- RQ3: What further challenges are there for correspondence blended projects?

### 9.2.4 Participant

This interview study was conducted with a participant that had a significant role in how students' presentations were assessed in Studies 1 and 5. As a 27-year-old English teacher and a second-year doctoral student of applied linguistics, she participated in the above projects as the second evaluator of student presentations and also as an observer in the face-to-face sessions. She was present in 80% of all classes throughout the two semesters and also delved somewhat into online learning environments on *Edmodo* and *Quizlet* to explore teacher possibilities.

The interviewee was also familiarized with the overarching goals of the skill development courses, the *Proficiency Exam* and the *Listening and Speaking Skills I* and *II* seminars. In the spring semester of the 2016/2017 academic year she taught the *Listening and Speaking Skills II* seminar to correspondence students. Due to time constraints, she opted for a blended approach in the correspondent course. For anonymity purposes, she was given the nickname Kara in the present study.

### 9.2.5 Data collection instrument

The data collection instrument in the study was originally planned to involve a semi-structured interview constructed along the following points: blended instruction design, student engagement in the face-to-face and online sessions and finally, assessing challenges to further blended implementation on the course and program level.

The original goal behind the semi-structured approach was exploring the teaching background of the participant. A semi-structured interview is well-suited for such a purpose as it allows for addressing emerging issues. This is in line with Dörnyei's (2007) emphasis on the nature of qualitative studies which provides the researcher with a level of flexibility to address emerging issues and to give special

attention to some issues during data collection (p. 37). As Dörnyei (2007) points out, qualitative research is primarily focused on exploration (p. 38).

Although the semi-structured interview would have possibly granted more insight into the issues in the participant's accounts, it was changed to a structured interview due to geographical and time table issues. This, however, allowed for the project to take on a fully comparative approach. Thus, the interview items were redesigned to a similar structure as was implemented in Study 3 (see Appendix K on p. 315). Another reason behind this approach was that the questions in Study 3 have been piloted and were able to provide reliable data. For this reason, the interview items were developed based on of Study 3 and adapted to fit the correspondence program.

### 9.2.6 Procedure

The structure of the research phases in the present study can be sorted into four steps. The first stage of the project can be connected to the findings of Study 3. The emerging patterns concerning tutors' e-learning background, course structure and challenges pointed toward a need for more focused blended instruction and also a platform that allows instructors to create a number of varied, online tasks. Solving these issues were cornerstones of Studies 1, 2, 4 and 5.

The next stage involved the *Listening and Speaking Skills I & II* courses which explored and validated the possibilities of language learning scaffoldings through two platforms: *Edmodo* and *Quizlet*. The preceding studies also addressed how the face-to-face and online sessions can be connected to achieve a blended learning context. Kara participated in both of these courses as a second evaluator of student presentations and as an observer. The weekly sessions were often followed-up by discussions between Kara and myself in terms of why certain tasks or exercises were used and how the online activities complement them.

The third stage involved Kara teaching a *Listening and Speaking Skills II* course in a blended manner in the correspondence program. In her course design, she adapted the syllabus of the previous *LSS* courses and she also had access to some of the learning materials. She applied the blended frame to solve time issues and provided language practice and online group learning opportunities.

The final stage concerned the analysis of Kara's responses to the interview



items. This step served two goals. The first was to pinpoint her blended learning design, the students' level of engagement and further challenges for correspondence blended projects. The second objective involved comparing the findings of the project to Study 3. This comparative analysis was able to give a more in-depth picture of what the general challenges of blended correspondent instruction are and what kind of training as well as theoretical background is required for successful implementation.

## 9.2.7 Findings

### 9.2.7.1 The participant's blended learning design

Kara's blended learning design is closely related to her experiences with the *Listening and Speaking Skills* courses she participated in as a second evaluator and observer. She described not having known about blended learning in general prior to being engaged in the aforementioned seminars. She also explained that she was not sure how such a setup could work to the point that she was even skeptical. However, Kara highlights that seeing blending in practice motivated her to further deepen her understanding of the frame and what kind of tasks can be associated with the face-to-face and online environments. She also referred to the consultations we had in the beginning of the 2016/17 spring semester that helped her in this development.

The interviewee expressed fears about the technological part of the blended course in the preparation stage both in terms of herself and the students. She explained that her initial plan was to have a 50-50% distribution between the contact and online sessions. However, learners expressed their need for more speaking exercises so all listening tasks were moved online. Kara's research area is mobile learning, however, she emphasized having had difficulties with using the *Edmodo* application properly as she could not follow student submissions. She also addressed that to her understanding only one student made use of the mobile application.

Kara explained that her overall course design was based on the previous syllabus of the *Listening and Speaking Skills* (see document B2 on p. 244) courses which she observed and these helped her greatly in designing her own course. She also mentioned that she had to select which tasks fit the contact sessions and expressed that the variety was more limited compared to the full-time courses. Overall, Kara used presentations and picture talks. Her assessment criteria were also based on the previous syllabus,

however, the contact session tasks made up only 40% and the online ones 60% of the overall grade of the students.

Unlike the face-to-face *Listening and Speaking Skills* courses, in Kara's course the video lessons from *Coursera* and *TED* presentation had an important role as students were required to provide feedback on them. Assessment on presentations was carried out using the *Proficiency Exam* criteria complemented with teacher comments. Kara also used *Edmodo* as the platform for online tasks. She addressed how the site's interface is similar to *Facebook* and how after a learning curve and some technical issues, it functioned well. She even praised *Edmodo* and expressed that it is a great platform.

In terms of course design and blended learning understanding, Kara displayed similar characteristics to Alice in Study 3. Both interviewees had some level of first-hand blended learning experience and actively sought out advice and guiding frames in terms of blending implementation. A further similarity lies in content development. While Alice started from the ground up and developed her materials for her students in an interactive fashion on *CooSpace*, Kara adapted learners' needs in terms of online tasks.

#### **9.2.7.2 Level of student engagement in the participant's blended course**

Kara's content development process included a number of issues that she addressed in her responses. She was concerned about whether students will be able to use *Edmodo* and how well they will keep the deadlines. A further issue she mentioned in the planning phase was fitting the tasks into the contact and online sessions. In terms of students, Kara's group was similar to the ones discussed in Study 3. This entails that learner engagement can be compared among the two studies. She had nine students from which overall eight participated in the full length of the course. Although she did no formal inquiry concerning age distribution, based on her account, it covered quite a wide range as her learners were between the ages of 20 and 45. In terms of gender there were seven female students and one male student.

The participant explained that face-to-face interactions were highly interactive which even surprised her as she had to intervene for the students to finish tasks due to time constraints. She argued that her students' reasoning skills and fluency were quite

developed and they were able to successfully construct their presentations. However, she also addressed that a kind of discrepancy was present between the face-to-face and online task involvement. The latter was plagued by students being unable to keep their deadlines and asking for postponements. Based on these accounts it comes as no surprise that students liked the picture talks and discussion topics in the contact sessions the most. However, Kara also expressed that students found the online listening tasks motivating and they even requested more. Furthermore, some of her learners also contacted her via e-mail or after class asking for further help.

Kara explains that the online submission deadlines led to some student resistance which was not present in the face-to-face sessions. In terms of demotivation, Kara's understanding is that her students were much rather overloaded with information and were overworked. She also mentioned that her students were at first anxious about the e-learning part as they had no prior experience with it but they eventually welcomed the possibility of practicing at home.

The interviewee's accounts concerning her students are quite similar to the one expressed by Diana, Lucy, Alice and Elisabeth in Study 3. In all cases students were at first startled by the idea of e-learning, however, in the end they were able to make use of the merits of the blended approach. The same can be reported about the tutors. Technology related anxiety in terms of the materials and the platforms was a recurring trend as well. In the end, all participants were able to gather experience with blended learning and had a much better understanding of what works online and in the face-to-face sessions as before.

### **9.2.7.3 Further challenges for blended correspondent courses**

Kara explained that initial support concerning *Edmodo* was quite helpful for her both in terms of the platform and its uses. She notes having known it to some level prior to using it in her course. However, the blended implementation required her to further explore *Edmodo*, to which she added that there are still unexplored functions of the site to her. She received mostly positive feedback from her students, although there was one learner who complained about the inconsistent following of deadlines. Kara argued that this student was among those asking for postponements. In Kara's account, the advantages of blending surpass the disadvantages which are also consistent with the

findings of the student satisfaction questionnaires in Studies 2 and 5.

The interviewee expressed that teachers with future blended courses would unquestionably need training and experience in blended and e-learning from both tutor's and students' perspectives. She addressed how this should include a hands-on approach where the task possibilities and resource management are explained. She emphasized that in order to properly use blended methods they first have to be experienced. This would give the participants practice of the medium. Kara also added the need for a concise theoretical background.

Kara's points in this case show similarities with Alice's accounts who also opted for first-hand experience when designing her course. However, there is a major difference between Kara and the other tutors in Study 3, most likely due to the different platforms implemented in the studies. While in the case of the teachers in Study 3 technical support was a consistent issue, in Kara's arguments the need for a solid theoretical background and some level of introduction was more persistent.

### **9.2.8 Conclusion**

The interviewee designed her blended learning course for the correspondence setting based on her experiences as an observer in Studies 2 and 5. She made use of the syllabus of those courses and applied the tasks to the blended context. Due to time limitations, this entailed changing the requirements and the online part of the course receiving a more emphasized role (RQ1).

Student engagement was satisfactory in both the online and face-to-face tasks, although there were large differences between the two contexts. Learners were more active and motivated in the contact sessions and displayed some level of resistance concerning the deadlines of the online tasks. However, they also expressed their needs for further online listening tasks and found the opportunity to practice online motivating (RQ2).

Blended correspondence projects represent courses required by the University of Pécs to address timetable management issues and are also helpful for students in terms of saving on traveling costs and time. However, the construction of such courses still presents challenges. The major one identified in the present study concerns the need for prior blended and e-learning experience as well as a solid theoretical background

coupled with a suitable platform to successfully implement blended courses (RQ3).

The findings of Studies 3 and 6 complement each other. The major difference between the two concerns the teaching experience and technological socialization of the participants. In Study 3, tutors were almost all digital immigrants while in Study 6 Kara was a digital native. This explains how technological support was much less present in her case and also that she received some training in blended learning and had prior experience as an observer. Still, the issues identified in both studies point to similar overarching trends in terms of needed blended learning experience and technological support both at the planning and implementation stages.

## 10. Conclusion and directions for further research

### 10.1 Evaluating the main findings of the six studies

The overall goal of the dissertation was to identify solutions that make it possible for English major students to practice their language skills outside classroom limitations in the full time and correspondence programs. For this reason, two studies were conducted in the exploration, application and evaluation phases, totaling at six projects. As the phases indicate, the goals of these studies were to first explore the possibilities of blending at Institute of English Studies at the University of Pécs. This was followed by building on the results of the first two projects and designing focused blended environments along the language and learner needs. Finally, the results of the face-to-face courses were evaluated and applied to the correspondence program.

The first phase of the studies included a pre-study which took place in 2012 (see Simon, 2014 for details) and identified the e-learning understandings, habits and needs of English majors at the Institute of English Studies at the University of Pécs. The findings of this study, coupled with the decreasing listening scores on the *Proficiency Exam* were used to design a blended *Listening and Speaking Skills* course to address the issues.

In Study 1, blended learning provided the frame to complement face-to-face sessions in the form of online tasks that were designed based on a needs analysis questionnaire at the start of the semester. *Edmodo* was chosen as the e-learning platform for the exploratory project as it had a user-friendly interface and compared to the university's content management system at the time, offered a large number of possibilities for task creation. A few other websites such as *MindMup* were also included in the project along with video lessons from *Coursera* and *TED* presentations. The main focus of the blended course was listening and speaking skill development as well as vocabulary development. The results of the student satisfaction questionnaire indicated that learners found the blended design beneficial for their language development and were able to use the platform for the most part without any issues.

Study 2 examined how adapting vocabulary tests (Nation, 1990; Schmitt, Schmitt & Clapham, 2001, pp. 86-88; Martinez, 2011) affects vocabulary development. This project was carried out in the same course *LSS* outlined in Study 1. Results

indicated that students were able to adequately complete the vocabulary tests and the repeated items for also lead to increased correct answers. These findings and students' indication for further vocabulary development provided the initiative for more focused vocabulary instruction, practice and testing.

The second phase of the studies referred to applying the findings and experience gathered in the exploratory stage to address both teacher and student needs. The planning, implementation and assessment of Studies 1 and 2 provided first-hand teaching experience with blended learning. This coincided with the university's need for blended instruction for correspondence students in the English teacher MA program. To address tutors' e-learning understanding, blended course design, student feedback and perceived challenges, a comparative interview study was designed and carried out in Study 3. This revealed that teachers' understanding and course designs can be vastly different based primarily on their experiences with e-learning and secondary on the technical difficulties of the e-learning platform they used. Although e-solutions were applied in almost every case, there was only one tutor who delved into the content creation aspect of e-learning instead of turning face-to-face materials into e-learning ones.

The second project of the application phase was a follow-up study to the vocabulary development findings of Study 2. In another *Listening and Speaking Skills* course as the context, students participated in fully online vocabulary instruction, practice and testing. The interactive flashcard website *Quizlet* provided the platforms for the vocabulary and *Edmodo* for the testing aspects of the project. The words covered during the semester were primarily based on the *NGSL* and *AWL* lists and included nearly 1,000 items. The online solutions proved to be useful as there was a measurable vocabulary increase of almost 700 words at the end of the semester and in the final in-class vocabulary test students were able to properly use the acquired items in context.

The final stage of the studies involved assessing how the changes affected the face-to-face courses and also addressing how they translate to another tutor in the correspondence program. Study 5 was a follow-up project to Study 1 and was the context of Study 4 as well. It implemented the results of the student satisfaction questionnaire of Study 1 and the findings of Study 2 in terms of vocabulary development. This *LSS* course was based on a redesigned syllabus that, similarly to

Study 1, also built on the findings of a needs-analysis questionnaire at the beginning of the semester. Study 5 established that *Edmodo* and *Quizlet* are reliable platforms that can further students' language skills development and also motivate them to be open for further e-learning courses.

The final project of the evaluation stage included applying the findings of the preceding studies combined with the observer experience of a fellow tutor in the two *Listening and Speaking Skills* courses and using them in the correspondence context. This interview study looked into how the tutor designed her course, student engagement and further challenges. It was identified in her accounts as well, that despite some technical difficulties *Edmodo* is a reliable e-learning platform that is suited for blended instruction and can provide contexts for a number of online language tasks. Her correspondence students were engaged both in the face-to-face and online environments.

*Edmodo's* reliability is of special importance considering the limited possibilities provided by the now obsolete *CooSpace* and the currently used *Neptun* which has a confusing interface and very few e-learning options on its *MeetStreet* menu. These findings point to a need for using external websites like *Edmodo* until *Neptun* is updated to meet e-learning challenges.

Overall, the six studies provided insight into what possibilities there are with blended learning implementation in the face-to-face and correspondence courses using free e-learning platforms. The projects identified recurring student needs that can be addressed using *Edmodo* as the main hub for e-learning activities and *Quizlet* for focused vocabulary development. Teacher needs were also identified and they included the need for continuous technological support and sufficient theoretical background about how blended learning works. To conclude, the findings of the six studies can be used as guidelines for turning the other *Proficiency Exam* preparatory courses next to *Listening and Speaking Skills* like *Reading and Writing Skill* and *Grammar in Use* to blended courses in the full time and correspondence programs.



## 10.2 Limitations of the studies

There are a number of limitations that come from the research structure that the studies followed. The first concerns the theoretical background presented in the literature review. As e-learning is a developing field with new advancements, findings, technical solutions and especially websites, platforms and applications, a contrastive analysis of such solutions would hold the possibility of quickly becoming outdated. For this reason, e-learning was much rather approached from psychological, historical and learning perspectives. Of course, this meant that a selection rationale had to be followed which led to the omission of certain aspects like contrasting the learner and teacher experiences, going into detail about virtual realities, assessing the merits and shortcomings of electronic, automated and online evaluation or detailing the process of online material creation from additional perspectives. Although these aspects were removed from the literature review they were readdressed indirectly in the six research studies in the empirical section.

The second, third and fourth limitations stem from the design and implantation of the studies and concern the number of participants (limitation 2), generalizability of the findings (3) and instrument validation (4). As the overall goal of the dissertation was to establish possible blending solutions for the *Listening and Speaking Skills* seminars, the number of participants was limited to two groups of students and a few teachers; altogether 36 pupils and 6 tutors. Such a design raises issues in terms of validity.

As Mackey and Gass (2005) explain, without internal validity, generalization is a futile effort (p. 119). Thus, from a statistics perspective, the findings of this sample are not generalizable to a larger population of learners or teachers. However, in terms of the English major population and tutors of the Institute of English Studies at the University of Pécs, the results offered reliable insights into the problematic and developing areas. As such, the generalization of the findings is valid within this context as constraints like the BA and MA course structure and requirements as well as the filter exam of the institution apply.

A further limitation is connected to validation. The six projects in the dissertation followed a similar two-project-structure that was connected to one of three instruments. In each case, the first study piloted the instrument and the second revised it depending on the findings. Studies 1 and 5 included student satisfaction questionnaires,

2 and 4 were concerned with vocabulary testing and 3 and 6 were interview studies. The issue of limited generalization based on the sample size was present with validation as well. Thus, test and questionnaire item validation was a major issue that was tackled with the aforementioned two-study approach.

The final limitation comes from my presence in Studies 1, 2, 4 and 5 as both the teacher and the researcher. Such contexts inevitably affect objectivity to some degree. Although the instruments in these projects were designed to be analyzed with descriptive statistics, researcher bias cannot be ruled out completely.

### **10.3 Pedagogical implications**

The findings of the research studies concerning the *Listening and Speaking Skills* seminars revealed a trend that can be translated to a possible two course design. As the participants in Studies 1, 2, 4 and 5 were all digital native students, a number of findings in the literature review were confirmed. These included the lack of homogeneity of such learners' technological socialization and their digital skills. All three are central issues as the number of online sources, platforms and mobile applications is increasingly growing. However, without structured introduction to implementing these possibilities, students' might find e-learning confusing and can fossilize at personal and leisure uses of technology. Of course, it is not the sole responsibility of the *LSS* courses to prepare learners' for comprehensive professional use of online solutions, however, they can provide an introductory frame for it.

The first semester of English majors' courses at the Institute of English Studies at the University of Pécs are centered on introduction to various scholarly areas such as literature, history and linguistics as well as language development. The second semester is concerned with applying the introductory concepts and taking the *Proficiency Exam*. For students that just passed their school leaving exams, such a learning curve is arguably very steep. Even with intermediate level language exam backgrounds, the difficulty spike in terms of required language knowledge could partially explain the decreasing passing rate of the *Proficiency Exam* which initiated the blended studies in the dissertation. A further issue is that even with the required language exams, students' actual English mastery might be limited to exam preparation and lacking in key areas such as discussion, argumentation, listening and speaking skills as well as vocabulary.

The proposed frame for the two *LSS* courses aims to target two main issues, introducing students to educational uses of online solutions and scaffolding their language development through blended learning (see Table 23). The basic premise of this structure is that the *LSSI* seminar acts as a difficulty spike minimizing bridge between learners' secondary school/ intermediate language exam knowledge and university-level requirements.

In terms of listening exercises this is achievable through using intermediate and upper-intermediate level tasks. Moreover, learners are introduced to podcasts. Presentations on students' favored topics and pre-assigned picture talk exercises and related peer-reviews are kept as cornerstones of the course. Students are introduced to blended learning in the form of online elements complementing the face-to-face sessions. The in-class speaking development along the staged debate, group and pair discussion task types are extended by *MOOCs* and *TED* videos. Bringing students' vocabulary knowledge to *Proficiency Exam* level requirements starts with structured online delivery, practice and testing that encompass synonyms and definitions. Subsequently, learners are also introduced to the online mind map format. Grammar development is not part of the *LSS* courses main aims, however, optional practice through mobile applications like *MyGrammarLab* and *YouTube* playlists focusing on intermediate and upper-intermediate-level grammar can also be included.

The *LSSII* course builds on the digital skills developed by *LSSI* and takes a more practice-oriented approach. The level of listening exercises is set at upper-intermediate and advanced. In this case, students are also required to create and share an own podcast series of at least three episodes that address issues of their choice. Argumentative and discussion skills are further developed by using the addition of group- and pair-based problem solving. Own presentations, pre-assigned picture talks and peer-reviews are also present in the *LSSII* seminar. Additionally, learners are required to create a *TED* playlist based on a central topic and share it with their classmates. Vocabulary development is continued using the same online delivery, practice and testing approach but now the focus is on the academic register through the *NAWL*. Moreover, students are presented with language exam mind map scaffoldings which they need to complete. Grammar development is handled in the same fashion as in the *LSSI* course, however, the *YouTube* playlists are centered on upper-intermediate and advanced level grammar issues.

An optional element can be added to both *LSS* courses in the end of the respective semesters. As these are seminars that prepare students for the oral part of the *Proficiency Exam* and learners mostly experience written tests in their first year, a possible trial exam could be held. A way to integrate this into the rising difficulty levels structure would be as follows. As established, *LSSI* is considered to act as a bridge between the school leaving/ language exam requirements and university level English usage. Thus, the addition of a low-stakes (not included in the course grade) scored oral element would give students the possibility get feedback on their current level. Similarly, the *LSSII* seminar's high stakes (included in the course grade) oral exam part would give learners a picture on what to practice before taking the *Proficiency Exam*

Overall, the structure presented in Table 23 is based on face-to-face courses. However, since *LSS* seminars are also part of the correspondence program, this frame needs to be adjusted to those students' needs. In practice, this could entail a stronger focus on the online elements.

**Table 23:** Summary of the proposed framework for blended *Listening and Speaking Skills* courses

Skill/ knowledge development	<i>Listening and Speaking Skills I</i>		<i>Listening and Speaking Skills II</i>	
	Face-to-face	Online	Face-to-face	Online
<b>Listening</b>	<ul style="list-style-type: none"> <li>practicing using intermediate and upper-intermediate level exercises</li> </ul>	<ul style="list-style-type: none"> <li>online practice tasks</li> <li>introduction to podcasts</li> </ul>	<ul style="list-style-type: none"> <li>practicing using upper-intermediate and advanced level exercises</li> </ul>	<ul style="list-style-type: none"> <li>online practice tasks</li> <li>creating own podcasts</li> </ul>
<b>Speaking</b>	<ul style="list-style-type: none"> <li>developing argumentative and discussion skills through:               <ul style="list-style-type: none"> <li>staged debate</li> <li>group discussion</li> <li>pair discussion</li> </ul> </li> <li>presentation(s)</li> <li>picture talk(s)</li> </ul>	<ul style="list-style-type: none"> <li>online video lessons targeting presentation construction (see McGarrity, 2015)</li> <li>selected <i>TED</i> videos furthering digital skills</li> <li>online peer reviews</li> </ul>	<ul style="list-style-type: none"> <li>developing argumentative and discussion skills through:               <ul style="list-style-type: none"> <li>group discussion</li> <li>pair discussion</li> <li>group- and pair-based problem solving</li> </ul> </li> <li>presentation(s)</li> <li>picture talk(s)</li> </ul>	<ul style="list-style-type: none"> <li>online video lessons targeting presentation construction (see McGarrity, 2015)</li> <li>creating <i>TED</i> video playlists on an a chosen topic area</li> <li>online peer reviews</li> </ul>
<b>Vocabulary</b>	<ul style="list-style-type: none"> <li>establishing a general core vocabulary using the <i>NGSL</i> on <i>Quizlet</i></li> <li>introduction to mind map design</li> </ul>	<ul style="list-style-type: none"> <li>online vocabulary tests based on definitions and synonyms</li> </ul>	<ul style="list-style-type: none"> <li>establishing a general academic vocabulary using the <i>NAWL</i> on <i>Quizlet</i></li> <li>using language exam criteria to scaffold thematic knowledge</li> </ul>	<ul style="list-style-type: none"> <li>online vocabulary tests based on definitions and synonyms</li> </ul>
<b>Grammar</b>		<ul style="list-style-type: none"> <li>at-home practice through mobile applications <i>YouTube</i> playlists on intermediate and upper-intermediate grammar</li> </ul>		<ul style="list-style-type: none"> <li>at-home practice through mobile applications</li> <li><i>YouTube</i> playlists on upper-intermediate and advanced grammar</li> </ul>

## 10.4 Future directions for research

The six studies provided valuable insights into how blended learning can work both from the tutors' and the learners' perspectives. While the findings are promising and established that there are reliable free e-learning platforms that can be used for language skill development, there are still a number of issues that need solving.

The first problem to address is training for proper blended implementation blended learning. A recurring trend identified in the interview studies revealed that most of the tutors primarily reuse their materials from their face-to-face courses in blended ones as well. While this is not problematic in terms of the materials *per se* and they were able to complement them with e-learning solutions, blended learning can be applied in more instrumental ways. This, however, requires training, time for material (re)designing and suitable platforms.

The second issue is linked to the first problem, namely the University of Pécs having quite a limited e-learning platform with *Neptun*. For this reason it was simply bypassed in the studies. However, it would not only make sense from a student and teacher point of view for the university to have a reliable e-learning platform, but it would also enable to increase the number of international students in fully online courses and even introduce MOOCs.

Third, the context of the research studies warranted a comparative analysis in terms of the two evaluators and students' peer-assessment. The rationale behind it can be found in Vanderhoven, Raes, Montrieux, Rotsaert, and Schellens's (2015) argument, that the success of peer-assessment is based on the following, unambiguous evaluation criteria, peer assessment training, "high inter-rater agreements between peers' and teachers' scores" (p. 124). Peer-assessment and two evaluator scores were used in Studies 1 and 5 with the advanced level ECL language exam and the *Proficiency Exam* criteria respectively. In Kollárová and Simon (2016), a comparative analysis involving Krippendorff's Alpha to measure reliability and Spearman's Rho to determine the level of agreement among the evaluators was calculated using the *SPSS* statistics tool. Students' peer assessments were also put under scrutiny using Krippendorff's Alpha. The findings revealed that learners' assessment was with both sets of criteria below the acceptable values (Kollárová & Simon, 2016, p. 9). However, there were significant differences in terms of inter-rater agreement and reliability with the tutors. The ECL

criteria led to significantly higher agreement and reliability values than the *Proficiency Exam* descriptors (Kollárová & Simon, 2016, p. 9). Such results point to the need for assessment training and the reevaluation of the criteria.

Fourth, there were a number of problematic areas identified in the online vocabulary tests in Study 4. Students also pointed out areas in Study 5 where further development is needed in the blended courses' design. Addressing these issues is a required future step.

Fifth, an overarching language-related baseline along the *Proficiency Exam* preparatory courses would greatly contribute to material creation for both the full time and correspondence programs. Although corpus-based lists were identified to be sufficient in providing scaffolding for vocabulary development, the courses would benefit from an overall design that incorporates the vocabulary and content items that students are required to be familiar with. To my understanding, Professor Lehmann is currently working on a similar vocabulary list. Creating an environment based on overarching research in intradepartmental cooperation would establish a measurable baseline for students and teachers alike. Designing blended learning based on such data to incorporate listening, speaking, reading and writing skill development as well as vocabulary and grammar knowledge extension could be the first follow-up project to the dissertation.

Finally, returning the issue addressed in my dissertation's title, blending is trending. In other words, it is a currently popular frame. The underlying reasons for this have been addressed throughout the literature review and the empirical studies, but the main advantage lies in blended learning's flexibility. It is a solution that can be applied to face-to-face and correspondence courses as well. However, technological developments have replaced popular frames throughout the various e-learning generations and it is likely that they will continue to do so. The question is whether blended learning is a frame with longevity or the most popular solution of a transitional period. In my understanding, blended learning can be enhanced by augmented and virtual reality settings; however, the core structure's versatility is key. For this reason, blending is likely to remain trending as it has the potential to adapt new technologies without disrupting its fundamental frame.

## References

- Abbiss, J. (2009). Gendering the ICT curriculum: The paradox of choice. *Computers & Education*, 53(2), 343-354. <http://dx.doi.org/10.1016/j.compedu.2009.02.011>.
- Adams, S., Montagne, M., Rodriguez, J., & Stevens, V. (2012). Collaborative learning for teachers and students: Earth Day and Earthbridges. *TESL-EJ*, 16(1), 1-14. Retrieved from: <http://bit.ly/2bSP3ui>.
- Ainin, S., Naqshbandi, M. M., Moghavvemi, S., & Jaafar, N. I. (2015). Facebook usage, socialization and academic performance. *Computers & Education*, 83, 64-73. <http://dx.doi.org/10.1016/j.compedu.2014.12.018>.
- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl, & J. Beckmann (Eds.), *Springer Series in Social Psychology* (pp. 11–39). Berlin, Germany: Springer.
- Akkerman, S., Admiraal, W., & Huizenga, J. (2009). Storification in history education: A mobile game in and about medieval Amsterdam. *Computers & Education*, 52(2), 449-459. <http://dx.doi.org/10.1016/j.compedu.2008.09.014>.
- Aliprandi, S. (2011). *Creative commons: A user guide. A complete manual with a theoretical introduction and practical suggestions*. Milan: Ledizioni.
- Allen, I. E., & Seaman, J. (2010). *Class differences. Online education in the United States, 2010*. Babson Survey Research Group. Retrieved from: <http://bit.ly/2bLE2uu>.
- Alraimi, K. M., Zo, H., & Ciganek, A. P. (2015). Understanding the MOOCs continuance: The role of openness and reputation. *Computers & Education*, 80, 28-38. <http://dx.doi.org/10.1016/j.compedu.2014.08.006>.
- Anderson, N., Lankshear, C., Timms, C. & Courtney, L. (2008). ‘Because it’s boring, irrelevant and I don’t like computers’: Why high school girls avoid professionally-oriented ICT subjects. *Computers & Education*, 50(4), 1304-1318. <http://dx.doi.org/10.1016/j.compedu.2006.12.003>.
- Angelelli, C. V. (2009). Using a rubric to assess translation ability: Defining the construct. In C. V. Angelelli & H. E. Jacobson (Eds.), *Testing and assessment in translation and interpreting studies: A call for dialogue between research and practice* (pp. 13-48). Philadelphia: John Benjamins Publishing Company.
- Arena, C. (2010). Listening plus – A social approach to learning English online. *TESL-EJ*, 14(2), 1-7. Retrieved from: <http://bit.ly/2bLnQhC>.
- Arnold, N., & Ducate, L. (2006). Future foreign language teachers’ social and cognitive collaboration in an online environment. *Language Learning & Technology*, 10(1), 42-66. Retrieved from: <http://bit.ly/2ccgS3e>.



- Bachman, L. F., & Palmer, A. S. (1996). *Language testing in practice: Designing and developing useful language tests*. Oxford: Oxford University Press.
- Baepler, P., Walker, J. D., & Driessen, M. (2014). It's not about seat time: Blending, flipping, and efficiency in active learning classrooms. *Computers & Education*, 78, 227-236. <http://dx.doi.org/10.1016/j.compedu.2014.06.006>.
- Barak, M. (2005). From order to disorder: The role of computer-based electronics projects on fostering of higher-order cognitive skills. *Computers & Education*, 45(2), 231-243. <http://dx.doi.org/10.1016/j.compedu.2004.12.001>.
- Bax, S. (2003). CALL—past, present and future. *System*, 31(1), 13–28. doi:10.1016/S0346251X(02)00071-4.
- Beasley, R. E., & Chuang, Y. (2008). Web-based music study: The effects of listening repetition, song likeability, and song understandability on EFL learning perceptions and outcomes. *TESL-EJ*, 12(2), 1-17. Retrieved from: <http://bit.ly/2cefj4U>.
- Beatty, K. (2013). *Teaching & researching: Computer-assisted language learning* (2<sup>nd</sup> ed.). London: Routledge.
- Becker, M. R., McCaleb, K., & Baker, C. (2015). Paradigm shift toward student engagement in technology mediated courses. In F. N. Nafukho & B. J. Irby (Eds.), *Handbook of research on innovative technology integration in higher education* (pp. 74-92). Hershey, PA: IGI Publishing.
- Beckett, G. H., & Slater, T. (2005). The project framework: a tool for language, content, and skills integration. *ELT J*, 59(2), 108-116. doi: 10.1093/eltj/ccj024.
- Bennett, S., Bishop, A., Dalgarno, B., Waycott, J., & Kennedy, G. (2012). Implementing Web 2.0 technologies in higher education: A collective case study. *Computers & Education*, 59(2), 524-534. <http://dx.doi.org/10.1016/j.compedu.2011.12.022>.
- Bhattacharya, A., & Chauhan, K. (2010). Augmenting learner autonomy through blogging. *ELT J*, 64(4), 376-384. doi: 10.1093/elt/ccq002.
- Blake, R., Wilson, N. L., Cetto, M., & Pardo-Ballester, C. (2008). Measuring oral proficiency in distance, face-to-face, and blended classrooms. *Language Learning & Technology*, 12(3), 114-127. Retrieved from: <http://bit.ly/2c2QTfL>.
- Bonelli, E. T. (2010). Theoretical overview of the evolution of corpus linguistics. In A. O'Keefe & M. McCarthy (Eds.), *The Routledge handbook of corpus linguistics* (pp. 14-28). New York: Routledge.

- Bonk, W. J. (2000). Second language lexical knowledge and listening comprehension. *International Journal of Listening*, 14(1), 14-31. <http://dx.doi.org/10.1080/10904018.2000.10499033>.
- Borg, S., & Al-Busaidi, S. (2012). Teachers' beliefs and practices regarding learner autonomy. *ELT J*, 66(3), 283-292. doi:10.1093/elt/ccr065.
- Brezina, V., & Gablasova, D. (2015). Is there a core general vocabulary? Introducing the *New General Service List*. *Applied Linguistics*, 36(1), 1-22. doi: 10.1093/applin/amt018.
- Brooks, J. G., & Brooks, M. G. (1999). *In search of understanding: The case of constructivist classrooms*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Brosnan, M. J. (2002). *Technophobia: The psychological impact of information technology*. London: Routledge.
- Brown, J. S., & Adler, R. P. (2008). Minds on fire: Open education, the long tail, and learning 2.0. *EDUCASE Review*, 43(1), 16-32. Retrieved from: <http://bit.ly/2bP9kEg>.
- Brown, T. H., & Mbatia, L. S. (2015). Mobile learning: Moving past the myths and embracing the opportunities. *International Review of Research in Open and Distance Learning*, 16(2), 115-135. Retrieved from: <http://bit.ly/1nwpmW2>.
- Browne, C. (2014). A new general service list: The better mousetrap we've been looking for? *Vocabulary Learning and Instruction*, 3(1), 1-10. doi: 10.7820/vli.v03.1.browne.
- Browne, C., Culligan, B., & Phillips, J. (2013a). The New General Service List. Retrieved from: <http://bit.ly/1j6EaZJ>.
- Browne, C., Culligan, B., & Phillips, J. (2013b). The New Academic Vocabulary List. Retrieved from: <http://bit.ly/2aN7Hr1>.
- Buckingham, J. (2014). Open digital badges for the uninitiated. *TESL-EJ*, 18(1). 1-11. Retrieved from: <http://bit.ly/2c2hed4>.
- Calcaterra, A., Antonietti, A., & Underwood, J. (2005). Cognitive style, hypermedia navigation and learning. *Computers & Education*, 44(4), 441-457. <http://dx.doi.org/10.1016/j.compedu.2004.04.007>.
- Calvani, A., Fini, A., Ranieri, M., & Picci, P. (2012). Are young generations in secondary school digitally competent? A study on Italian teenagers. *Computers & Education*, 58(2), 797-807. <http://dx.doi.org/10.1016/j.compedu.2011.10.004>.
- Candy, P. C. (1991). *Self-direction for lifelong learning: A comprehensive guide to theory and practice*. San Francisco: Jossey-Bass Publishers.

- Carbonaro, M., Szafron, D., Cutumisu, M., & Schaeffer, J. (2010). Computer-game construction: A gender-neutral attractor to Computing Science. *Computers & Education*, 55(3), 1098-1111. <http://dx.doi.org/10.1016/j.compedu.2010.05.007>.
- Chang, Y.-C., Kao, W.-Y., Chu, C.-P., & Chiu, C.-H. (2009). A learning style classification mechanism for e-learning. *Computers & Education*, 53(2), 273-285. <http://dx.doi.org/10.1016/j.compedu.2009.02.008>.
- Chen, C.-M., & Chung, C.-J. (2008). Personalized mobile English vocabulary learning system based on item response theory and learning memory cycle. *Computers & Education*, 51(2), 624-645. <http://dx.doi.org/10.1016/j.compedu.2007.06.011>.
- Chen, C.-M., Lee, H.-M., & Chen, Y.-H. (2005). Personalized e-learning system using Item Response Theory. *Computers & Education*, 44(3), 237-255. <http://dx.doi.org/10.1016/j.compedu.2004.01.006>.
- Chen, G.D., Chang, C.K., & Wang, C.Y. (2008). Ubiquitous learning website: Scaffold learners by mobile devices with information-aware techniques. *Computers & Education*, 50(1), 77-90. <http://dx.doi.org/10.1016/j.compedu.2006.03.004>.
- Chen, H.-I. (2013). Identity practices of multilingual writers in social networking spaces. *Language Learning & Technology*, 17(2), 143-170. Retrieved from: <http://bit.ly/2bUJH3v>.
- Chen, J. J., & Yang, S. C. (2014). Fostering foreign language learning through technology-enhanced intercultural projects. *Language Learning & Technology*, 18(1), 55-75. Retrieved from: <http://bit.ly/2bU2hHk>.
- Chen, L.-H. (2010). Web-based learning programs: Use by learners with various cognitive styles. *Computers & Education*, 54(4), 1028-1035. <http://dx.doi.org/10.1016/j.compedu.2009.10.008>.
- Chen, N.-S., Wei, C.-W., Wu, K.-T., & Uden, L. (2009). Effects of high level prompts and peer assessment on online learners' reflection levels. *Computers & Education*, 52(2), 283-291. <http://dx.doi.org/10.1016/j.compedu.2008.08.007>.
- Cheng, L., & Curtis, A. (2004). Washback or backwash: a review of the impact of testing on teaching and learning. In L. Cheng, Y. Watanabe & A. Curtis (Eds.), *Washback in language testing: Research contexts and methods* (pp. 3-18). Mahwah, NJ: Lawrence Erlbaum.
- Cheng-Chao, S. (2005). An open source portal for educators. *TESL-EJ*, 9(1), 1-11. Retrieved from: <http://bit.ly/2bKJmBI>.
- Chik, A. (2014). Digital gaming and language learning: Autonomy and community. *Language Learning & Technology*, 18(2), 85-100. Retrieved from: <http://bit.ly/2cdthUm>.

- Chinnery, G. M. (2006). Going to the MALL: Mobile assisted language learning. *Language Learning & Technology*, 10(1), 9-16. Retrieved from: <http://bit.ly/2cmrPyi>.
- Chiu, C.-M., Hsu, M.-H., Sun, S.-Y., Lin, T.-C., & Sun, P.-C. (2005). Usability, quality, value and e-learning continuance decisions. *Computers & Education*, 45(4), 399-416. <http://dx.doi.org/10.1016/j.compedu.2004.06.001>.
- Christoph, G., Goldhammer, F., Zylka, J., & Hartig, J. (2015). Adolescents' computer performance: The role of self-concept and motivational aspects. *Computers and Education*, 81, 1-12. <http://dx.doi.org/10.1016/j.compedu.2014.09.004>.
- Chu, R. J., & Chu, A. Z. (2010). Multi-level analysis of peer support, Internet self-efficacy and e-learning outcomes: the contextual effects of collectivism and group potency. *Computers & Education*, 55(1), 145–154. <http://dx.doi.org/10.1016/j.compedu.2009.12.011>.
- Clark, R. C., & Mayer, R. E. (2011). *e-Learning and the science of instruction: Proven guidelines for consumers and designers of multimedia learning* (3<sup>rd</sup> ed.). San Francisco: Pfeifer.
- Cobb, T. (2001). *Compleat Lexical Tutor*. Available online at: <http://bit.ly/2ckg4YM>.
- Cobb, T. (2007). Computing the vocabulary demands of L2 reading. *Language Learning & Technology*, 11(3), 38-36. Retrieved from: <http://bit.ly/2bZgYJT>.
- Comello, M. L. G. (2009). William James on “Possible Selves”: Implications for studying identity in communication contexts. *Communication Theory*, 19(3), 337-350. doi: 10.1111/j.1468-2885.2009.01346.x.
- Conole, G., & Oliver, M. (2007). Introduction. In G. Conole & M. Oliver (Eds.) *Contemporary perspectives in e-learning research* (pp. 3-20). London: Routledge.
- Conti-Ramsden, G., Durkin, K., & Walker, A. J. (2010). Computer anxiety: A comparison of adolescents with and without a history of specific language impairment (SLI). *Computers & Education*, 54(1), 136-145. <http://dx.doi.org/10.1016/j.compedu.2009.07.015>.
- Cowie, N., & Sakui, K. (2013). It's never too late: An overview of e-learning. *ELT J*, 67(4), 459-467. doi: 10.1093/elt/cct037.
- Coxhead, A. (2000). The academic word list. Retrieved from: <http://bit.ly/1iAfNzm>.
- Craig, A. B. (2013). *Understanding augmented reality: Concepts and applications*. Waltham, MA: Morgan Kaufmann.
- Creswell, J. W. (2004). *Research design: Qualitative, quantitative, and mixed methods approaches* (2<sup>nd</sup> edition). Thousand Oaks, CA: Sage Publications.

- Csikszentmihályi, M. (1990). *Flow: The psychology of optimal experience*. New York: Harper & Row.
- Cuene, J. (2005). Web 2.0: Is it a whole new internet? [Presentation slides]. Retrieved January 10, 2015 from: <http://bit.ly/2bIncg6>.
- Daloğlu, A., Baturay, M., & Yildirim, S. (2008). Designing a constructivist vocabulary learning material. In R. d. C. V. Marriott & P. L. Torres (Eds.), *Handbook of research on e-learning methodologies for language acquisition* (pp. 186-203). Hershey, PA: Information Science Reference.
- Dalton-Puffer, C. (2007). *Discourse in content and language integrated learning (CLIL) classrooms*. Amsterdam: John Benjamins Publishing Co.
- Daniel, D. B., & Woody, W. D. (2013). E-textbooks at what cost? Performance and use of electronic v. print texts. *Computers & Education*, 62, 18-23. <http://dx.doi.org/10.1016/j.compedu.2012.10.016>.
- Davies, M. (2012). *Word and phrase* [website]. Available online at: <http://bit.ly/1R7cPPP>.
- de Freitas, S., & Oliver, M. (2006). How can exploratory learning with games and simulations within the curriculum be most effectively evaluated? *Computers & Education*, 46(3), 249-264. <http://dx.doi.org/10.1016/j.compedu.2005.11.007>.
- de Langen, F., H. T. (2013). Strategies for sustainable business models for open educational resources. *The International Review of Research in Open and Distance Learning*, 14(2), 53-66. Retrieved from: <http://bit.ly/2c7I4Si>.
- deHaan, J., Reed, W. M., & Kuwada, K. (2010). The effect of interactivity with a music video game on second language vocabulary recall. *Language Learning & Technology*, 14(2), 70-94. Retrieved from: <http://bit.ly/2c4u5Of>.
- Deng, L., & Tavares, N. J. (2013). From Moodle to Facebook: Exploring students' motivation and experiences in online communities. *Computers & Education*, 68, 167-176. <http://dx.doi.org/10.1016/j.compedu.2013.04.028>.
- Donnelly, D., McGarr, O., & O'Reilly, J. (2011). A framework for teachers' integration of ICT into their classroom practice. *Computers & Education*, 57(2), 1469-1483. <http://dx.doi.org/10.1016/j.compedu.2011.02.014>.
- Dooly, M., & Masats, D. (2011). Closing the loop between theory and praxis: new models in EFL teaching. *ELT J*, 65(1), 42-51. doi: 10.1093/elt/ccq017.
- Dörnyei, Z., & Ottó, I. (1998). Motivation in action: A process model of L2 motivation. *Working Papers in Applied Linguistics*, (Thames Valley University, London), 4. 43-69. Retrieved from: <http://bit.ly/2c2pdqf>.

- Dörnyei, Z. (2001). *Teaching and researching motivation*. Harlow: Pearson Education Limited.
- Dörnyei, Z. (2003). *Questionnaires in second language research: Construction, administration, and processing*. London: Lawrence Erlbaum.
- Dörnyei, Z. (2005). *The psychology of the language learner*. London: Lawrence Erlbaum.
- Dörnyei, Z. (2007). *Research methods in applied linguistics*. Oxford: Oxford University Press.
- Dörnyei, Z. (2009). *The psychology of second language acquisition*. London: Lawrence Erlbaum.
- Dowling, S. (2011). Web-based learning: Moving from learning islands to learning environments. *TESL-EJ*, 15(2), 1-27. Retrieved from: <http://bit.ly/2c1n5BN>.
- Dudeny, G., & Hockly, N. (2012). ICT in ELT: How did we get here and where are we going? *ELT J*, 66(4), 533-542. doi:10.1093/elt/ccs050.
- Dudeny, G., & Hockly, N. (2013). Reversing the blend: From online to blended. In B. Tomlinson & C. Whittaker (Eds.), *Blended learning in English language teaching: Course design and implementation* (pp. 75-82). London: British Council.
- Elliot, R. J. (2008). Assessment 2.0. *International Journal of Emerging Technologies in Learning*, 3 Special Issue, 66-70. Retrieved from: <http://bit.ly/2c2YxXA>.
- Erlich, Z., Erlich-Philip, I., & Gal-Ezer, J. (2005). Skills required for participating in CMC courses: An empirical study. *Computers & Education*, 44(4), 477-487. <http://dx.doi.org/10.1016/j.compedu.2004.04.010>.
- Ertmer, P. A. (1999). Addressing first- and second-order barriers to change: strategies for technology integration. *Educational Technology Research and Development*, 47(4), 47-61. doi: 10.1007/BF02299597.
- Eslami, Z. R. (2011). In their own voices: Reflections of native and nonnative English speaking TESOL graduate students on on-line pragmatic instruction to EFL learners. *TESL-EJ*, 15(2), 1-21. Retrieved from: <http://bit.ly/2bKt6gK>.
- Esteban-Millat, I., Martínez-López, F. J., Huertas-García, R., Meseguer, A., & Rodríguez-Ardura, I. (2014). Modelling students' flow experiences in an online learning environment. *Computers & Education*, 71, 111-123. <http://dx.doi.org/10.1016/j.compedu.2013.09.012>.
- Eysenck, M. W. (2004). *Psychology: An international perspective*. Hove: Psychology Press.

- Falout, J. (2012). Coping with demotivation: EFL learners' remotivation processes. *TESL-EJ*, 16(3), 1-29. Retrieved from: <http://bit.ly/2bTyIHM>.
- Fan, T.-S., & Li, Y.-C. (2005). Gender issues and computers: college computer science education in Taiwan. *Computers & Education*, 44(3), 285-300. <http://dx.doi.org/10.1016/j.compedu.2004.02.003>.
- Ferguson, P. (1995). Cooperative learning and critical thinking. In J. E. Pedersen & A. D. Digby (Eds.), *Secondary schools and cooperative learning: Theories, models, and strategies* (pp. 55-80). New York: Garland Publishing.
- Fernandez, V., Simo, P., & Sallan, J. M. (2009). Podcasting: A new technological tool to facilitate good practice in higher education. *Computers & Education*, 53(2), 385-392. <http://dx.doi.org/10.1016/j.compedu.2009.02.014>.
- Ferrer, F., Belvis, E., & Pàmies, J. (2011). Tablet PCs, academic results and educational inequalities. *Computers & Education*, 56(1), 280-288. <http://dx.doi.org/10.1016/j.compedu.2010.07.018>.
- Freire, A. P., Linhalis, F., Bianchini, S. L., Fortes, R. P. M., & Pimentel, M. d. G. C. (2010). Revealing the whiteboard to blind students: An inclusive approach to provide mediation in synchronous e-learning activities. *Computers & Education* 54(4), 866–876. <http://dx.doi.org/10.1016/j.compedu.2009.09.016>.
- Friedman, G. L. (2009). Learner-created lexical databases using web-based source material. *ELT J*, 63(2), 126-136. doi: 10.1093/elt/ccn022.
- Friesen, N. (2009). *Re-thinking e-learning research: Foundations, methods and practices*. New York: Peter Lang Publishing.
- Fukuda, S. T., & Yoshida, H. (2013). Time is of the essence: factors encouraging out-of-class study time. *ELT J*, 67(1), 31-40. doi: 10.1093/elt/ccs054.
- Galoyana, T., & Madyarova, I. (2016). The relationship between the types of engagement with digital and social media and motivation to learn English. In Í. H. Mirici, Í. H. Erten, H. Öz & I. Vodopija-Krstanović (Eds.), *Research papers on teaching English as an additional language* (pp. 103-124). University of Rijeka: Croatia.
- Garberoglio, C. L., Dickson, D., Cawthon, S., & Bond, M. (2015). Bridging the communication divide: CMC and deal individuals' literacy skills. *Language Learning & Technology*, 19(2), 118-133. Retrieved from: <http://bit.ly/2c3Fuvk>.
- Gardner, D., & Davies, M. (2014). A New Academic Vocabulary List. *Applied Linguistics*, 35(3), 305-327. doi: 10.1093/applin/amt015.

- Garrison, D. R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *Internet and Higher Education*, 7(2), 95-105. <http://dx.doi.org/10.1016/j.iheduc.2004.02.001>.
- Garrison, D. R. (2011). *E-learning in the 21<sup>st</sup> century: A framework for research and practice* (2<sup>nd</sup> edition). New York: Routledge.
- Gikandi, J. W., Morrow, D., & Davis, N. E. (2011). Online formative assessment in higher education: A review of the literature. *Computers and Education*, 57 (4), 2333-2351. <http://dx.doi.org/10.1016/j.compedu.2011.06.004>.
- Gilmore, A. (2009). Using online corpora to develop students' writing skills. *ELT J*, 63(4), 363-372. doi: 10.1093/elt/ccn056
- Godwin-Jones, R. (2006). Tag clouds in the blogosphere: Electronic literacy and social networking. *Language Learning & Technology*, 10(2), 8-15. Retrieved from: <http://bit.ly/2cneWUT>.
- Godwin-Jones, R. (2007a). E-texts, mobile browsing, and rich Internet applications. *Language Learning & Technology*, 11(3), 8-13. Retrieved from: <http://bit.ly/2bYcoLU>.
- Godwin-Jones, R. (2007b). Tools and trends in self-paced language instruction. *Language Learning & Technology*, 11(2), 10-17. Retrieved from: <http://bit.ly/2bYsSDC>.
- Grabe, W. (2009). *Reading in a second language: Moving from theory to practice*. Cambridge: Cambridge University Press.
- Gülbahar, Y. (2007). Technology planning: A roadmap to successful technology integration in schools. *Computers & Education*, 49(4), 943-956. <http://dx.doi.org/10.1016/j.compedu.2005.12.002>.
- Gurung, B., & Rutledge, D. (2014). Digital learners and the overlapping of their personal and educational digital engagement. *Computers & Education*, 77, 91-100. <http://dx.doi.org/10.1016/j.compedu.2014.04.012>.
- Guth, S., & Helm, F. (2012). Developing multiliteracies in ELT through telecollaboration. *ELT J*, 66(1), 42-51. doi: 10.1093/elt/ccr027.
- Hamano-Bunce, D. (2011). Talk or chat? Chatroom and spoken interaction in a language classroom. *ELT J*, 65(4), 426-436. doi: 10.1093/elt/ccq084.
- Hansen, J. G., & Liu, J. (2005). Guiding principles for effective peer response. *ELT J*, 59(1), 31-38. doi: 10.1093/elt/cci004.
- Harrington, A. M. (2010). Problematizing the hybrid classroom for ESL/EFL students. *TESL-EJ*, 14(3), 1-13. Retrieved from: <http://bit.ly/2c243bO>.



- Hatami, S. (2013). Learning styles. *ELT J*, 67(4), 488-490. doi: 10.1093/elt/ccs083.
- Hattem, D. (2014). Microblogging activities: Language play and tool transformation. *Language Learning & Technology*, 18(2), 151-174. Retrieved from: <http://bit.ly/2bZj7oE>.
- Hayes, E. (2008). Game content creation and it proficiency: An exploratory study. *Computers & Education*, 51(1), 97-108. <http://dx.doi.org/10.1016/j.compedu.2007.04.002>.
- Hayes, T. (2008). The three-e strategy for overcoming resistance to technological change. *Educase Quarterly*, 31(4), 67-69. Retrieved from: <http://bit.ly/2ciqjg9>.
- Hew, K. F., & Cheung, W. S. (2014). Students' and instructors' use of massive open online courses (MOOCs): motivations and challenges. *Educational Research Review*, 12, 45-58. <http://dx.doi.org/10.1016/j.edurev.2014.05.001>.
- Hinkelman, D., & Gruba, P. (2012). Power within blended language learning programs in Japan. *Language Learning & Technology*, 16(2), 46-64. Retrieved from: <http://bit.ly/2c9gDaA>.
- Hirvela, A. (2006). Computer-mediate communication in ESL teacher education. *ELT J*, 60(3), 233-241. doi: 10.1093/elt/ccl003.
- Hockly, N. (2013). Mobile learning. *ELT J*, 67(1), 80-84. doi:10.1093/elt/ccs064.
- Hockly, N. (2015). Developments in online language learning. *ELT J*, 69(3), 308-313. doi: 10.1093/elt/ccv020.
- Hoffman, H. G., Meyer, W. J. III, Ramirez, M., Roberts, L., Seibel, E. J., Atzori, B., Sharar, S. R., & Patterson, D. R. (2014). Feasibility of articulated arm mounted *Oculus Rift* virtual reality goggles for adjunctive pain control during occupational therapy in pediatric burn patients. *Cyberpsychology, Behavior, and Social Networking*, 17(6), 397-401. doi:10.1089/cyber.2014.0058.
- Holley, D., & Oliver, M. (2010). Student engagement and blended learning: Portraits of risk. *Computers & Education*, 54(3), 693-700. <http://dx.doi.org/10.1016/j.compedu.2009.08.035>.
- Holmes, B., & Gardner, J. (2006). *e-Learning: Concepts and practice*. London: Sage Publications.
- Horowitz, K. (2011). Video gaming: The new free voluntary reading? *The International Journal of Foreign Language Teaching*, 6(1), 7-10. Retrieved from: <http://bit.ly/2c3kUO1>.

- Horst, M., Cobb, T., & Nicolae, I. (2005). Expanding academic vocabulary with an interactive on-line database. *Language Learning & Technology*, 9(2), 90-110. Retrieved from: <http://bit.ly/2cyUTqD>.
- Horváth, J. (2001). Introductions and conclusions in advanced EFL students' writing: Evidence from the corpus. *Teaching English with Technology*, 1(5), 3-12.
- Hu, M., & Nation, I. S. P. (2000). Vocabulary density and reading comprehension. *Reading in a Foreign Language*, 23(1), 403-430.
- Huang, H.-C., Chern, C.-I., & Lin, C.-C. (2009). EFL learners' use of online reading strategies and comprehension of texts: An exploratory study. *Computers & Education*, 52(1), 13-26. <http://dx.doi.org/10.1016/j.compedu.2008.06.003>.
- Huang, Y.-Y., & Chou, C. (2013). Revisiting cyberbullying: Perspectives from Taiwanese teachers. *Computers & Education*, 63, 227-239. <http://dx.doi.org/10.1016/j.compedu.2012.11.023>.
- Huisman, J., de Boer, H., & Bótas, P. C. P. (2012). Where do we go from here? The future of English higher education. *Higher Education Quarterly*, 66(4), 341-362. Retrieved from: <http://bit.ly/2chVAQx>.
- Hyun, E. (2005). A study of 5- to 6-year-old children's peer dynamics and dialectical learning in a computer-based technology-rich classroom environment. *Computers & Education*, 44(1), 69-91. <http://dx.doi.org/10.1016/j.compedu.2004.01.004>.
- Illés, É. (2012). Learner autonomy revisited. *ELT J*, 66(4), 505-513. doi: 10.1093/elt/ccs044.
- Issroff, K., & del Soldato, T. (1996). Incorporating motivation into computer-supported collaborative learning. In *Proceedings of European conference on artificial intelligence in education* (pp. 284–290). Ficha Técnica, Lisbon.
- Ito, M., Baumer, S., Bittanti, M., Boyd D., Cody R., Herr-Stephenson B., Horst, H. A., Lange, P. G., Mahendran, D., Martínez, K. Z., Pascoe, C. J., Perkel, D., Robinson, L., Sims, S., & Tripp, L. (2010). *Hanging out, messing around and geeking out: Kids living and learning with new media*. Cambridge, MA: The MIT Press.
- James, W. (1890). *The principles of psychology* (Vol. 1), 8th publication of original work (1981). Cambridge, MA: Harvard University Press.
- Jarvis, H., & Achilleos, M. (2013). From computer assisted language learning (CALL) to mobile assisted language use (MALU). *TESL-EJ*, 16(4), 1-18. Retrieved from: <http://bit.ly/2bXDJ3B>.
- Jarvis, H., & Krashen, S. (2014). Is CALL obsolete? Language acquisition and Language learning revisited in a digital age. *TESL-EJ*, 17(4), 1-6. Retrieved from: <http://bit.ly/2bL4FFS>.

- Jarvis, H., & Szymczyk, M. (2010). Student views on learning grammar with web- and book-based materials. *ELT J*, 64 (1), 32-44. doi: 10.1093/elt/ccp006.
- Jarvis, H. (2015). From PPP and CALL/MALL to a praxis of task-based teaching and mobile assisted language use. *TESL-EJ*, 19(1), 1-9. Retrieved from: <http://bit.ly/2bSC51F>.
- Jay, T. (1981). Computerphobia. What to do about it. *Educational Technology*, 21, 47-48.
- Jiang, W., & Ramsay, G. (2005). Rapport-building through CALL in teaching Chinese as a foreign language: An exploratory study. *Language Learning & Technology*, 9(2), 47-63. Retrieved from: <http://bit.ly/2ccixFN>.
- Johnstone, S. M. (2005). Open educational resources serve the world. *Educase Quarterly*, 28(3), 15-18. Retrieved from: <http://bit.ly/2c0IM2w>.
- Jones, A., & Issroff, K. (2005). Learning technologies: Affective and social issues in computer-supported collaborative learning. *Computers & Education*, 44(4), 395-408. <http://dx.doi.org/10.1016/j.compedu.2004.04.004>.
- Jones, A., Issroff, K., Scanlon, E., Gill, C., McAndrew, P., & Blake, C. (2006). Using mobile devices for learning in informal settings: is it motivating? In *IADIS International Conference on Mobile Learning* (pp. 251–255), 14-16 July 2006, Dublin, IADIS Press. Retrieved from: <http://bit.ly/2bTru4y>.
- Jones, C., Ramanau, R., Cross, S., & Healing, G. (2010). Net generation or digital natives: Is there a distinct new generation entering university? *Computers & Education*, 54(3), 722-732. <http://dx.doi.org/10.1016/j.compedu.2009.09.022>.
- Jones, F. R. (1998). Self-instruction and success: A learner-profile study. *Applied Linguistics*, 19(3), 378-406. doi: 10.1093/applin/19.3.378.
- Jung, H.-J. (2014). Ubiquitous learning: Determinants impacting learners' satisfaction and performance with smartphones. *Language Learning & Technology*, 18(3), 97-119. Retrieved from: <http://bit.ly/2bKbR49>.
- Kane, M. T. (2006). Validation. In R. L. Brennan (Ed.), *Educational measurement*. (4<sup>th</sup> ed., pp. 17–64). Westport, CT: American Council on Education/Praeger.
- Karrer, T. (2007). Understanding e-learning 2.0. Retrieved from: <http://bit.ly/22IQKAJ>.
- Keengwe, J., & Onchwari, G. (2008). Constructivism, technology, and meaningful learning. In T. T. Kidd & H. Song. (Eds.), *Handbook of research on instructional systems and technology* (pp. 51-64). Hershey, PA: Information Science Reference.
- Keller, J. M. (1987). Strategies for stimulating the motivation to learn. *Performance and Instruction*, 26(8), 1–7. 10.1002/pfi.4160260802.

- Kennewell, S., & Morgan, A. (2006). Factors influencing learning through play in ICT settings. *Computers & Education*, 46(3), 265-279. <http://dx.doi.org/10.1016/j.compedu.2005.11.001>.
- Kész, Z., & Törökné Tenk, D. (2011). *Let's discuss it!* Székesfehérvár: Lexika Kiadó.
- Khan, B. H. (2005). *Managing e-learning strategies: Design, delivery, implementation and evaluation*. Hershey, PA: Information Science Publishing.
- Kim, B. K., & Baek, Y. (2009). Exploring ideas and possibilities of Second Life as an advances e-learning environment. In H. H. Yang & C-Y. Y. Steve (Eds.), *Handbook of research on practices and outcomes in e-learning: Issues and trends* (pp. 165-182). Hershey, PA: IGI Publishing.
- Kim, D., Rueckert, D., Kim, D.-J., & Seo, D. (2013). Students' perceptions and experiences of mobile learning. *Language Learning & Technology*, 17(3), 52-73. Retrieved from: <http://bit.ly/2c27NKn>.
- Kimber, K., Pillay, H., & Richards, C. (2002). Reclaiming teacher agency in a student-centred digital world. *Asia-Pacific Journal of Teacher Education*, 30(2), 155-167. doi: 10.1080/13598660220135667.
- Kimber, K., Pillay, H., & Richards, C. (2007). Technoliteracy and learning: An analysis of the quality of knowledge in electronic representations of understanding. *Computers & Education*, 48(1), 59-79. <http://dx.doi.org/10.1016/j.compedu.2005.01.004>.
- King, B. W. (2015). *Wikipedia* writing as praxis: Computer-mediated socialization of second-language writers. *Language Learning & Technology*, 19(3), 106-123. Retrieved from: <http://bit.ly/2bLrSGX>.
- Kirkwood, A. (2006). Going outside the box: skills development, cultural change and the use of on-line resources. *Computers & Education*, 47(3), 316-331. <http://dx.doi.org/10.1016/j.compedu.2004.11.002>.
- Kitsantas, A., & Chow, A. (2007). College students' perceived threat and preference for seeking help in traditional, distributed, and distance learning environments. *Computers & Education*, 48(3), 383-395. <http://dx.doi.org/10.1016/j.compedu.2005.01.008>.
- Klimanova, L., & Dembovskaya, S. (2013). L2 identity, discourse, and social networking in Russian. *Language Learning & Technology*, 17(1). 69-88. Retrieved from: <http://bit.ly/2cdiny0>.
- Klimmt, C., Hefner, D., & Vorderer, P. (2009). The video game experience as "true" identification: A theory of enjoyable alterations of players' self-perception. *Communication Theory*, 19(4), 351-373. doi: 10.1111/j.1468-2885.2009.01347.x.

- Kobus, M. B. W., Rietveld, P., & van Ommeren, J. N. (2013). Ownership versus on-campus use of mobile IT devices by university students. *Computers & Education*, 68, 29-41. <http://dx.doi.org/10.1016/j.compedu.2013.04.003>.
- Kőfalvi, T. (2006). *E-tanítás. Információs és kommunikációs technológiák felhasználása az oktatásban. Alapismeretek a tanári mesterségre készülők számára*. Budapest: Nemzeti Tankönyvkiadó.
- Kollárová, K., & Simon, K. (2016). Inter-rater reliability in assessing oral presentation skills [presentation slided]. Presented at the *University of Zagreb Roundtable: Empirical Studies in Applied Linguistics* on June 3, 2016. Retrieved from: <http://bit.ly/2a2wAuL>.
- Komenczi, B. (2009). *Elektronikus tanulási környezetek*. Budapest: Gondolat Kiadó.
- Kong, S. C., & Song, Y. (2015). An experience of personalized learning hub initiative embedding BYOD for reflective engagement in higher education. *Computers & Education*, 88, 227-240. <http://dx.doi.org/10.1016/j.compedu.2015.06.003>.
- Krashen, S. (1985). *The input hypothesis: Issues and implications*. London: Longman.
- Kubovy, M., Epstein, W., & Gepshtein, S. (2003). In I. B. Weiner, A. F. Healy & R. W. Proctor (Eds.), *Handbook of psychology. Volume 4: Experimental Psychology* (pp. 87-120). Hoboken, NJ: John Wiley and Sons, Inc.
- Kuhlemeier, H., & Hemker, B. (2007). The impact of computer use at home on students' Internet skills. *Computers & Education*, 49(2), 460-480. <http://dx.doi.org/10.1016/j.compedu.2005.10.004>.
- Kuhn, J. (2015). Meaningful play – Making professional development fun. *TESL-EJ*, 18(4), 1-8. Retrieved from: <http://bit.ly/2coNKaW>.
- Lai, C. (2013). A framework for developing self-directed technology use for language learning. *Language Learning & Technology*, 17(2), 100-122. Retrieved from: <http://bit.ly/2bNdJqY>.
- Lankshear, C., & Knobel, M. (2006). *New literacies: Everyday practices and classroom learning* (2<sup>nd</sup> edition). Maidenhead: Open University Press.
- Lartigue, J., Scoville, T., & Pham, M. (2014). Promoting K-8 Learning using Oculus Rift: Employing virtual reality to increase learning outcomes in elementary biology. In T. Bastiaens (Ed.), *Proceedings of e-learn: World conference on e-learning in corporate, government, healthcare, and higher education 2014* (pp. 1100-1105). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE).

- Laufer, B., Elder, C., Hill, K., & Congdon, P. (2004). Size and strength: Do we need both to measure vocabulary knowledge? *Language Testing*, 21(2), 202-226. doi: 10.1191/0265532204lt277oa.
- Lazarowitz, R. (1995). Learning science in cooperative modes in junior- and senior-high schools: Cognitive and affective outcomes. In J. E. Pedersen & A. D. Digby (Eds.), *Secondary schools and cooperative learning: Theories, models, and strategies* (pp. 185-228). New York: Garland Publishing. Retrieved January 16, 2016 from: <http://bit.ly/2bKenYc>.
- Lee, C. H. M., Cheng, Y. W., Rai, S., & Depickere, A. (2005). What affect student cognitive style in the development of hypermedia learning system? *Computers & Education*, 45(1), 1-19. <http://dx.doi.org/10.1016/j.compedu.2004.04.006>.
- Lee, L. (2011). Blogging: Promoting learner autonomy and intercultural competence through study abroad. *Language Learning & Technology*, 15(3), 87-109. Retrieved from: <http://bit.ly/2cekstK>.
- Lehmann, K., & Chamberlin, L. (2009). *Making the move to eLearning. Putting your course online*. New York: Rowman & Littlefield Education.
- Lehmann, M. (2007). Is intentional or incidental vocabulary learning more effective? *International Journal of Foreign Language Teaching*, 3(1), 23-28. Retrieved from: <http://bit.ly/1vMYSPB>.
- Li, N., & Kirkup, G. (2007). Gender and cultural differences in Internet use: A study of China and the UK. *Computers & Education*, 48(2), 301-317. <http://dx.doi.org/10.1016/j.compedu.2005.01.007>.
- Li, Z., & Hegelheimer, V. (2013). Mobile-assisted grammar exercises: Effects on self-editing in L2 writing. *Language Learning & Technology*, 17(3), 135-156. Retrieved from: <http://bit.ly/2cxELFE>.
- Liang, M-Y. (2010). Using synchronous online peer response groups in EFL writing: Revision-related discourse. *Language Learning & Technology*, 14(1), 45-64. Retrieved from: <http://bit.ly/2bLwkWk>.
- Lin, C.-B., Young, S. S.-C., Chan, T-W., & Chen, Y.-H. (2005). Teacher-oriented adaptive Web-based environment for supporting practical teaching models: a case study of “school for all”. *Computers & Education*, 44(2), 155-172. <http://dx.doi.org/10.1016/j.compedu.2003.11.003>.
- Lindberg, V. (2008). *Intellectual property and open source: A practical guide to protecting code*. Sebastopol, CA: O'Reilly Media Inc.
- Lipman, M. (2003). *Thinking in education*. (2<sup>nd</sup> ed). New York: Cambridge University Press.

- Liu, Y.-H., & Tourtellott, M. (2011). Blending at small colleges: Challenges and solutions. *Journal of Asynchronous Learning Networks*, 15(1), 58-67. Retrieved from: <http://bit.ly/2c243bS>.
- Luzón, M. J., & Ruiz-Madrid, M. (2010). Webtasks for the development of language learning autonomy in the digital environment. In M. J. Luzón, M. N. Ruiz-Madrid & M. L. Villanueva (Eds.), *Digital genres, new literacies and autonomy in language learning* (pp. 153-174). Newcastle upon Tyne: Cambridge Scholars Publishing.
- Lys, F. (2013). The development of advanced learner oral proficiency using iPads. *Language Learning & Technology*, 17(3), 94-116. Retrieved from: <http://bit.ly/2c9s3LK>.
- Lytras, M. D., Gašević, D., Ordóñez de Pablos, P., & Huang, W. (2008). Preface. In M. D. Lytras, D. Gašević, P. Ordóñez de Pablos & W. Huang (Eds.), *Technology enhanced learning: Best practices* (pp. viii-xiii). Hershey, PA: IGI Publishing.
- MacDonald, J. (2008). *Blended learning and online tutoring: Planning learner support and activity design* (2<sup>nd</sup> ed). Hampshire: Gower Publishing.
- Mackey, A., & Gass, S. (2005). *Second language research: Methodology and design*. Mahwah, NJ: Lawrence Erlbaum.
- Magnan, A., & Ecalle, J. (2006). Audio-visual training in children with reading disabilities. *Computers & Education*, 46(4), 407-425. <http://dx.doi.org/10.1016/j.compedu.2004.08.008>.
- Mampadi, F., Chen, S. Y., Ghinea, G., & Chen, M.-P. (2011). Design of adaptive hypermedia learning systems: A cognitive style approach. *Computers & Education*, 56(4), 1003-1011. <http://dx.doi.org/10.1016/j.compedu.2010.11.018>.
- Margaryan, A., Bianco, M., & Littlejohn, A. (2015). Instructional quality of Massive Open Online Courses (MOOCs). *Computers and Education*, 80, 77-83. <http://dx.doi.org/10.1016/j.compedu.2014.08.005>.
- Margaryan, A., Littlejohn, A., & Vojt, G. (2011). Are digital natives a myth or reality? University students' use of digital technologies. *Computers & Education*, 56(2), 429-440. <http://dx.doi.org/10.1016/j.compedu.2010.09.004>.
- Martin, S., Diaz, G., Sancristobal, E., Gil, R., Castro, M., & Peire, J. (2011). New technology trends in education: Seven years of forecasts and convergence. *Computers & Education*, 57(3), 1893-1906. <http://dx.doi.org/10.1016/j.compedu.2011.04.003>.
- Martinez, R. (2011). Phrasal vocabulary test. BNC version (1-5k). Available online at: <http://bit.ly/1e6gt1m>.

- Matzat, U. (2013). Do blended virtual learning communities enhance teachers' professional development more than purely virtual ones? A large scale empirical comparison. *Computers & Education*, 60(1), 40-51. <http://dx.doi.org/10.1016/j.compedu.2012.08.006>.
- Mazman, S. G., & Usluel, Y. K. (2010). Modeling educational usage of *Facebook*. *Computers & Education*, 55(2), 444-453. <http://dx.doi.org/10.1016/j.compedu.2010.02.008>.
- McCarty, S. (2007). Theorizing and realizing the globalized classroom. In A. Edmundson (Ed.), *Globalized e-learning. Cultural challenges* (pp. 90-115). Hershey, PA: Information Science Publishing.
- McGarrity, M. (2015). *Introduction to public speaking* [MOOC]. University of Washington: Washington. Retrieved May 29, 2015 from: <http://bit.ly/1OslI9b>.
- McKinney, D., Dyck, J. L., & Luber, E. S. (2009). *iTunes* University and the classroom: Can podcasts replace professors? *Computers & Education*, 52(3), 617-623. <http://dx.doi.org/10.1016/j.compedu.2008.11.004>.
- McMurry, B. L., Tanner, M. W., & Anderson, N. J. (2009). Self-access centers: maximizing learners' access to center resources. *TESL-EJ*, 12(4), 1-13. Retrieved from: <http://bit.ly/2c92ZE1>.
- Medgyes, P. (2014). The native/nonnative conundrum revisited. In J. Horváth & P. Medgyes (Eds.), *Studies in honour of Marianne Nikolov* (pp. 176-185). Pécs: Lingua Franca Csoport. Retrieved from: <http://bit.ly/2cpJOnj>.
- Messick, S. (1989). Validity. In R. Linn (Ed.), *Educational measurement* (3<sup>rd</sup> ed., pp. 13–103). New York: Macmillan.
- Michinov, N., & Michinov, E. (2008). Face-to-face contact at the midpoint of an online collaboration: Its impact on the patterns of participation, interaction, affect, and behavior over time. *Computers & Education*, 50(4), 1540-1557. <http://dx.doi.org/10.1016/j.compedu.2007.03.002>.
- Mikropoulos, T. A., & Natsis, A. (2011). Educational virtual environments: A ten-year review of empirical research (1999–2009). *Computers & Education*, 56(3), 769-780. <http://dx.doi.org/10.1016/j.compedu.2010.10.020>.
- Mohammadyari, S., & Singh, H. (2015). Understanding the effect of e-learning on individual performance: The role of digital literacy. *Computers & Education*, 82, 11-25. <http://dx.doi.org/10.1016/j.compedu.2014.10.025>.
- Mok, J. (2011). A case study of students' perceptions of peer assessment in Hong Kong. *ELT J*, 65(3), 230-239. doi: 10.1093/elt/ccq062.



- Müller, A. R., Röder, M., & Fingerle, M. (2014). Child sexual abuse prevention goes online: Introducing “Cool and Safe” and its effects. *Computers & Education*, 78, 60-65. <http://dx.doi.org/10.1016/j.compedu.2014.04.023>.
- Nævdal, F. (2007). Home-PC usage and achievement in English. *Computers & Education*, 49(4), 1112-1121. <http://dx.doi.org/10.1016/j.compedu.2006.01.003>.
- Nation, I.S.P. (2006). How large a vocabulary is needed for reading and listening? *The Canadian Modern Language Review*, 63(1), 59-82. doi: <http://dx.doi.org/10.3138/cmlr.63.1.59>.
- Nation, P. & Beglar, D. (2007). *Vocab size test (1-14k)*. Available online at: <http://bit.ly/1NLLDrS>.
- Nation, P. (1990). *Recognition test (2-10k)*. Available online at: <http://bit.ly/1Ky1TcO>.
- Nikolov, M. (2009). The age factor in context. In N. Marianne (Ed.), *The age factor and early language learning* (pp. 1-38). Berlin & New York: Mouton de Gruyter.
- Ng, W. (2012a). Can we teach digital natives digital literacy? *Computers & Education*, 59(3), 1065-1078. <http://dx.doi.org/10.1016/j.compedu.2012.04.016>.
- Ng, W. (2012b). *Empowering scientific literacy through digital literacy and multiliteracies*. New York: Nova Science Publishers.
- O'Reilly, T. (2007). What is web 2.0: Design patterns and Business models for the next generation of software. *Communications & Strategies*, 65, 17-37. Retrieved from: <http://bit.ly/2bXEgG3>.
- Offir, B., Lev, Y., & Bezalel, R. (2008). Surface and deep learning processes in distance education: Synchronous versus asynchronous systems. *Computers & Education*, 51(3), 1172-1183. <http://dx.doi.org/10.1016/j.compedu.2007.10.009>.
- Oliver, R. L. (1980). A cognitive model for the antecedents and consequences of satisfaction. *Journal of Marketing Research*, 17(4), 460-469. doi:10.2307/3150499.
- Olrich, D. C., Harder, R. J., Callahan, R. C., Trevisan, M. S., & Brown, A. H. (2010). *Teaching strategies: A guide to effective instruction* (9<sup>th</sup> ed). Boston, MA: Wadsworth Cengage Learning.
- Oppenheim, A. N. (1992). *Questionnaire design, interviewing and attitude measurement* (New Edition). London: Pinter.
- Oral, B. (2008). The evaluation of the student teachers' attitudes toward Internet and democracy. *Computers & Education*, 50(1), 437-445. <http://dx.doi.org/10.1016/j.compedu.2006.07.006>.

- Organization for Economic Cooperation and Development (OECD). (2007). *Giving knowledge for free: The emergence of open educational resources*. Paris: Centre for Educational Research and Innovation, OECD.
- Papastergiou, M., & Solomonidou, C. (2005). Gender issues in Internet access and favourite Internet activities among Greek high school pupils inside and outside school. *Computers & Education*, 44(4), 377-393. <http://dx.doi.org/10.1016/j.compedu.2004.04.002>.
- Papastergiou, M. (2008). Are Computer Science and Information Technology still masculine fields? High school students' perceptions and career choices. *Computers & Education*, 51(2), 594-608. <http://dx.doi.org/10.1016/j.compedu.2007.06.009>.
- Papastergiou, M. (2009). Digital game-based learning in high school Computer Science education: Impact on educational effectiveness and student motivation. *Computers & Education*, 52(1), 1-12. <http://dx.doi.org/10.1016/j.compedu.2008.06.004>.
- Papp, L. (2005). *Az e-learning a felnőttképzésben (trendek, perspektívák, európai környezet)*. Budapest: Nemzeti Felnőttképzési Intézet.
- Pardo-Gonzalez, J. (2013). Incorporating blended learning in an undergraduate English course in Colombia. In B. Tomlinson & C. Whittaker (Eds.), *Blended Learning in English Language Teaching: Course Design and Implementation* (pp. 51-60). London: British Council.
- Paribakht, T. S., & Wesche, M. (1997). Vocabulary enhancement activities and reading for meaning in second language vocabulary acquisition. In J. Coady & T. N. Huckin (Eds.), *Second language vocabulary acquisition: A rationale for pedagogy* (pp. 174-200). Cambridge: Cambridge University Press.
- Park, J., Yang, J-S., & Hsieh, Y. C. (2014). University level second language readers' online reading and comprehension strategies. *Language Learning & Technology*, 18(3), 148-172. Retrieved from: <http://bit.ly/2bL7i4q>.
- Park, Y. (2011). A pedagogical framework for mobile learning: Categorizing educational applications of mobile technologies into four types. *International Review of Research in Open and Distance Learning*, 12(2), 78-102. Retrieved from: <http://bit.ly/1eoIJvC>.
- Partnership for 21<sup>st</sup> Century Learning (P21). (2007). *Framework for 21<sup>st</sup> century learning*. Retrieved from: <http://bit.ly/1Wdz27a>.
- Passerino, L. M., & Santarosa, L. M. M. C. (2008). Autism and digital learning environments: Processes of interaction and mediation. *Computers & Education*, 51(1), 385-402. <http://dx.doi.org/10.1016/j.compedu.2007.05.015>.

- Payne, J. S., & Ross, B. M. (2005). Synchronous CMC, working memory, and L2 oral proficiency development. *Language Learning & Technology*, 9(3), 35-54. Retrieved from: <http://bit.ly/2cbcpPS>.
- Peachey, N. (2013). A blended learning teacher development course for the development of blended learning in English Language Teaching. In B. Tomlinson & C. Whittaker (Eds.), *Blended learning in English language teaching: Course design and implementation* (pp. 65-74). London: British Council.
- Pearson, J. (2006). Investigating ICT using problem-based learning in face-to-face and online learning environments. *Computers & Education*, 47(1), 56-73. <http://dx.doi.org/10.1016/j.compedu.2004.09.001>.
- Peters, K. (2007). M-learning: Positioning educators for a mobile, connected future. *International Review of Research in Open and Distance Learning*, 8(2), 1-17. Retrieved from: <https://bit.ly/1PXHGyn>.
- Phipps, R., & Merisotis, J. (1999). *What's the difference? A review of contemporary research on the effectiveness of distance learning in higher education*. Washington, DC: The Institute for Higher Education Policy. Retrieved from: <http://bit.ly/1aMRA5x>.
- Pope, J. (2014). What are MOOCs good for? *MIT Technology Review*, December 15, 2014. Retrieved from: <http://bit.ly/12SDVc8>.
- Precel, K., Eshet-Alkalai, Y., & Alberton, Y. (2009). Pedagogical and design aspects of a blended learning course. *International Review of Research in Open and Distance Learning*, 10(2), 1-16. Retrieved from: <http://bit.ly/2bO88nj>.
- Prensky, M. (2001). Digital natives, digital immigrants. *On the Horizon*, 9(5), 1-6. Retrieved from: <http://bit.ly/1MBu0j>.
- Rau, P.-L. P., Gao, Q., & Wu, L.-W. (2008). Using mobile communication technology in high school education: Motivation, pressure, and learning performance. *Computers & Education*, 50(1), 1-22. <http://dx.doi.org/10.1016/j.compedu.2006.03.008>.
- Reategui, E., Boff, E., & Campbell, J. A. (2008). Personalization in an interactive learning environment through a virtual character. *Computers and Education*, 51(2), 530-544. <http://dx.doi.org/10.1016/j.compedu.2007.05.018>.
- Reinders, H., & Wattana, S. (2014). Can I say something? The effects of digital gameplay on willingness to communicate. *Language Learning & Technology*, 18(2), 101-123. Retrieved from: <http://bit.ly/1zEGcpx>.
- Richards, C. (2005). The design of effective ICT-Supported learning activities: Exemplary models, changing requirements, and new possibilities. *Language Learning & Technology*, 9(1), 60-79. Retrieved from: <http://bit.ly/2caVqLS>.

- Richardson, V. (2005). *Constructivist teaching and teacher education*. In V. Richardson (Ed.), *Constructivist teacher education: Building a world of new understandings* (pp. 3-14). London: RoutledgeFalmer.
- Riding, R., & Rayner, S. G. (1998). *Cognitive styles and learning strategies. Understanding style differences in learning and behavior*. London: David Fulton Publisher.
- Rivera-Nivar, M., & Pomales-García, C. (2010). E-training: Can young and older users be accommodated with the same interface? *Computers & Education*, 55(3), 949-960. <http://dx.doi.org/10.1016/j.compedu.2010.04.006>.
- Rogers, E. M. (2003). *Diffusion of innovations* (5<sup>th</sup> ed.). New York, NY: The Free Press.
- Rosell-Aguilar, F. (2013). Podcasting for language learning through iTunes U: The learner's view. *Language Learning & Technology*, 17(3), 74-93. Retrieved from: <http://bit.ly/2cnORaT>.
- Rosen, L. D. (2012). *iDisorder: Understanding our obsession with technology and overcoming its hold on us*. New York: MacMillan.
- Ruthven, K., Hennessy, S., & Deaney, R. (2005). Incorporating Internet resources into classroom practice: pedagogical perspectives and strategies of secondary-school subject teachers. *Computers & Education*, 44(1), 1-34. <http://dx.doi.org/10.1016/j.compedu.2003.11.001>.
- Salisbury, A. D. (2014). Impacts of MOOCs on higher education. *Inside Higher Ed*, October 23, 2014. Retrieved from: <http://bit.ly/1nA2vYA>.
- Sánchez, R. A., Cortijo, V., & Javed, U. (2014). Students' perceptions of Facebook for academic purposes. *Computers & Education*, 70, 138-149. <http://dx.doi.org/10.1016/j.compedu.2013.08.012>.
- Sankó, Gy. (2006). The effects of hypertextual input modification on L2 vocabulary acquisition and retention. In M. Nikolov & J. Horváth (Eds.), *UPRT 2006: Empirical Studies in English Applied Linguistics* (pp. 157-178).
- Sauro, S. (2009). Computer-mediated corrective feedback and the development of L2 grammar. *Language Learning & Technology*, 13(1), 96-120. Retrieved from: <http://bit.ly/2bVIWXS>.
- Schmitt, N. (2008). Instructed second language vocabulary learning. Review article. *Language Teaching Research*, 12(3), 329-364. doi: 10.1177/1362168808089921.
- Schmitt, N., Schmitt, D., & Clapham, C. (2001). Developing and exploring the behaviour of two new versions of the Vocabulary Levels Test. *Language Testing*, 18(1), 55-88. doi: 10.1177/026553220101800103.

- Shahini, G., & Riazi, A. M. (2011). A PBLT approach to teaching ESL speaking, writing, and thinking skills. *ELT J*, 65(2), 170-179. doi: 10.1093/elt/ccq045.
- Shahrokni, S. A., & Talaeizadeh, A. (2013). Learning processes in blended language learning: A mixed-methods approach. *TESL-EJ*, 17(3), 1-34. Retrieved from: <http://bit.ly/2chCUAr>.
- Shahrokni, S. A. (2009). Second language incidental vocabulary learning: The effect of online textual, pictorial, and textual pictorial glosses. *TESL-EJ*, 13(3), 1-27. Retrieved from: <http://bit.ly/2c4j4wy>.
- Sharma, P. (2010). Blended learning. *ELT Journal*, 64(4), 456-458. doi: 10.1093/elt/ccq043.
- Sharma, Y. (2014). Move over MOOCs - Collaborative MOOC 2.0 is coming. *University World News*, 342, November 07, 2014. Retrieved from: <http://bit.ly/1oBIGRe>.
- Shaw, S., & Crisp, V. (2011). Tracing the evolution of validity in educational measurement: Past issues and contemporary challenges. *Research Matters*, 11, 14-19. Retrieved from: <http://bit.ly/2bLvKYi>.
- Simon, K. & Kollárová, K. (2015). Blending with Edmodo: The application of blended learning in a listening and speaking skills development course. In M. Lehmann, Lugossy, R. & J. Horváth (Eds.), *UPRT 2015: Empirical Studies in English Applied Linguistics* (pp. 193-217). Pécs: Lingua Franca Csoport. Retrieved from: <http://bit.ly/2c7CizT>.
- Simon, K. (2014). To e or not to e? Students' e-learning needs and habits at the Institute of English Studies at the University of Pécs. In S. Letica Krevelj & J. Mihaljevic Djigunovic (Eds.), *UZRT 2014: Empirical Studies in Applied Linguistics* (pp. 110-119). Zagreb: FF Press. Retrieved from: <http://bit.ly/1LLyxsq>.
- Simon, K. (2016). *Edmodo: The Facebook of learning platforms*. *TESL-EJ*, 20(1), 1-8. Retrieved from: <http://bit.ly/2cpyKa6>.
- Smeets, E. (2005). Does ICT contribute to powerful learning environments in primary education? *Computers & Education*, 44(3), 343-355. <http://dx.doi.org/10.1016/j.compedu.2004.04.003>.
- Smith, E., & Oosthuizen, H. J. (2006). Attitudes of entry-level University students towards computers: a comparative study. *Computers & Education*, 47(3), 352-371. <http://dx.doi.org/10.1016/j.compedu.2004.10.011>.
- Smolčec, F., Smolčec, M., & Stevens, V. (2014). Using *Minecraft* for learning English. *TESL-EJ*, 18(2), 1-15. Retrieved from: <http://bit.ly/2c2XeXB>.

- So, S. (2010). Pedagogical and technological considerations of mobile learning. Paper presented at the annual meeting of the *Association for Educational Communications and Technology* on October 27, 2010 in Anaheim, CA.
- Solomonidou, C. (1998). Girls, science and new technologies: Problems, but also challenges for the future. In *Proceedings of the Panhellenic conference education and gender – New technologies* (pp. 169–179). Thessaloniki: Center of Research Studies on Gender Issues, Greek General Secretariat of Equity (in Greek).
- Solomonidou, C. (2001). *New educational technology. Computers and learning in the knowledge society*. Thessaloniki: Codex Editions (in Greek).
- Son, J.-B. (2011). Online tools for language teaching. *TESL-EJ*, 15(1), 1-12. Retrieved from: <http://bit.ly/2bSGy4b>.
- Song, Y. (2014). “Bring Your Own Device (BYOD)” for seamless science inquiry in a primary school. *Computers & Education*, 74, 50-60. <http://dx.doi.org/10.1016/j.compedu.2014.01.005>.
- Stanley, G., & Mawer, K. (2007). Language learners & computer games: From *Space Invaders* to *Second Life*. *TESL-EJ*, 11(4), 1-12. Retrieved from: <http://bit.ly/2c1XG9l>.
- Stevens, V. (2010). Shifting sands, shifting paradigms: Challenges to developing 21<sup>st</sup> century learning skills. [presentation slides]. *CALICO Conference*, Amherst, June 10. Retrieved from: <http://bit.ly/1W5hLwg>.
- Stevens, V. (2011). Transforming learning with creative technology: Achieving the aha! moment. *TESL-EJ*, 14(4), 1-9. Retrieved from: <http://bit.ly/2cddSDv>.
- Stevens, V. (2012). Learner-centered do-it-yourself learning management systems. *TESL-EJ*, 15(4), 1-14. Retrieved from: <http://bit.ly/2bXnBMB>.
- Stevens, V. (2013). What’s with the MOOCs? *TESL-EJ*, 16(4), 1-14. Retrieved from: <http://bit.ly/2bR7uBA>.
- Stober, D. (2015). MOOCs haven't lived up to the hopes and the hype, Stanford participants say. *Stanford Report*, October 15, 2015. Retrieved from: <http://stanford.io/1Kjh4V3>.
- Stockwell, G. (2010). Using mobile phones for vocabulary activities: Examining the effect of the platform. *Language Learning & Technology*, 14(2), 95-110. Retrieved from: <http://bit.ly/1eBvC4O>.
- Stockwell, G. (2013). Technology and motivation in English-language teaching and learning. In E. Ushioda (Ed.), *International perspectives on motivation: Language learning and professional challenges* (pp. 156–175). Basingstoke, UK: Palgrave Macmillan.

- Stoynoff, S. (2012). Looking backward and forward at classroom-based language assessment. *ELT J*, 66(4), 523-532. doi: 10.1093/elt/ccs041.
- Sturm, M., Kennel, T., McBride, R., & Kelly, M. (2009). The pedagogical implications of Web 2.0. In T. Michael (Ed.) *Handbook of research on Web 2.0 and second language learning* (pp. 367-384). Hershey, PA: Information Science Reference.
- Sun, C-T., Ye, S-H., & Wang, Y-J. (2015). Effects of commercial video games on cognitive elaboration of physical concepts. *Computers & Education*, 88, 169-181. <http://dx.doi.org/10.1016/j.compedu.2015.05.002>.
- Sun, P.-C., Tsai, R. J., Finger, G., Chen, Y.-Y., & Yeh, D. (2008). What drives a successful e-Learning? An empirical investigation of the critical factors influencing learner satisfaction. *Computers & Education*, 50(4), 1183-1202. <http://dx.doi.org/10.1016/j.compedu.2006.11.007>.
- Szabó, Sz., & Collins, M. (2010). *ECL practice exams 1-5. English level C1*. Nyíregyháza: Szabó Nyelviskola és Fordítóiroda.
- Szabó, Sz., & Collins, M. (2011). *ECL examination topics. English level B2*. Nyíregyháza: Szabó Nyelviskola és Fordítóiroda.
- Szabó, Sz., & Papp, E. (2013). *How to pass the ECL exam? Level B1, B2, C1*. Nyíregyháza: Szabó Nyelviskola és Fordítóiroda.
- Taber, K. S. (2015). Constructivism in education: Interpretations and criticism from science education. In E. Railean, G. Walker, A. Elçi, & L. Jackson (Eds.), *Handbook of research on applied learning theory and design in modern education* (pp. 116-144). Hershey, PA: IGI Publishing.
- Tanner, M. W., & Landon, M. M. (2009). The effects of computer-assisted pronunciation readings on ESL learners' use of pausing, stress, intonation, and overall comprehensibility. *Language Learning & Technology*, 13(3), 51-65. Retrieved from: <http://bit.ly/2cegUHN>.
- Teixeira, A. M., & Mota, J. (2014). A proposal for the methodological design of collaborative language MOOCs In E. M. Monje & E. B. Madera (Eds.), *Language MOOCs: Providing learning, transcending boundaries* (pp. 33-47). Berlin: De Gruyter GmbH.
- Thille, C., Mitchell, J., & Stevens, M. (2015). What we've learned from MOOCs. *Inside Higher Ed*, September 22, 2015. Retrieved from: <http://bit.ly/1ONWGCa>.
- Thompson, P. (2013). The digital natives as learners: Technology use patterns and approaches to learning. *Computers & Education*, 65, 12-33. <http://dx.doi.org/10.1016/j.compedu.2012.12.022>.

- Thorne, K. (2003). *Blended learning: How to integrate online & traditional learning*. London: Kogan Page.
- Timmis, I. (2015). *Corpus Linguistics for ELT: research and practice*. New York: Routledge.
- Tomlinson, B., & Whittaker, C. (Eds.). (2013). *Blended Learning in English Language Teaching: Course Design and Implementation*. British Council.
- Tompos, A., & Neville, A. (2012). *Arguments and discussion*. Győr: Nordwest 2002 Kiadó.
- Triantafyllou, E., Georgiadou, E., & Economides, A. A. (2008). The design and evaluation of a computerized adaptive test on mobile devices. *Computers & Education*, 50(4), 1319-1330. <http://dx.doi.org/10.1016/j.compedu.2006.12.005>.
- Tsai, C.-W. (2010). Do students need teacher's initiation in online collaborative learning? *Computers & Education*, 54(4), 1137-1144. <http://dx.doi.org/10.1016/j.compedu.2009.10.021>.
- Ushioda, E. (2013). Motivation matters in mobile language learning: A brief commentary. *Language Learning & Technology*, 17(3), 1–5. Retrieved from: <http://bit.ly/1ARq5Uz>.
- Vandergriff, I. (2006). Negotiating common ground in computer-mediated versus face-to-face discussions. *Language Learning & Technology*, 10(1), 110-138. Retrieved from: <http://bit.ly/2bVvk691>.
- Vanderhoven, E., Raes, A., Montrieux, H., Rotsaert, T., & Schellens, T. (2015). What if pupils can assess their peers anonymously? A quasi-experimental study. *Computers & Education*, 81, 123-132. <http://dx.doi.org/10.1016/j.compedu.2014.10.001>.
- Vekiri, I., & Chronaki, A. (2008). Gender issues in technology use: Perceived social support, computer self-efficacy and value beliefs, and computer use beyond school. *Computers & Education*, 51(3), 1392-1404. <http://dx.doi.org/10.1016/j.compedu.2008.01.003>.
- Vekiri, I. (2010). Boys' and girls' ICT beliefs: Do teachers matter? *Computers & Education*, 55(1), 16-23. <http://dx.doi.org/10.1016/j.compedu.2009.11.013>.
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: toward a unified view. *MIS Quarterly*, 27(3), 425-478. Retrieved from: <http://bit.ly/2bKkjLV>.
- Virvou, M., & Alepis, E. (2005). Mobile educational features in authoring tools for personalised tutoring. *Computers & Education*, 44(1), 53-68. <http://dx.doi.org/10.1016/j.compedu.2003.12.020>.



- Vogel, J. J., Greenwood-Ericksen, A., Cannon-Bower, J., & Bowers, C. A. (2006). Using virtual reality with and without gaming attributes for academic achievement. *Journal of Research on Technology in Education*, 39, 105–118. Retrieved from: <http://bit.ly/2cz5oKy>.
- Volman, M., van Eck, E., Heemskerk, I., & Kuiper, E. (2005). New technologies, new differences. Gender and ethnic differences in pupils' use of ICT in primary and secondary education. *Computers & Education*, 45(1), 35-55. <http://dx.doi.org/10.1016/j.compedu.2004.03.001>.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Walls, S. M., Kucsera, J. V., Walker, J. D., Acee, T. W., McVaugh, N. K., & Robinson, D. H. (2010). Podcasting in education: Are students as ready and eager as we think they are? *Computers & Education*, 54(2), 371-378. <http://dx.doi.org/10.1016/j.compedu.2009.08.018>.
- Wang, H. C., & Chiu, Y. F. (2011). Assessing e-learning 2.0 system success. *Computers & Education*, 57(2), 1790-1800. <http://dx.doi.org/10.1016/j.compedu.2011.03.009>
- Wang, S., & Smith, S. (2013). Reading and grammar learning through mobile phones. *Language Learning & Technology*, 17(3), 117-134. Retrieved from: <http://bit.ly/2bT6LOW>.
- Wang, T-H. (2008). Web-based quiz-game-like formative assessment: Development and evaluation. *Computers & Education*, 51(3), 1247-1263. <http://dx.doi.org/10.1016/j.compedu.2007.11.011>.
- Warschauer, M. (1996). Computer assisted language learning: An introduction. In S. Fotos (Ed.), *Multimedia language teaching* (pp. 3-20). Tokyo: Logos International.
- Waycott, J., Bennet, S., Kennedy, G., Dalgarno, D., & Gray, K. (2010). Digital divides? Student and staff perceptions of information and communication technologies. *Computers & Education*, 54(4), 1202-1211. <http://dx.doi.org/10.1016/j.compedu.2009.11.006>.
- Webb, S. (2008). Receptive and productive vocabulary sizes of L2 learners. *Studies in Second Language Acquisition*, 30(1), 79-95. doi: 10.1017/S0272263108080042.
- Weber, R., Tamborini, R., Westcott-Baker, A., & Kantor, B. (2009). Theorizing flow and media enjoyment as cognitive synchronization of attentional and reward networks. *Communication Theory*, 19(4), 397-422. doi: 10.1111/j.1468-2885.2009.01352.x.

- Weller, M. (2007). The distance from isolation: Why communities are the logical conclusion in e-learning. *Computers & Education*, 49(2), 148-159. <http://dx.doi.org/10.1016/j.compedu.2005.04.015>.
- Wesche, M., & Paribakht, T.S. (1996). Assessing second language vocabulary knowledge: Depth versus breadth. *The Canadian Modern Language Review*, 53(1), 13-40.
- West, M. (1953). *A General Service List of English words*. London: Longman, Green & Co.
- Wette, R. (2011). Product–process distinctions in ELT curriculum theory and practice. *ELT J*, 65(2), 136-144. doi: 10.1093/elt/ccq022.
- Wheeler, S. C., DeMarree, K. G., & Petty, R. E. (2007). Understanding the role of the self in prime-to-behavior effects: The active-self account. *Personality and Social Psychology Review*, 11(3), 234–261. doi: 10.1177/1088868307302223.
- Wieling, M. B., & Hofman, W. H. A. (2010). The impact of online video lecture recordings and automated feedback on student performance. *Computers & Education*, 54(4), 992-998. <http://dx.doi.org/10.1016/j.compedu.2009.10.002>.
- Winet, D. (2015). Reflections on StudyCom. *TESL-EJ*, 19(1), 1-18. Retrieved from: <http://bit.ly/1o2HMOC>.
- Winke, P., Gass, S., & Sydorenko, T. (2010). The effects of captioning videos used for foreign language listening activities. *Language Learning & Technology*, 14(1), 65-86. Retrieved from: <http://bit.ly/2bUMwBs>.
- Wiśniewska, D. (2013). Interest and interest-enhancing strategies of adolescent EFL learners. *ELT J*, 67(2), 210-219. doi: 10.1093/elt/ccs079.
- Wohn, D. Y., Ellison, N. B., Khan, M. L., Fewins-Bliss, R., & Gray, R. (2013). The role of social media in shaping first-generation high school students' college aspirations: A social capital lens. *Computers & Education*, 63, 424-436. <http://dx.doi.org/10.1016/j.compedu.2013.01.004>.
- Wong, L.-H., & Looi, C.-K. (2011). What seams do we remove in mobile-assisted seamless learning? A critical review of the literature. *Computers & Education*, 57(4), 2364-2381. <http://dx.doi.org/10.1016/j.compedu.2011.06.007>.
- Woody, W. D., Daniel, D. B., & Baker, C. A. (2010). E-books or textbooks: Students prefer textbooks. *Computers & Education*, 55(3), 945-948. <http://dx.doi.org/10.1016/j.compedu.2010.04.005>.
- Xue, G., & Nation, I. S. P. (1984). A university word list. *Language Learning and Communication*, 3(2), 215–29. Retrieved from: <http://bit.ly/2czpbt4>.

- Yeh, S.-W., & Lo, J.-J. (2005). Assessing metacognitive knowledge in web-based CALL: A neural network approach. *Computers & Education*, 44(2), 97-113. <http://dx.doi.org/10.1016/j.compedu.2003.12.019>.
- Yelland, N., & Masters, J. (2007). Rethinking scaffolding in the information age. *Computers & Education*, 48(3), 362-382. <http://dx.doi.org/10.1016/j.compedu.2005.01.010>.
- Yu, A. Y., Tian, S. W., Vogel, D., & Kwok, R. C.-V. (2010). Can learning be virtually boosted? An investigation of online social networking impacts. *Computers & Education*, 55(4), 1494-1503. <http://dx.doi.org/10.1016/j.compedu.2010.06.015>.
- Yuan, L., & Powell, S. (2013). MOOCs and open education: Implications for higher education [White Paper]. Retrieved from: <http://bit.ly/1Z3cm7X>.
- Yudko, E., Hirokawa, R., & Chi, R. (2008). Attitudes, beliefs, and attendance in a hybrid course. *Computers & Education*, 50(4), 1217-1227. <http://dx.doi.org/10.1016/j.compedu.2006.11.005>.
- Zhou, M. (2016). Chinese university students' acceptance of MOOCs: A self-determination perspective. *Computers & Education*, 92-93, 194-203. <http://dx.doi.org/10.1016/j.compedu.2015.10.012>.
- Ziegler, M. F., Paulus, T., & Woodside, M. (2014). Understanding informal group learning in online communities through discourse analysis. *Adult Education Quarterly*, 64(1), 60-78. 10.1177/0741713613509682.
- Ziglari, L. & Parviz, B. (2012). Meaning development in child language: A constructivist approach. In N. M., Seel (Ed.), *Encyclopedia of the sciences of learning* (pp. 2128-2134). London: Springer.

# **Appendices**

## **1. Research phase one: Exploration**

### **1.1 Study 1: Exploring blended learning conversion in listening and speaking skills development**

#### **Appendix A: Supplementary tables to Study 1**

**Table A1:** Skills development needs indicated by the learners in the needs analysis at the beginning of the 2014/2015 spring semester

<b>Vocabulary development</b>	<b>Speaking</b>	<b>Listening</b>	<b>Other</b>
<p><b>Vocabulary extension</b>  learn new words (2)  vocabulary lists (1)  improve vocabulary (2)</p>	<p><b>General skill improvement</b>  improve speaking skills (6)  speak more fluently (2)  speak spontaneously (1)  improve communicative skills (1)  develop oral accuracy (1)  develop communicative effectiveness (1)  express myself better (1)  speak more elaborately (1)  improve pronunciation (1)  to have interesting topics to talk about (1)</p> <p><b>Becoming a better presenter</b>  improve presentation skills (1)  to get used to presenting in front of others (3)</p> <p><b>Becoming a better debater</b>  learn how to argue (1)  develop argumentative skills (1)</p>	<p><b>General skill improvement</b>  improve listening skills (9)</p> <p><b>Specific skill improvement</b>  information about how to complete listening exercises (1)</p>	<p><b>Improving self-confidence</b>  improve self-confidence (3)</p> <p><b>Proficiency Exam</b>  pass the Proficiency Exam (1)  being prepared for the Proficiency Exam (1)</p> <p><b>The course in general</b>  not to be usual as the other courses (1)  more fun (1)  having fun (1)  learning interesting things (1)  interesting topics (1)  good way to develop our skills (1)  many topics (1)  learn in an enjoyable way (1)</p> <p><b>Feedback</b>  feedback on mistakes and how to develop (1)</p> <p><b>Development</b>  develop formal accuracy (1)</p>

**Table A2:** The findings of what learners indicated they are ready to do for their progress as indicated in the needs analysis questionnaire conducted at the beginning of the 2014/2015 spring semester

<b>Vocabulary development</b>	<b>Speaking</b>	<b>Listening</b>	<b>Other</b>
<p><b>Vocabulary extension</b> learn a lot of words and expressions (3)</p>	<p><b>Preparation</b> prepare properly for the presentations (3) doing argument exercises at home (1)</p> <p><b>Videos</b> watching videos to improve oral skills (1)</p> <p><b>Involvement</b> give opinion about the topics (1)</p>	<p><b>Home practice listening exercises</b> listening exercises at home (1)</p> <p><b>Number of tasks</b> many listening tasks (1)</p>	<p><b>Classroom work</b> participate actively (3) attend lessons (2) listen to helpful advice (1)</p> <p><b>Work at home</b> do homework (2) doing extra exercises (3) preparing for seminars (1) spend two hours a week on the course (1) self-studying (1) courses on the internet (1) extra-curricular activities (1)</p> <p><b>Skill improvement</b> do my best (1) improving skills (1) learn more (1) plenty of practice (2)</p> <p><b>Watching movies and videos</b> watch English films (3) watch videos in English (3)</p> <p><b>Proficiency Exam</b> be prepared for the exam (1)</p>

**Table A3:** The learners' tasks needs indicated in the needs analysis questionnaire conducted at the beginning of the 2014/2015 spring semester

<b>Vocabulary development</b>	<b>Speaking</b>	<b>Listening</b>	<b>Other</b>
<b>Vocabulary extension</b> a lot of new expressions and words (1) vocabulary lists for topics (1)	<b>General skill development</b> pair or group work (1) chances to speak (1)  <b>Becoming a better presenter</b> interesting topics for discussion (1) be able to speak in front of others (1)  <b>Becoming a better debater</b> not getting angry while speaking (1) be a better debater (1) argumentative tasks (1)	<b>General skill improvement</b> listening tasks (3)  <b>Specific skill improvement</b> advice on how to improve listening and note taking skills (1)  <b>Specific task need</b> listening exercises about song lyrics (1)	<b>Encouragement</b> do not deter from Proficiency exam (1) encouragement (1) not being looked down upon (1)  <b>Self confidence</b> be more confident (2)  <b>Praise</b> receive praise (2)  <b>Proficiency Exam</b> receiving help to pass the Proficiency exam (1) tasks as in the Proficiency exam (1)  <b>Watching movies and videos</b> watching parts of a movie (1) videos about unusual topics (1) interesting videos (1)  <b>General task needs</b> learning from interesting topics (2) practice tasks (1), enjoyable classes (1) having fun (1), improving (1)  <b>Specific task needs</b> develop criticism of activity (1)  <b>Feedback</b> seeing the development (2)  <b>Online tasks</b> a lot of online materials (1)

**Table A4:** The second round of self-assessment conducted at the end of the 2014/2015 spring semester

NAME:																														
	<b>Formal accuracy</b>					<b>Oral accuracy</b>					<b>Vocabulary</b>					<b>Style</b>					<b>Communicative effectiveness</b>									
Where you saw yourself in the beginning of the semester	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
								x						x				x						x				x		
Where you wanted get by the end of the course	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
									x					x					x					x					x	
Where you see yourself now	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5



**Table A5:** The end-of-term student satisfaction questionnaire in the 2014/2015 spring semester

<b>Listening and speaking skills questionnaire</b>										
Please mark the answers that are true for you (put an <i>x</i> in the box next to the statement). Data will be used for statistical purposes only; no personally identifiable information is collected.										
<b>Gender</b>	Male		Female		<b>Age</b>		<b>Academic year</b>			
<b>I had previous experience with e-learning</b>						Yes		No	Not sure	
<b>Programme</b>	BA		Teacher training				Other:			
<b>Respond to the statements by marking:</b> 1 (strongly disagree), 2 (somewhat disagree), 3 (mostly agree), 4 (absolutely agree)										
<b>In the cases of yes/ no questions:</b> 1 (strongly disagree), 4 (absolutely agree)										
<b>About the in-class tasks</b>							<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>1.</b>	The presentation task contributed to my language development.									
<b>2.</b>	I found the level of the presentation task appropriate.									
<b>3.</b>	The picture presentation task contributed to my language development.									
<b>4.</b>	I found the level of the picture presentation task appropriate.									
<b>5.</b>	The pair-presentation task contributed to my language development.									
<b>6.</b>	I found the level of the pair-presentation task appropriate.									
<b>7.</b>	The group discussion task contributed to my language development.									
<b>8.</b>	I found the level of the group discussion task appropriate.									
<b>9.</b>	The pair discussion task contributed to my language development.									
<b>10.</b>	I found the level of the pair discussion task appropriate.									
<b>11.</b>	The in-class listening tasks contributed to my language development.									
<b>12.</b>	I found the level of the in-class listening tasks appropriate.									
<b>13.</b>	Please write down the ways in which these tasks helped your development.									
<b>14.</b>	Please write down any other forms of development you would have welcomed.									

15.	Other comments and reflections regarding the in-class tasks:				
<b>About the online tasks</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
16.	I found the level of the compulsory online listening tasks appropriate.				
17.	The compulsory online listening tasks contributed to my language development.				
18.	I found the level of the home practice listening tasks appropriate.				
19.	The home practice listening tasks contributed to my language development.				
20.	I used the vocabulary lists from the in-class and online listening tasks.				
21.	I found writing the peer-reviews useful for the development of my classmates.				
22.	I found the peer-review scores I received fair.				
23.	I watched every <i>Coursera</i> presentation either before or after the classes.				
24.	I found the <i>Coursera</i> course on public speaking useful for developing my presentation skills.				
25.	I was familiar with <i>Coursera</i> before the course.				
26.	I watched every <i>TED</i> presentation either before or after the classes.				
27.	I found the <i>TED</i> presentations useful for developing my presentation skills.				
28.	I was familiar with the <i>TED</i> before the course.				
29.	Completing the mind map task with the <i>MindMup</i> website was easy.				
30.	Completing the mind map task contributed to my language development.				
31.	I found the mind maps of my classmates useful for my language development.				
32.	Searching for a podcast to write a reflective essay about was not difficult.				
33.	I found putting together a list of words and expressions I learned from the podcast(s) easy.				
34.	I found creating a short listening task based on the podcasts easy.				

35.	I found the results of the vocabulary size test to be useful for my language development.				
36.	I found the level of the vocabulary practice tasks appropriate.				
37.	I found the vocabulary practice tests useful for my language development.				
38.	Please write down the ways in which these tasks helped your development.				
39.	Please write down any other forms of development you would have welcomed.				
40.	Other comments and reflections regarding the online tasks:				
<b>About the feedback</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
41.	I found the comments and I received from my teacher in class constructive.				
42.	I found the comments I received from my teacher(s) in the written feedback constructive.				
43.	I found receiving scores from two evaluators useful.				
44.	I found the feedback I received on Edmodo (e.g. listening tasks) constructive.				
45.	I found reading the peer-review comments from my classmates useful.				
46.	Other comments and reflections regarding feedback:				
<b>About Edmodo</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
47.	I found using <i>Edmodo</i> in this course useful.				
48.	I found the user interface of <i>Edmodo</i> to be intuitive.				
49.	I found task completion easy on <i>Edmodo</i> .				
50.	I found accessing files on <i>Edmodo</i> intuitive.				
51.	I did not encounter errors while using <i>Edmodo</i> .				
52.	The errors I encountered on <i>Edmodo</i> had a negative impact on my task completion.				

53.	I found the tech support I received during the course useful and satisfactory.				
54.	I found the <i>Edmodo</i> badges motivating.				
55.	I would like to use <i>Edmodo</i> in other courses as well.				
56.	Other comments and reflections regarding feedback:				
<b>Overall</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
57.	I enjoyed the course overall.				
58.	I was able to develop my listening and speaking skills this semester.				
59.	I found working with <i>Edmodo</i> a good idea for this course.				
60.	What would you have liked to have more of in this course?				
61.	What would you have like to have less of?				
62.	Other feedback and recommendations for the course:				
63.	What would you recommend for the next blended learning version of listening and speaking skills?				
64.	Please summarize your overall impression of the course in 200-300 words:				

**Table A6:** The results of the Likert-scale items of the in-class tasks section of the questionnaire in the 2014/2015 spring semester

	<b>Items about the in-class tasks</b>	<b>1</b> <b>(strongly</b> <b>disagree)</b>	<b>2</b> <b>(somewhat</b> <b>disagree)</b>	<b>3</b> <b>(somewhat</b> <b>agree)</b>	<b>4</b> <b>(strongly</b> <b>agree)</b>	<b>Mean</b>	<b>SD</b>
1.	The presentation task contributed to my language development.	0	0	9	6	3.4	.507
2.	I found the level of the presentation task appropriate.	0	1	7	7	3.4	.632
3.	The picture presentation task contributed to my language development.	1	1	8	5	3.13	.834
4.	I found the level of the picture presentation task appropriate.	1	0	6	8	3.4	.828
5.	The pair-presentation task contributed to my language development.	0	2	7	6	3.27	.704
6.	I found the level of the pair-presentation task appropriate.	0	1	8	6	3.33	.617
7.	The group discussion task contributed to my language development.	0	3	10	2	2.93	.594
8.	I found the level of the group discussion task appropriate.	0	3	6	6	3.2	.775
9.	The pair discussion task contributed to my language development.	0	2	10	3	3.07	.594
10.	I found the level of the pair discussion task appropriate.	0	2	8	5	3.2	.676
11.	The in-class listening tasks contributed to my language development.	0	4	4	7	3.2	.862
12.	I found the level of the in-class listening tasks appropriate.	0	2	3	10	3.53	.743

**Table A7:** The results of the open-ended items of the in-class tasks section of the questionnaire in the 2014/2015 spring semester

<p><b>13. Please write down the ways in which these tasks helped your development.</b></p> <p>S1: They were colourfully organised and well-structured which helped me to work hard while enjoying it.</p> <p>S2: They improved my vocabulary.</p> <p>S3: I became a little bit more self-confident.</p> <p>S4: I speak more fluently and developed my vocab.</p> <p>S5: I became braver when I have to speak in front of others. I practiced listening tasks more. I learned what I should pay attention to when presenting.</p> <p>S6: Helped my pronunciation and comprehension.</p> <p>S7: There help (sic.) to become more confident in the class.</p> <p>S8: Picture presentation, pair-presentation, own presentation.</p> <p>S9: From the presentation: I learned a lot of new words/ expressions.</p> <p>S10: Picture presentation and listening tasks.</p> <p>S11: We have to make a presentation → more vocabulary, learn how keep the prezi (sic.). Listening tasks improve my vocabulary.</p> <p>S12: Since you need to talk in these tasks your development is sure. Preparing for the presentations always improved my vocabulary.</p> <p>S13: Presentations help use to improve our confidence and speaking skills. Listening tasks can help us to get used to these kinds of exercises.</p> <p>S14: Improved my vocabulary, practice how to speak, how to make a presentation.</p> <p>S15: I don't have any other opportunity to practice listening. The more I listen The better result I have.</p>	<p><b>Grouped responses:</b></p> <p>structure of the course: S1</p> <p>vocabulary development: S2, S4, S9 (from the presentations), S11 (from the presentations and listening tasks), S11, S12 (preparing for presentations), S14</p> <p>self-confidence building: S3, S7, S13</p> <p>speaking development: S4, S5, S8 (presentations), S10 (presentations), S12, S13, S14</p> <p>listening tasks: S5, S6, S10, S15, S3 (answer in Q14)</p> <p>pronunciation development: S6</p>
<p><b>14. Please write down any other forms of development you would have welcomed.</b></p> <p>S1: I was satisfied with what we've done.</p> <p>S2: I would have welcomed more arguments.</p> <p>S3: My listening skills became a bit better.</p> <p>S5: Vocabulary development.</p> <p>S12: Would have been nice to improve more and dictionary (sic.).</p> <p>S14: More vocabulary tasks.</p>	<p><b>Grouped responses:</b></p> <p>nothing else: S1,</p> <p>speaking: S2,</p> <p>listening: S3 (answer for Q13)</p> <p>vocabulary: S5, S12, S14</p>
<p><b>15. Other comments and reflections regarding the in-class tasks:</b></p>	<p><b>Grouped responses:</b></p>

S1: They were exciting and I never realised that the lesson had just past.	exciting: S1,
S2: They were useful and good.	useful: S2, S4, S13,
S4: They were very interesting and useful.	interesting: S4,
S6: I wouldn't let people to read out their presentations word by word.	creative: S7,
S7: The tasks were creative and useful.	feedback: S6 (do not allow reading presentations), S12 (argument tasks without cards), S9 & S10 (too many exercises)
S9: Too much (sic.) exercises :)	good classmates: S10
S10: Too much (sic.) exercises, really good classmates.	liking: S2, S14,
S12: I think the argument task should be done without the helping cards. That way, we would have to come up with our own ideas.	
S13: They all were very useful.	
S14: I liked them.	

**Table A8:** The results of the Likert-scale items of the listening tasks section of the questionnaire in the 2014/2015 spring semester

Items about the listening tasks		1 (strongly disagree)	2 (somewhat disagree)	3 (somewhat agree)	4 (strongly agree)	Mean	SD
16.	I found the level of the compulsory online listening tasks appropriate.	0	1	6	8	3.47	.64
17.	The compulsory online listening tasks contributed to my language development.	0	1	5	9	3.53	.64
18.	I found the level of the home practice listening tasks appropriate.	0	1	7	7	3.4	.632
19.	The home practice listening tasks contributed to my language development.	0	1	10	4	3.2	.561
20.	I used the vocabulary lists from the in-class and online listening tasks.	0	9	3	3	2.6	.828

**Table A9:** The results of the Likert-scale items of the peer-review section of the questionnaire in the 2014/2015 spring semester

Items about the peer-reviews	1 (strongly disagree)	2 (somewhat disagree)	3 (somewhat agree)	4 (strongly agree)	Mean	SD
21. I found writing the peer-reviews useful for the development of my classmates.	2	3	4	6	2.93	1.10
22. I found the peer-review scores I received fair.	0	2	6	7	3.33	.724

**Table A10:** The results of the Likert-scale items of the video lectures and presentations section of the questionnaire in the 2014/2015 spring semester

Items about the video lectures and presentations	1 (strongly disagree)	2 (somewhat disagree)	3 (somewhat agree)	4 (strongly agree)	Mean	SD
23. I watched every <i>Coursera</i> presentation either before or after the classes.	1	8	5	1	2.4	.737
24. I found the <i>Coursera</i> course on public speaking useful for developing my presentation skills.	1	9	2	3	2.47	.915
25. I was familiar with <i>Coursera</i> before the course.	14	1	0	0	1.07	.258
26. I watched every <i>TED</i> presentation either before or after the classes.	0	8	5	2	2.6	.737
27. I found the <i>TED</i> presentations useful for developing my presentation skills	0	4	7	4	3	.756
28. I was familiar with the <i>TED</i> before the course.	4	0	1	10	3.13	1.356



**Table A11:** The results of the Likert-scale items of online mind map task section of the questionnaire in the 2014/2015 spring semester

<b>Items about the online mind map task</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>Mean</b>	<b>SD</b>
		<b>(strongly disagree)</b>	<b>(somewhat disagree)</b>	<b>(somewhat agree)</b>	<b>(strongly agree)</b>		
<b>29.</b>	Completing the mind map task with the <i>MindMup</i> website was easy.	1	3	7	4	2.93	.884
<b>30.</b>	Completing the mind map task contributed to my language development.	0	2	8	5	3.2	.676
<b>31.</b>	I found the mind maps of my classmates useful for my language development.	1	4	8	2	2.73	.799

**Table A12:** The results of the Likert-scale items of podcast task section of the questionnaire in the 2014/2015 spring semester

<b>Items about the podcast task</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>Mean</b>	<b>SD</b>
		<b>(strongly disagree)</b>	<b>(somewhat disagree)</b>	<b>(somewhat agree)</b>	<b>(strongly agree)</b>		
<b>32.</b>	Searching for a podcast to write a reflective essay about was not difficult.	2	8	3	2	2.33	.90
<b>33.</b>	I found putting together a list of words and expressions I learned from the podcast(s) easy.	0	2	8	5	3.2	.676
<b>34.</b>	I found creating a short listening task based on the podcasts easy.	2	3	2	8	3.07	1.163

**Table A13:** The results of the Likert-scale items of the online vocabulary tasks section of the questionnaire in the 2014/2015 spring semester

Items about the online vocabulary tasks		1 (strongly disagree)	2 (somewhat disagree)	3 (somewhat agree)	4 (strongly agree)	Mean	SD
35.	I found the results of the vocabulary size test to be useful for my language development.	1	2	6	6	3.13	.915
36.	I found the level of the vocabulary practice tasks appropriate.	0	1	8	6	3.33	.617
37.	I found the vocabulary practice tests useful for my language development.	0	0	10	5	3.33	.488

**Table A14:** The results of the open-ended items of the online tasks section of the questionnaire in the 2014/2015 spring semester

<p><b>38. Please write down the ways in which these tasks helped your development.</b></p> <p>S1: It was good that we had to do different tasks at home as well. As a result we could practice what we could do in class.</p> <p>S2: The Ted presentations extended my vocabulary. The MindMup project improved my skills.</p> <p>S3: Improved my vocabulary and writing skills.</p> <p>S4: They developed my vocab. and my listening skills.</p> <p>S5: I could practice: listening tasks while creating one, essay-writing, learn new expressions.</p> <p>S6: Improved my vocabulary.</p> <p>S7: Making mindmaps and doing the vocabulary tests were very useful.</p> <p>S8: Podcast, Coursera, TED presentations.</p> <p>S9: Improve my vocab and pronunciation.</p> <p>S10: Podcasts, TED, and vocabulary size test.</p> <p>S11: The vocabulary tasks improved my vocabulary and mindmaps, too.</p> <p>S12: The vocabulary size tests improved a lot on my english expressions (sic.)</p> <p>S13: Home-practice listening tasks can improve our listening skills as well as the in-class tasks.</p>	<p><b>Grouped responses:</b></p> <p>tasks at home: S1, S8, S10, S14</p> <p>practice: S1 (additional)</p> <p>vocabulary development: S2 (TED &amp; MindMup), S3, S4, S5, S6, S7, S11, S12, S14, S15,</p> <p>writing skills development: S3, S5, S14</p> <p>listening skills development: S4, S5, S13, S14</p> <p>pronunciation development: S9</p>
---	---

---

S14: I practiced how to write an essay, how to use a new site, improved my vocabulary, helped to improve understanding spoken English.

S15: I learned many new words.

---

**39. Please write down any other forms of development you would have welcomed.**

S1: Watching short parts of series and movies as basis of listening tasks.

S2: I would like to have more Coursera tasks.

S3: The way of speaking.

S6: Vocabulary of listening tasks was a great idea at the beginning of the course. It was better than the mindmaps and vocabulary practices.

S14: Practicing typical proficiency vocabulary tests.

**Grouped responses:**

other forms of listening tasks: S1 (parts of series and movies)

more online tasks: S2 (more Coursera tasks)

speaking: S3

vocabulary: S6 (more vocabulary of listening tasks; fewer mind map and vocabulary tests), S14 (proficiency vocabulary tests)

---

**40. Other comments and reflections regarding the online tasks:**

S1: I enjoyed them.

S2: They were not so hard. I really liked them.

S5: It was easy to use the online surface and I could also develop my listening skills.

S6: The vocabulary tasks on Edmodo didn't really contain useful words and there were a lot of repetition in it.

S7: Listening took away lots of time.

S9: Lot of problem (sic.) with the online lis. task (it was really annoying) (error)

S10: Vocab tests are very useful.

SS12: It was hard for me to use another interface only for this course, since we already use many.

S13: I do not really like these tasks: mindmap and podcasts. They might be good practice, but I am on teacher training and the organizing of two faculties is really hard. it would have been better if it had been shown in advance in the syllabus.

S14: Little time remained to do all of the podcast based listening tasks.

---

**Grouped responses:**

enjoying, liking: S1, S2 (not so hard)

easy to use: S5

listening skills development: S5

room for improvement: S6 (repetition in the online vocabulary tasks and their limited usefulness), S7 (listening taking lots of time), S9 (errors with the online tasks), S12 (hard to use another interface), S13 (disliking mind map and podcast tasks), S14 (deadlines)

vocabulary development: S10 (useful vocabulary tests)

**Table A15:** The results of the Likert-scale items about the feedback section of the questionnaire in the 2014/2015 spring semester

Items about the feedback		1 (strongly disagree)	2 (somewhat disagree)	3 (somewhat agree)	4 (strongly agree)	Mean	SD
41.	I found the comments and I received from my teacher in class constructive.	0	0	2	13	3.87	.352
42.	I found the comments I received from my teacher(s) in the written feedback constructive.	0	1	1	13	3.8	.561
43.	I found receiving scores from two evaluators useful.	0	0	3	12	3.8	.414
44.	I found the feedback I received on Edmodo (e.g. listening tasks) constructive.	0	1	5	9	3.53	.64
45.	I found reading the peer-review comments from my classmates useful.	0	2	5	8	3.4	.737

**Table A16:** The results of the open-ended item of the feedback section of the questionnaire in the 2014/2015 spring semester

<p><b>46. Other comments and reflections regarding feedback:</b>            S1: It was good to know what the others thought about my presentations and just the teacher's opinion.            S2: It improved our skills so in the future we can have points with which we can give feedback.            S13: Sometimes I got fully contradictory opinions from my classmates.</p>	<p><b>Grouped responses:</b>            peer-reviews were helpful: S1            skill development: S2 (reflection was useful for skill development and feedback formulation as well)            room for improvement: S13 (contradictory opinions)</p>
--	---

**Table A17:** The findings of the Likert-scale items about the *Edmodo* section of the questionnaire in the 2014/2015 spring semester

Items about <i>Edmodo</i>	1 (strongly disagree)	2 (somewhat disagree)	3 (somewhat agree)	4 (strongly agree)	Mean	SD
47. I found using <i>Edmodo</i> in this course useful.	0	1	8	6	3.33	.617
48. I found the user interface of <i>Edmodo</i> to be intuitive.	0	3	4	7	3.29	.825
49. I found task completion easy on <i>Edmodo</i> .	0	6	5	4	2.87	.834
50. I found accessing files on <i>Edmodo</i> intuitive.	0	3	7	5	3.13	.743
51. I did not encounter errors while using <i>Edmodo</i> .	4	4	3	4	2.47	1.187
52. The errors I encountered on <i>Edmodo</i> had a negative impact on my task completion.	4	3	4	3	2.43	1.158
53. I found the tech support I received during the course useful and satisfactory.	0	3	8	4	3.07	.704
54. I found the <i>Edmodo</i> badges motivating.	1	1	10	3	2.93	.884
55. I would like to use <i>Edmodo</i> in other courses as well.	4	4	4	3	2.4	1.121

**Table A18:** The results of the open-ended item of the feedback section of the questionnaire in the 2014/2015 spring semester

<p><b>56. Other comments and reflections regarding feedback:</b></p> <p>S1: Better than coospace.</p> <p>S2: It was useful in my opinion. Keep up the good work.</p> <p>S4: There were problems with the listening task links on Edmodo.</p> <p>S7: In my opinion feedback was the most useful in the course. Because we know what was good or not in the presentations.</p> <p>S13: The solution of completing listening tasks was complicated because we do not see all questions at the same time but we have to step between them.</p>	<p><b>Grouped responses:</b></p> <p>interface: S1 (better than Coospace)</p> <p>usefulness: S2</p> <p>room for improvement: S4 (problems with the listening task links), S13 (the layout of the listening tasks)</p> <p>feedback: S7 (most useful)</p>
--	--

**Table A19:** The findings of the Likert-scale items about the overall impression of the participants in the 2014/2015 spring semester

Items about students' overall impression	1 (strongly disagree)	2 (somewhat disagree)	3 (somewhat agree)	4 (strongly agree)	Mean	SD
57. I enjoyed the course overall.	0	0	8	7	3.47	.516
58. I was able to develop my listening and speaking skills this semester.	0	1	8	6	3.33	.617
59. I found working with <i>Edmodo</i> a good idea for this course.	2	1	5	7	3.13	1.06

**Table A20:** The results of the open-ended items of the overall impressions section of the questionnaire in the 2014/2015 spring semester

<p><b>60. What would you have liked to have more of in this course?</b>            S1: I am <b>satisfied</b> with how it worked.            S2: <b>More Ted</b> videos for the course. The <b>argument</b> part was short.            S3: I would have liked to have <b>more speaking exercises</b>.            S4: <b>Speaking tasks, presentations</b>.            S5: More picture description, and <b>discussion of a topic</b>.            S6: <b>Spontaneously speaking tasks, more speaking</b>            S8: <b>Nothing, it was perfect</b>.            S9: Interesting exercises (<b>presentations</b>)            S10: The <b>mood was really good</b>. The exercises was (sic.) very useful.            S11: A <b>little bit easier listening tasks</b> because these were very hard.            S12: Dictionary and <b>expression learning</b>.            S14: <b>Vocabulary tasks</b>.            S15: More <b>listening task</b> (sic.).</p>	<p><b>Grouped responses:</b>  <b>satisfied:</b> S1, S8, S10  <b>speaking tasks:</b> S2 (TED videos and argument), S3 (more speaking exercises), S4 (speaking exercises and presentations), S5 (picture descriptions and discussion), S6 (spontaneous speaking tasks, more speaking), S9 (presentations)  <b>vocabulary tasks:</b> S12 (vocabulary development), S14  <b>listening tasks:</b> S15,  <b>other:</b> S11 (easier listening tasks)</p>
<p><b>61. What would you have liked to have less of?</b>            S1: It was useful that <b>we practiced a lot</b>.</p>	<p><b>Grouped responses:</b>  <b>positive remark:</b> S1 (lot of practice)</p>

---

S2: Edmodo tasks. I mean the listening tasks.

S3: Less presentations (sic.).

S4: Listening tasks.

S5: Less tasks on Edmodo, or broadened deadline with it.

S6: Presentations.

S7: We had to do lots of tasks in this semester. If you reduce it will be better.

S8: Maybe less difficult questions in the listening tasks.

S9: Listening task.

S10: Listening tasks.

S11: Less home practice tasks because it was too much.

S12: Presentations.

S13: The home-exercises. The peer-reviews, the home-practice listening tasks, the other listening tasks and the mindmap and podcast were too much for me.

S14: Peer reviews.

S15: less online task because they were complicated (sic.) for people who has (sic.) not so much knowledge for IT things.

listening tasks: S2, S9, S10

presentations: S3, S6, S12

Edmodo tasks: S2, S5

room for improvement: S5 (broadened deadlines), S7 (reduce the number of tasks), S8 (less difficult questions in the listening tasks), S11 (fewer home practice tasks), S13 (overwhelmed by the number of home exercises), S15 (fewer online tasks)

peer reviews: S14

---

## 62. Other feedback and recommendations for the course:

S1: It was one of the most interesting course (sic) which helped a lot.

S2: It was well put together. I really liked it.

S3: It was useful and I feel that my listening skills have been developed.

S4: It was very useful.

S6: It was very useful, well structured. You must have worked a lot with it.

S9: We should listen (sic.) most of the listening tasks in the class.

S10: Home-practice listening tasks was (sic.) really good, but there are too much (sic.) homework :(

S12: The whole course was great.

S13: I liked the atmosphere of the classes. I enjoyed them.

---

## Grouped responses:

interesting: S1

helpful: S1

structure: S2, S6

liking and enjoyment: S2, S12, S13

useful: S3, S4, S6

beneficial for skill development: S3 (listening)

home practice tasks: S10 (were good)

room for improvement: S9 (listen to most listening tasks in class), S10 (too much homework)

atmosphere: S13

---

## 63. What would you recommend for the next blended learning version of listening and speaking skills?

S1: Nothing.

S2: I would like to have less online tasks in the future.

S3: Have a bit less presentations, because it takes a lot of time.

S4: More speaking tasks and picture presentations.

---

## Grouped responses:

nothing: S1

fewer online tasks: S2 (tasks), S9 (listening), S11 (in general)

fewer presentations: S3, S6

---

S5: –  
 S6: Less presentations, more speaking with classmates.  
 S9: Less online tests (listening).  
 S10: I recommend the Edmodo, because we can find everything on it.  
 S11: Less online.  
 S13: I would show in advance what can be expected through the semester.  
 S14: Longer deadlines.  
 S15: listen a lot of english speaking videos to improve their pronunciation (sic.)

more speaking tasks: S4, S6  
 more picture presentations: S4  
 recommending Edmodo: S10  
 more listening: S13 (English speaking videos)  
 room for improvement: S13 (more detailed syllabus), S14 (longer deadlines)

---

**64. Please summarize your overall impression of the course in 200-300 words:  
 (Student answers presented with the grouped responses individually)**

---

S1: I was surprised at the first time because of the young teacher but I realised a bit later that he knows what he has to do. He knew how to make us interested in the tasks while he also made us to pay attention to him (sic). I find the course very useful as we practiced a lot and it gave me more self-confidence. I was no thinking about the two class (sic) I can skip as in other courses we do. I enjoyed it and it was good to come in and take part even if I was really tired. I think I tried to do my best but the teacher did more.  
 S1: raising interest, useful, practice, more self-confidence, enjoyment, additional praise

---

S2: I learned a lot of new expressions. The course was really useful because of the speaking tasks which improved my speaking skills in various ways. All in all it was a really good course in my opinion.  
 S2: vocabulary development, useful, improvement in speaking, additional praise

---

S3: Overall I enjoyed this course because I found the tasks interesting and useful. Especially I liked that we have a lot of listening tasks which was very helpful. I found the presentations interesting, but I think three presentations for every person was a bit much, it took a lot of time. I like the argumentative tasks, especially when two people had to speak because I think in the way it was easier to encourage us to speak. Taking everything into account I liked this course because the lessons were well-structured and enjoyable.

S3: enjoyment, interesting, liked the lots of listening tasks, three presentations are too much, liked the argumentative tasks, liking, additional praise

---

S4: I think it was a good course in this semester. I enjoyed the classes. I liked the presentations and I think it's a good idea to make presentation in every class. It can develop our communicative effectiveness. The listening tasks were also good but they were not so easy. Overall I liked this course and I think it was useful.

S4: liking, liked the presentations, developed communicative effectiveness, the listening tasks were good but not easy

---



---

S5: For me, it was a totally new way of practicing listening and speaking skills, but I liked it. We had much more listening tasks than in the previous semester which I found useful. I was able to do more tasks and I did not have to search for other listening skills. I found the presentations a really good idea, as I could learn how to develop my speech, and how to be less stressful when I have to speak in front of an audience. Arguments were also significant, I think I would develop my argumentation skills too. The atmosphere was calm and I laughed a lot too. The feedback I got was always constructive.

S5: new way of practicing listening and speaking skills, liking, more listening tasks than in the previous semester (useful), presentations were a good idea, developed my speech, more self-confident, developed argumentative skills, atmosphere, feedback was constructive

---

S6: It was very well structured. There were a lot of different things to do and to learn. Continuous evaluation were useful just like home practice tasks on Edmodo. Though we had to do a lot of different tasks it was worth it. I guess, no other teacher of ours spent so much time with their course.

S6: well-structured, lot of different things to do and learn, continuous evaluation, useful home practice tasks, additional praise

---

S7: I liked that everybody had to do something and not just sit in the class and sleep. It was good to choose our topics and not you give them to use. In addition, we did listening tasks in the class so if you forgot to do it online you proved your listening skill in class. I think that we didn't have any vocab test in the class from hundred words is great. I really appreciate it. The course was funny. Thank you for your good work.

S7: everybody had to do something, able to choose own topics, online and in-class listening tasks, no in-class vocabulary tests, funny, additional praise

---

S8: The course was good, I enjoyed the picture talkings and the presentations. The listening tasks was (sic.) difficult for me but it was useful. Learning on the internet was a new thing for me but it was a good idea too.

S8: was good, enjoyed the presentations and picture presentations, listening tasks useful but difficult, learning on the internet new but useful

---

S9: It was really good and interesting but I guess there were too much (sic.) exercises and I couldn't concentrate on all of them because I had to do a lot of different exercises. All in all this course was much better than the list. of speaking skills I. :)

S9: good, interesting, there were too many exercises, much better than Listening and Speaking Skills I

---

S10: The mood was really good, because this course contained a lot of kind people. This course was much better than the previous course. So listening and speaking II. was much much much better than listening and speaking I. because the teacher was really kind in this course and there were a lot of useful exercises and the online version was really good.

S10: the mood was good, kind people, better than Listening and Speaking Skills I (2x), teacher was kind, useful exercises, online version was good

---

S11: The presentations were useful, helpful and interesting for me. But the picture description was a negative feeling for me and the listening as well. Those were very hard to understand, those were not my level (not only for me). The worst thing was that we start with these and I felt under the

---

---

weather after that because I saw my scores. So the classes were bad for me thanks to this. Pair tasks were OK, but we got a lot of homework. Every week I didn't have time to do 2 listening tasks plus mind map and vocabulary tasks and vocabulary tasks or podcast and list other tow listening to the next class (sic.). It was too much especially when I had exams and the exams were more important to do than to do this. But I didn't do these listening tasks I got a lot of minus point (sic.). And I hated because I tried to do everything but I ran out of time and it was impossible to do everything.

S11: presentations were useful, helpful and interesting, picture description left a negative feeling, listening was hard to understand, seeing the listening scores left a negative feeling for the whole class, overwhelmed by homework

---

S12: It was overall great. The classes went down in a good mood, and this is always important, since students are more likely to listen and improve if the material is not dry and boring. I was having a blast, really. The topics in the class are also interesting and "up to date".

S12: overall great, good mood, having a blast, up to date topics

---

S13: I found classes and Edmodo useful as well. The in-class exercises were edifying and entertaining at the same time. In my opinion the peer-review was a good idea, but the opinions of my classmates were not so valuable because they added full contradictory opinions. The home-practice listening tasks were also useful because we could practice more in this way. The presentations were enjoyable and we could learn from each other as well. It was really good that we start doing argumentative exercises in pairs because it will be required during the proficiency exam too. The mindmap and the podcast exercises were also good ideas but in my opinion they should have been written into the syllabus with an exact deadline. Overall I liked this course and I could improve my listening skills as well as my speaking skills which is the point of this course.

S13: Edmodo and the lesson useful (2x), peer-reviews were a good idea but got contradictory opinions, useful home practice listening tasks, presentations enjoyable, argumentative exercises, mindmap and podcast exercises useful but need to be included in the syllabus with a deadline, liked the course, improved my listening and speaking skills,

---

S14: I liked the online surface but I sometimes found the deadlines too short. Especially to the podcast based tasks. I liked the lessons and they helped me to improve my English and practice for the proficiency exam.

S14: liked the online interface, deadlines too short, liked the lessons, improved proficiency and provided practice for the proficiency exam

---

S15: I liked this course because I didn't have so much opportunity to practice listening at all, but it helped a bit. I enjoyed the classes because I didn't get bored. The themes of the presentations were intriguing and I learned a lot from them. I felt that I'm not so good in English like the others because they had much more word they knew. I feel a little bit stupid for this University but I hope I will improve more. I hope I can practice more in the summer because I failed my proficiency. To summarize my impression, it was my favorite course in the school since I am here so I think it is a good thing.

---

S15: liked the course, enjoyed the classes, interesting presentations, felt other had a larger vocabulary, additional praise (favorite course)

---

## Appendix B: Supplementary documents to Study 1

**Document B1:** The first-round self-assessment and needs-analysis questionnaire used in the first session of the blended course and the self-evaluative questions in the 2014/2015 spring semester

Where you see yourself now					<b>Skills</b>	Where you would like to get by the end of the course				
1	2	3	4	5		1	2	3	4	5
					<i>Formal accuracy</i>					
					<i>Oral accuracy</i>					
					<i>Vocabulary</i>					
					<i>Style</i>					
					<i>Communicative effectiveness</i>					
					<i>Discussion skills</i>					
					<i>Argumentative skills</i>					
					<i>Presentation skills</i>					

What I expect from this course:

What I am ready to do for my progress:

What I would like to see:

**Document B2:** *Listening and Speaking Skills II* syllabus in the 2014/2015 spring semester

**Tutor:** Krisztián Simon ([skrisztian88@gmail.com](mailto:skrisztian88@gmail.com))

**Time and room:** Wednesday 10:00-11:30, Room E420

**Office hour:** Wednesday 08:30-09:30, Room A430

**Aim of the course:** to provide opportunities and training to develop students' listening, speaking and argumentative skills in order to prepare them for the English proficiency exam.

**Requirements:** students are expected to

- attend seminars and not miss more than two sessions
- participate in discussions and classroom tasks actively
- participate in the peer review process actively and watch the video lessons and *Ted* talks
- do one picture presentations on an image received a week before the task
- do a presentation about a video/ podcast they found interesting with a group mate as pair work and create and share a short quiz on the topic
- do a presentation on a topic of their choice

**Assessment:** students will be assessed based on their oral and written contributions based on the following criteria

- active participation (20%)
  - listening scores (35 %): speaking scores (35%): picture description (10 %), presentation (10 %), pair presentation (5%), in class discussions/ role plays (10 %)
- peer reviews and online participation (10 %)

**Assessment criteria for speaking and peer review** (adapted from Szabó & Papp, 2013, p. 160)

1. *Formal accuracy:* using the correct, level appropriate grammatical structures.
2. *Oral accuracy:* speaking fluently with correct pronunciation and stress
3. *Vocabulary:* having a good command of an advanced level lexical repertoire
4. *Style:* structuring ideas in a logical way, adequate use of vocabulary, proper use of linking and interaction with communication partners (if the task requires it)
5. *Communicative effectiveness:* correctly understanding the task and conversing successfully with communication partners

Each criteria is assessed on a scale from 1 to 5. Peer assessment happens through *Edmodo*. After completing the peer reviews, presenters will receive a written evaluation of their performance and a summary of the reviews submitted.

**Presentation, pair presentation and picture description guidelines**

- Students are requested to do a presentation on a topic of their choice within 5 to 10 minutes.
- Visual aids can be used (poster, PPT, *Prezi*, etc.) but need to be discussed in advance.

- Each student will need to do a picture description which needs to be 5 minutes long.
- Non-presenting students are required to address the presenter with questions.
- Both presenters and non-presenting students need to assess their performance on the above discussed criteria.
- Two students are required to do a pair presentation together and can use visual aids as well. They should talk about a video or podcast of their choice within 5 minutes. Following their presentation they need to share the hyperlink of their source and prepare a short 5-10 item quiz on the topic of their talk which the other students will complete on *Edmodo*.

### Semester schedule

#### February 4

Coursera: speaking situations:

<http://bit.ly/1ykLmW9>

Ted: the voices of Twitter users:

<http://bit.ly/1qgQO6u>

#### February 18

Coursera: outlining and flowing:

<http://bit.ly/15qauA3>

Ted: why Google glass?:

<http://bit.ly/1Ew8Zwh>

#### March 4

Coursera: elements of main points:

<http://bit.ly/1wnoUX2>

Ted: how simple ideas can lead to scientific discoveries: <http://bit.ly/1mVHJha>

#### March 18

Coursera: phrasing main points:

<http://bit.ly/15qauA3>

Ted: How to succeed? Get more sleep:

<http://bit.ly/1iHhxsS>

#### April 1

Coursera: refining your invention and arrangement: <http://bit.ly/1AG5FdP>

Ted: rethinking the desktop with

BumpTop: <http://bit.ly/1AG5LCd>

#### April 15

Videos to watch:

Coursera: developing your support:

<http://bit.ly/1AG5FdP>

Ted: Google's driverless car:

<http://bit.ly/1gYoxuj>

#### April 29

Ted: a 12 year old app developer:

<http://bit.ly/1nEz9ny>

Ted: the psychology of time:

<http://bit.ly/1r6Se3C>

#### February 11

Coursera: phrasing main points:

<http://bit.ly/15qauA3>

Ted: 4 lessons in creativity: <http://bit.ly/OB4H1D>

#### February 25

Coursera: identifying and developing main points: <http://bit.ly/1yEjcri>

Ted: how to build your creative confidence:

<http://bit.ly/1fbkcmE>

#### March 11

Coursera: arranging main points:

<http://bit.ly/1Go1nQF>

Ted: inventing is the easy part:

<http://bit.ly/1sVvVDt>

#### March 25

Coursera: developing your key ideas:

<http://bit.ly/1CvODRQ>

Ted: How *YouTube* thinks about copyright:

<http://bit.ly/1J6KwV2>

#### April 8

Spring break

#### April 22

Ted: a next generation digital book:

<http://bit.ly/1umtJpr>

Ted: how books can open your mind:

<http://bit.ly/1AbaVch>

#### May 6

Ted: How to make a splash in social media:

<http://bit.ly/PSr6Zr>

Ted: 8 secrets of success: <http://bit.ly/1fHfnYa>

### **Learning platforms used in the course**

*CooSpace* (<https://coospace.tr.pte.hu/>) and *Edmodo*: webpage: <https://www.edmodo.com/>, for iOS & Android

### **Supplementary materials**

Speaking situations abstract based on Kész & Törökné Tenk (2011).

*Edmodo* registration and user tutorial

### **References**

Szabó, Sz. & Papp, E. (2013). *How to pass the ECL exam? Level B1, B2, C1*. Nyíregyháza: Szabó Nyelviskola és Fordítóiroda.

Kész, Z. & Törökné Tenk, D. (2011). *Let's discuss it!* Székesfehérvár: Lexika Kiadó.

### **Useful links for further listening skill development**

The full *Introduction to public speaking* MOOC:  
<https://www.coursera.org/learn/publicspeaking/outline>

*BBC podcasts*: <http://www.bbc.co.uk/podcasts>, *PBS*: <http://www.pbs.org/>, *Kued*:  
<http://www.kued.org/>

*iTunesU* and podcasts: found in the *iTunes Store* (for free) after downloading and installing *iTunes* (<https://www.apple.com/hu/itunes/>), *Ted*: <http://www.ted.com/>

**Document B3:** The peer-review sheet used by students in the 2014/2015 spring semester

Name:

**Peer review**

Presenter:

Date:

	1	2	3	4	5
<i>Formal accuracy</i>					
<i>Oral accuracy</i>					
<i>Vocabulary</i>					
<i>Style</i>					
<i>Communicative effectiveness</i>					

What I liked in the presentation:

What I would recommend:

What I would keep and what I would do different next time (if you are the presenter)

**Document B4:** A sample of presentation assessment by two evaluators and peer reviews handed in by the students in the 2014/2015 spring semester

<b>Evaluator 1</b>	<b>Evaluator 2</b>
<b>Formal accuracy:</b> 4/5 you had some grammatical errors	<b>Formal accuracy:</b> 4/5 instead of candy store use candy shop become-became-become
<b>Oral accuracy:</b> 4/5 some pronunciation errors like with <i>supermarket</i>	<b>Oral accuracy:</b> 4/5
<b>Vocabulary:</b> 5/5 nice use of the topic related special vocabulary	<b>Vocabulary:</b> 5/5
<b>Style:</b> 4/5 at times it seemed you were jumping from one point to the next do not overuse the phrase <i>I don't know how to say that</i> , it shows laziness and you proved that you can do better	<b>Style:</b> 4/5 not very well structured
<b>Communicative effectiveness:</b> 4/5 you talked about nutrition, balanced diets, diseases, junk food and your personal background of being an athlete there were some eye contact issues with the audience it was an overall great presentation	<b>Communicative effectiveness:</b> 5/5 jumping from one idea to another you did not make it clear how much fat should be consume daily
<b>Overall: 22/25</b>	Formal accuracy: 4
	Oral accuracy: 4
	Vocabulary: 5
	Style: 4
	Communicative effectiveness: 5

**Peer-review results for “Jake”**

Formal accuracy: 5, 4, 5, 5, 5, 5, 3

Oral accuracy: 4, 4, 4, 5, 5, 5, 3

Vocabulary: 5, 4, 4, 5, 4, 5, 4

Style: 5, 4, 4, 5, 4, 5, 5

Communicative effectiveness: 5, 5, 5, 5, 5, 5, 5



**What I liked:**

He spoke about something that he is devoted for  
He spoke spontaneously  
He entertained the audience, it was funny ☺  
He took examples about the topic (they were funny)  
He spoke freely.  
He did the task in his own style.  
He tried to make it funny and interesting to us.  
He spoke about various topics in connection with the picture.  
He said some personal examples.  
Speaking style  
Communicative effectiveness  
Picture was interesting  
Formal accuracy  
I can highlight nothing because it was fantastic.  
freely speaking, speaking style  
communicative effectiveness  
he wasn't nervy  
I liked he chose a really important topic  
I liked that it seemed that he is really interested in the topic  
He talked about his personal experiences  
He was self-confident and his speech was fluent  
He was well-prepared  
He was self-confident  
He used vocabulary well

**What I would recommend:**

Maybe the tempo was a little bit slow, but it wasn't disturbing at all  
I think he sometimes made too much jokes and because of it he lost the seriousness of the task.  
More expressions  
Keep it up! :D :D  
I think he should practice pronunciation a bit because I felt some mistakes here and there  
I realized some mistakes in grammar as well so he should practice it as well

## 1.2 Study 2: Piloting online vocabulary development and testing on *Edmodo*

### Appendix C: Supplementary tables to Study 2

**Table C1:** Results of the first vocabulary test in the 2014/2015 spring semester

Items/ results	Vocabulary test 1							
	a)	%	b)	%	c)	%	d)	%
1. keep away from sight (2k)	blame	20	hide	80	hit	-	invite	-
2. choose by voting (2k)	elect	100	jump	-	apply	-	threaten	-
3. being born (2k)	birth	100	dust	-	row	-	victory	-
4. part of a country (3k)	bench	-	province	100	fort	-	jar	-
5. inner surface of your hand (3k)	marble	10	palm	80	statue	10	scheme	-
6. happening once a year (3k)	savage	-	blank	-	definite	-	annual	100
7. kind of tree (5k)	pork	-	steak	-	creed	10	maple	90
8. think about deeply (5k)	extract	10	gamble	-	launch	-	contemplate	90
9. enough (5k)	internal	-	mature	-	profound	10	adequate	90
10. swinging from side to side (UWL)	deficiency	-	oscillation	90	magnitude	-	sanction	10
11. without the writer's name (UWL)	maternal	-	anonymous	100	nutrient	-	indigenous	-
12. prevent people from doing something they want to do (UWL)	frustrate	10	coordinate	60	coincide	30	transfer	-
13. give care and food to (10k)	skid	-	overhaul	-	nurture	100	straggle	-
14. small and weak (10k)	anterior	-	volatile	20	interminable	10	puny	70
15. being away from other people (10k)	auspices	-	seclusion	90	froth	10	haunch	-
16. No one knows what it will LEAD TO (10k)	want	-	have inside	-	cause in the future	100	find	-
17. I don't like it AT ALL (1k)	all the time	-	in any way	100	at first	-	sometimes	-
18. It's good SO FAR. (2k)	until now	100	but not really	-	sometimes	-	from a distance	-
19. They will TAKE OVER. (2k)	be finished	30	have control	70	come later	-	think about it	-
20. FOR INSTANCE, it is cheaper. (2k)	maybe	-	for a short time	-	in my opinion	-	as an example	100
21. I just did not FEEL LIKE it. (3k)	love	20	want to	50	think about	-	try to do	30
22. OTHER THAN that, it's good. (3k)	not including	70	if you include	20	because of	-	after	10
23. It has PROVED TO BE important. (4k)	possible become	10	shown itself to be	80	continued to be	10	never been	-
24. It is IN EFFECT the reason. (4k)	possibly	30	not	-	now	-	actually	70
25. He just CAME UP TO me. (5k)	approached	90	rejected	10	did not like	-	copied	-

**Table C2:** Results of the second vocabulary test in the 2014/2015 spring semester

Items/ results	Vocabulary test 2							
	a)	%	b)	%	c)	%	d)	%
1. have a bad effect on something (2k)	<b>blame</b>	40	pour	10	invite	-	hit	50
2. become like water (2k)	threaten	-	<b>melt</b>	100	manufacture	-	jump	-
3. game (2k)	<b>sport</b>	80	victory	10	operation	-	row	10
4. help the poor (3k)	<b>charity</b>	100	fort	-	jar	-	mirror	-
5. excited feeling (3k)	<b>thrill</b>	80	ridge	-	statue	-	marble	20
6. certain (3k)	brilliant	-	<b>definite</b>	90	concealed	10	savage	-
7. system of belief (5k)	maple	-	<b>creed</b>	80	steak	10	artillery	10
8. bring back to health (5k)	gamble	-	<b>revive</b>	100	provoke	-	extract	-
9. fully grown (5k)	<b>mature</b>	100	adequate	-	solitary	-	tragic	-
10. respect (UWL)	<b>prestige</b>	90	magnitude	10	deficiency	-	sanction	-
11. least possible amount (UWL)	anonymous	-	maternal	-	modification	-	<b>minimum</b>	100
12. add to (UWL)	expel	10	frustrate	-	<b>supplement</b>	90	coordinate	-
13. speak badly about God (10k)	<b>blaspheme</b>	100	nurture	-	endorse	-	skid	-
14. easily changing (10k)	puny	10	wicker	-	concave	10	<b>volatile</b>	70
15. someone killed or injured (10k)	<b>casualty</b>	70	auspices	10	revelry	10	froth	10
16. He IS LIKELY to go. (1k)	likes	-	can	-	wants	-	<b>probably will</b>	100
17. I can DEAL WITH it. (10k)	<b>fix</b>	80	remember	-	find	10	see	10
18. AS A RESULT it was done. (2k)	no person knows it	-	after a long time	10	before that	-	because of that	90
19. It was CARRIED OUT yesterday. (2k)	lifted	10	found	-	read	-	<b>done</b>	90
20. We ARE EXPECTED TO do it. (2k)	are wanting	10	hoping to	50	<b>must</b>	40	are able to	-
21. Keep IN TOUCH. (3k)	feeling it	-	<b>communicating</b>	100	pushing it	-	thinking	-
22. I did it AT ONCE. (3k)	one time	60	many times	-	early	-	<b>immediately</b>	40
23. It was accepted IN LIGHT OF the money. (4k)	despite	-	<b>because of</b>	70	in addition to	30	instead of	-
24. She TOOK IT FOR GRANTED. (5k)	kept it	20	<b>did not give it importance</b>	40	wanted it a lot	20	thought about it carefully	20
25. OVER TIME it was cheaper. (5k)	long ago	50	<b>eventually</b>	30	when it was too late	10	at the perfect moment	-

**Table C3:** Results of the third vocabulary test in the 2014/2015 spring semester

Items/ results	Vocabulary test 3							
	a)	%	b)	%	c)	%	d)	%
1. first (2k)	sorry	-	private	-	<b>original</b>	90	royal	10
2. heat (2k)	<b>temperature</b>	100	basket	-	salary	-	thread	-
3. something you must pay (2k)	<b>debt</b>	100	pride	-	fortune	-	choice	-
4. spirit who serves God (3k)	<b>angel</b>	100	mate	-	pond	-	frond	-
5. a person who is loved very much (3k)	interior	-	opera	-	coach	-	<b>darling</b>	100
6. meet (3k)	discharge	-	<b>encounter</b>	100	knit	-	prevail	-
7. day or night before a holiday (5k)	ham	-	mound	-	<b>eve</b>	100	switch	-
8. large beautiful house (5k)	<b>mansion</b>	100	volunteer	-	chart	-	outfit	-
9. break suddenly into small pieces (5k)	obscure	-	demonstrate	-	heave	10	<b>shatter</b>	90
10. one event in a series (UWL)	innovation	-	<b>episode</b>	100	precision	-	axis	-
11. speech (UWL)	<b>discourse</b>	90	configuration	-	propensity	-	hypothesis	10
12. not moving or changing (UWL)	<b>static</b>	90	negative	-	ultimate	10	reluctant	-
13. accept without protest (10k)	<b>acquiesce</b>	80	contaminate	20	squint	-	rape	-
14. helping, adding, support (10k)	morose	10	<b>auxiliary</b>	70	dubious	10	temporal	10
15. natural liquid present in the mouth (10k)	truce	-	dregs	10	<b>saliva</b>	80	flurry	10
16. AT LEAST it is warm. (1k)	<b>other things may be bad, but</b>	70	many days have passed and now	20	I cannot believe that	-	the least important thing is	10
17. He IS TO speak this afternoon. (1k)	<b>will</b>	70	can	10	may	10	wants to	10
18. I USED TO go. (1k)	want to travel now	-	<b>went there in the past</b>	50	usually go there	40	always travel there	10
19. I'll go AS SOON AS I can. (2k)	<b>from the moment</b>	80	only if	10	after	-	before	10
20. I AM ABOUT TO read the newspaper. (2k)	cannot wait to	-	<b>am going to</b>	70	really like to	20	am trying to	10
21. It is ALL OVER the bed. (3k)	<b>covering</b>	60	inside	10	on top of	-	beside	20
22. They GOT RID OF it. (3k)	<b>decided not to have</b>	80	received	-	become bored with	-	caused	20
23. IN TIME they bought a house. (3k)	quickly	50	earlier	10	<b>eventually</b>	30	recently	10
24. He is BY NO MEANS rich. (4k)	very	-	<b>not at all</b>	90	more or less	-	considered	10
25. We are not TO BLAME. (5k)	in total agreement	-	interested	-	accusing anyone	40	<b>the cause of the problem</b>	60

**Table C4:** Results of the fourth vocabulary test in the 2014/2015 spring semester

Items/ results	Vocabulary test 4							
	a)	%	b)	%	c)	%	d)	%
1. not public (2k)	original	-	<b>private</b>	100	slow	-	sorry	-
2. meat (2k)	crop	-	salary	-	thread	10	<b>flesh</b>	90
3. loud, deep sound (2k)	accident	-	<b>roar</b>	100	pride	-	choice	-
4. group of animals (3k)	administration	-	mate	10	<b>herd</b>	90	pond	-
5. sound reflected back to you (3k)	<b>echo</b>	100	opera	-	coach	-	slice	-
6. throw up in the air (3k)	<b>toss</b>	90	prevail	-	discharge	-	knit	10
7. soldiers who fight from horses (5k)	mound	-	<b>cavalry</b>	100	switch	-	eve	-
8. place where metals are made and forged (5k)	outfit	-	sample	-	<b>forge</b>	90	chart	10
9. make someone feel shy or nervous (5k)	relax	-	<b>embarrass</b>	90	obscure	10	demonstrate	-
10. wealth (UWL)	<b>affluence</b>	90	tissue	10	episode	-	axis	-
11. theory (UWL)	<b>hypothesis</b>	100	intersection	-	discourse	-	partisan	-
12. final, furthest (UWL)	reluctant	10	elementary	-	random	-	<b>ultimate</b>	90
13. make a fold on cloth or paper (10k)	contaminate	20	dabble	10	acquiesce	20	<b>crease</b>	50
14. bad-tempered (10k)	candid	-	<b>morose</b>	80	auxiliary	-	pompous	20
15. confused mixture (10k)	flurry	-	saliva	10	<b>jumble</b>	90	hostage	-
16. It will GO ON (10k)	sleep	-	repeat	-	be fast	-	<b>continue</b>	100
17. He sat SO THAT they could do it (10k)	<b>to make possible that</b>	90	because	10	very slowly and then	-	before	-
18. I USED TO go. (1k)	want to travel now	-	usually travel there	-	went there in the past	100	always travel there	-
19. I'll go AS SOON AS I can. (2k)	<b>from the moment</b>	80	only if	-	after	10	before	10
20. I want that IN PARTICULAR. (2k)	<b>especially</b>	100	in private	-	because it is different	-	maybe	-
21. I GIVE UP. (3k)	try very hard	-	am starting	-	<b>will stop now</b>	100	exercise	-
22. It TURNED OUT different. (3k)	startled	-	seemed	30	<b>become</b>	70	did not look	-
23. IN TIME they bought a house. (3k)	<b>eventually</b>	40	quickly	20	earlier	20	recently	20
24. She HAPPENED TO call. (4k)	pretended	-	tried hard to	10	did not want to	20	<b>by chance did</b>	70
25. She is BY FAR the most intelligent. (5k)	trying to be	-	not at all	10	<b>really</b>	90	sometimes	-

**Table C5:** Results of the fifth vocabulary test in the 2014/2015 spring semester

Items/ results	Vocabulary test 5							
	a)	%	b)	%	c)	%	d)	%
1. ask (2k)	blame	-	pour	-	hit	-	<b>invite</b>	100
2. make (2k)	jump	-	elect	10	apply	30	<b>manufacture</b>	70
3. winning (2k)	operation	-	<b>victory</b>	100	row	-	dust	-
4. long seat (3k)	mirror	-	province	-	charity	-	<b>bench</b>	100
5. plan (3k)	palm	-	statue	-	marble	10	<b>scheme</b>	90
6. wild (3k)	definite	-	concealed	10	<b>savage</b>	90	blank	-
7. large gun on wheels (5k)	hydrogen	-	steak	20	<b>artillery</b>	70	creed	10
8. make someone angry (5k)	contemplate	-	gamble	-	<b>provoke</b>	100	launch	-
9. alone away from other things (5k)	tragic	-	<b>solitary</b>	100	mature	-	profound	-
10. lack (UWL)	oscillation	-	sanction	-	<b>deficiency</b>	100	specification	-
11. native (UWL)	nutrient	-	<b>indigenous</b>	100	minimum	-	modification	-
12. send out by force (UWL)	<b>expel</b>	70	supplement	-	transfer	20	coincide	10
13. slip or slide (10k)	<b>skid</b>	80	overhaul	-	straggle	10	blaspheme	10
14. endless (10k)	<b>interminable</b>	100	concave	-	wicker	-	volatile	-
15. happy celebration (10k)	froth	-	haunch	30	<b>revelry</b>	70	seclusion	-
16. No one knows what it will LEAD TO (10k)	want	-	have inside	-	<b>cause in the future</b>	100	find	-
17. I can DEAL WITH it. (1k)	<b>fix</b>	70	remember	-	find	10	see	20
18. AS A RESULT it was done. (2k)	no person knows if	-	after a long time	10	before that	-	<b>because of that</b>	90
19. It was CARRIED OUT yesterday. (2k)	lifted	-	found	10	read	-	<b>done</b>	90
20. FOR INSTANCE, it is cheaper. (2k)	maybe	-	for a short time	-	in my opinion	-	<b>as an example</b>	100
21. I just did not FEEL LIKE it. (3k)	love	-	<b>want to</b>	80	think about	10	try to do	10
22. I did it AT ONCE. (3k)	one time	20	many times	-	early	-	<b>immediately</b>	80
23. It has PROVED TO BE important. (4k)	possibly become	-	<b>shown itself to be</b>	100	continued to be	-	never been	-
24. EVEN SO it's better. (4k)	<b>despite that</b>	70	that way	20	it is the same end	-	maybe	-
25. He just CAME UP TO me. (5k)	<b>approached</b>	90	rejected	-	did not like	-	copied	10

**Table C6:** The test items used according to their level in the 2014/2015 spring semester

<b>Levels</b>	<b>Vocabulary items</b>			
<b>1k</b>	1. No one knows what it will lead to	2. I don't like it AT ALL	3. He IS LIKELY to go.	4. I can DEAL WITH it.
	5. AT LEAST it is warm.	6. He IS TO speak this afternoon.	7. I USED TO go.	8. It will GO ON.
	9. He sat SO THAT they could do it	10. I USED TO go.	11. No one knows what it will LEAD TO.	12. I can DEAL WITH it.
<b>2k</b>	1. keep away from sight	2. choose by voting	3. being born	4. It's good SO FAR.
	5. They will TAKE OVER.	6. FOR INSTANCE, it is cheaper.	7. have a bad effect on something	8. become like water
	9. game	10. AS A RESULT it was done.	11. It was CARRIED OUT yesterday.	12. We ARE EXPECTED TO do it.
	13. first	14. heat	15. something you must pay	16. I'll go AS SOON AS I can.
	17. I AM ABOUT TO read the newspaper.	18. not public	19. meat	20. loud, deep sound
<b>3k</b>	1. I'll go AS SOON AS I can.	2. I want that IN PARTICULAR.	3. ask	4. make
	5. winning	6. AS A RESULT it was done.	7. It was CARRIED OUT yesterday.	8. FOR INSTANCE, it is cheaper.
	9. It's good SO FAR.	10. wild	11. I just did not FEEL LIKE it.	12. I did it AT ONCE.
	13. part of a country	14. inner surface of your hand	15. happening once a year	16. I just did not FEEL LIKE it.
	17. OTHER THAN that, it's good.	18. help the poor	19. excited feeling	20. certain
	21. Keep IN TOUCH.	22. I did it AT ONCE.	23. spirit who serves God	24. a person who is loved very much
	25. meet	26. It is ALL OVER the bed.	27. They GOT RID OF it.	28. IN TIME they bought a house.
	29. group of animals	30. sound reflected back to you	31. throw up in the air	32. I GIVE UP.
	33. It TURNED OUT different.	34. IN TIME they bought	35. long seat	36. plan

	a house.			
<b>4k</b>	1. It has <b>PROVED TO BE</b> important.	2. It is <b>IN EFFECT</b> the reason.	3. It was accepted <b>IN LIGHT OF</b> the money.	4. He is <b>BY NO MEANS</b> rich.
	5. She <b>HAPPENED TO</b> call.	6. It has <b>PROVED TO BE</b> important.	7. <b>EVEN SO</b> it's better.	
<b>5k</b>	1. kind of tree	2. think about deeply	3. enough	4. He just <b>CAME UP TO</b> me.
	5. system of belief	6. bring back to health	7. fully grown	8. She <b>TOOK IT FOR GRANTED</b> .
	9. <b>OVER TIME</b> it was cheaper.	10. day or night before a holiday	11. large beautiful house	12. break suddenly into small pieces
	13. We are not <b>TO BLAME</b> .	14. soldiers who fight from horses	15. place where metals are made and forged	16. make someone feel shy or nervous
	17. She is <b>BY FAR</b> the most intelligent.	18. large gun on wheels	19. make someone angry	20. alone away from other things
	21. He just <b>CAME UP TO</b> me.			
<b>UWL</b>	1. swinging from side to side	2. without the writer's name	3. prevent people from doing something they want to do	4. respect
	5. least possible amount	6. add to	7. one event in a series	8. speech
	9. not moving or changing	10. wealth	11. theory	12. final, furthest
	13. lack	14. native	15. send out by force	
<b>10K</b>	1. give care and food to	2. small and weak	3. being away from other people	4. speak badly about God
	5. easily changing	6. someone killed or injured	7. accept without protest	8. helping, adding, support
	9. natural liquid present in the mouth	10. make a fold on cloth or paper	11. bad-tempered	12. confused mixture
	13. slip or slide	14. endless	15. happy celebration	

**Legend:** *UWL: University World List*



## **2. Research phase two: Application**

### **2.1 Study 3: Addressing blending from the perspective of MA teachers**

#### **Appendix D: The interview items sorted into corresponding research question units**

- addressing e-learning understanding:
  1. What blended learning course did you teach?
  2. How much information did you have about e-learning and blended learning?  
Where did you get it from?
  3. What were your first thought in connection with blended learning?
  4. Why did you decide to undertake this option?
  5. How many students participated in the course?
  6. What ratio was implemented in a blended learning format?
- addressing the blended learning course design:
  7. How did you design your blended learning course?
  8. What experiences did you have with e-learning before doing this?
  9. What did you foresee in the planning phase as possible difficulties?
  10. How did you (re)design the materials for the course? How did they work?
  11. How did you prepare for the course?
- addressing the challenges teachers faced:
  12. In what ways was preparing for this blended course different from a traditional one?
  13. What e-learning elements were included in the course? How did they work?
  14. How did students work in the e-learning mode?
  15. What e-learning platform did you use? How did it work?
  16. How were the students assessed?
  17. What kind of feedback did you use?
- addressing feedback on the blended learning course:
  18. What kind of feedback did you get from the students?
  19. How did the students respond to the new experiences? What did you think they appreciated? What difficulties did you notice? How did you manage them?

20. What experiences did you gather with your first blended learning course?

List the advantages and disadvantages.

21. What should be changed and what kind of help is needed? Are there further courses you would like to do in a blended learning or fully online way?

## **Appendix E: The transcriptions of the interviews conducted in the study**

### **Interview E1: Diana**

**1. Thank you very much for doing this interview and the topic is the first blended course you taught. My first question is what blended learning course did you teach?**

D: It was last semester; I taught Teaching Culture for correspondent students in a blended learning format.

**2. How much information did you have about e-learning and blended learning?**

D: Before I started teaching?

**Yes, before.**

D: Well, I mean general information that anybody could have that e-learning is...or has to do with regular exchanges via e-mail and most of the course material is provided for students via the computer and well, the same about blended learning.

**Where did you get this knowledge from?**

D: I googled a lot of it, heard from colleagues how they imagined it and perhaps conference talks.

**3. What were your first thoughts in connection with blended learning?**

D: That it would be easier than face-to-face (laughs).

**How did it eventually turn out to be? Was it easier?**

D: It was more difficult and a lot more work. And I think it takes time til you really develop a good blended learning course because it's not just enough to present the tasks on any platform, whatever's available, but you also need to create manuals, which is roughly lecture outlines or something that you want them to acquire during that course. And that's the hard part because normally in the classroom teaching you know what you want to get through and then you try to tailor the class or channel the activities in a way that you get at what you wanted to get at. But with blended learning you have to plan really consciously ahead how that's going to work out.

**4. Why did you decide to undertake this option? So why did you decide to do this as a blended course?**

D: Because the university couldn't provide enough rooms so there weren't enough timeslots and enough room and we couldn't keep students here from 8 o'clock til 10 o'clock pm on Fridays so that was an option to do basically.

**5. How many students participated in this course?**

D: Oh, a lot. Like close to 30 or something so it was really like two or three groups together. So that was really a lot of work.

**And all these students were correspondence students?**

D: Yes, they were all correspondence students. So they came three times and then they had two face-to-face classes of the five occasions.

**And this would have been the next question.**

D: (laughs).

**6. What ratio was implemented in a blended learning format?**

D: Well, it was three fifths if I want to translate it into the language of mathematics (laughs).

**7. How did you design your blended learning course?**

D: Hm, very ad-hoc at the beginning, I mean this was a course I have been running for a very long time so I knew basically what I wanted to use and I knew basically what I did with those things before. But I didn't have a clue how to get it through without me teaching most of this stuff. So I kinda first, I planned activities and then assigned the readings and what was missing actually was the explanatory parts so how I actually teach the assigned readings to them. So that's kind of...I tried to plan questions based on the reading but it's not really enough.

**8. What experiences did you have with e-learning before this, before doing this course?**

D: Nothing. I mean...no that's not true because before it was not called a blended learning course but we did part of the course work on a platform provided by the university. But this was in the U.S. So actually we had to prepare outlines for the readings and we had to submit it via the online platform and we had to read each other's work via the online platform. So it was something that I would call partly blended work but actually the focus was on the regularly weekly meetings. But that part of the coursework was also partly... I mean we had to review each other's papers that were also submitted via the university's course platform so basically that's it pretty much. So I had some kind of experience which I didn't know was called any fancy name at the time. It was just a cool thing to do because I had never had an experience with such a thing before.

**So this course also used peer assessment?**

D: Yeah, it used...well it wasn't really peer-assessment. No. It was just that we had to do a review and the teacher or the tutor or the professor, whatever, actually graded our reviews. So we didn't assess each other's works. Of course I could see a difference because I was used to grading student papers and there was a difference in the level, the quality level of the papers. But that was not the goal. The goal was contentwise to try to kind of pull the threads together, all of them on one thread and try to find the connecting point. But this was all done, mostly, online. We had to submit those things online.

**About when did this course take place?**

D: It was 2001 spring semester.

**9. Okay, I see. What did you foresee in the planning phase as possible difficulties for this blended course you taught?**

D: Well, I don't like grading papers. I think that's the most nuisance part of teaching but I didn't think it was such a nuisance if assignments were submitted online on *CooSpace*. So it was really hard to figure things out. And then I created deadlines that I thought would work because and then it didn't work because then I was snowed under with work and so I just couldn't catch up with *CooSpace* work. And I wasn't sure whether *CooSpace* would allow me to do the work that I assigned before, like I assigned at a date before and then so... But it worked out because *CooSpace* did allow, so I just sent a remark. But you know, one has to learn this as well and we didn't have much introduction about that. We were just experimenting.

**10. How did you (re)design the materials for the course?**

D: Like you mean compared to when I was face teaching?

**Yes, the traditional one.**

D: Well, I had to design a lot more questions. I had to create task descriptions to be a lot more clear, like when I have the chance to explain it. I had to make sure it goes through so, I mean I

had to... So all the framework has to be very clear or clearly presented I think in blended learning because that's the only way you have access. Plus! Hungarian students don't ask questions because they feel it's a shame if they ask questions. Which is bad. But even if they don't understand what they have to do in a blended learning course they wouldn't ask you but they ask each other on *Facebook* or whatsoever which is just...And then there is one daring one who eventually sends an e-mail to the teacher or to the tutor or instructor. And so...it's really hard because you couldn't really rely on student feedback, what works and what doesn't, but you have to rely on whether they would understand this or not. So that's hard.

**So, how did they work eventually?**

D: You mean the course or the tasks?

**The tasks.**

D: I mean, they answered most of the questions, but what I felt they missed was this kind of exploratory part. So why they were reading certain readings, so that's the lecture part. Or the...they are not really seminars so I'm not lecturing, but you know the way how I get the essence out of an assignment or an assigned reading. Now that's missing and I haven't been able to figure out how I could deal with that. We'll see.

**11. How did you prepare for the course?**

D: Uhm, I mean this is a running course, so this had been running for a while before we started the blended learning project so it didn't really require preparation in terms of the material *per se*. It required more preparation in the practical side. I mean, how to get this thing through to them via computer. Cause most of the students are not the age of the regular students who would...for them the digital world is just very natural. So for most of them this wasn't all very natural. Some of them sent their assignments by e-mail rather than uploading it on Coospace. And of course, then I had to figure out how to grade that on Coospace. So it's kind of hard. Yeah. It was a hiatus when you know there is no assignments submitted on Coospace but there is an excellent grade on Coospace. So it's kind of hard.

**12. In what ways was preparing for this blended course different from a traditional one?**

D: Well this one, basically, that you had to have everything written down for the students, because otherwise it doesn't make sense. I mean they don't know what you are thinking, if you don't provide them a clue about what you are thinking.

**And these are the manuals you were referring to?**

D: Yeah, that's right, the manuals and also the tasks. I mean it was, everything very clear, 'I want you to do this', 'this is a part A and a part B and make sure you answer all the questions'. And then to reemphasize that. And of course, it's not...kind of manual is not the word...perhaps lecture notes, to call their attention, that you know this is what is important in there or this is what Clair Kramsch argues or this is what whoever argues. I think that could be very helpful. But I don't...of course, there's time constraints too.

**Yes. So you had to hold these students' hand a bit more and guide them a bit more than in the traditional one?**

D: Uhm. Yeah, perhaps so. If I want them to really understand what they are reading, they need that. So they need that kind of feedback that happens in the classroom, that you know, I understand this this way, or this article or reading says this, and this is how I'm going to use this in the future. Without that, it's really hard.

**13. What e-learning elements were included in the course?**

D: Like e-learning elements? What do mean by that? I'm not an expert on e-learning.

**Blogs, videos, video lectures...**

D: Videos, video lectures were not...video clips I did upload or at least link because I uploaded them on YouTube and I provided them with the links. Uhm. Video blogs. I didn't use video blogs. Perhaps I could do, like record myself talking about a particular article but I can't happen to have...not the courage...I don't know ... It seems strange.

**Yes it is also for the teachers. I saw on Coursera that it was strange for them doing the first e-learning course and just sitting in front of the camera is...**

D: Yeah, that's right, to talk to the camera. Uh...That's strange. Of course you can edit it later so that's a huge opportunity but still...I mean...But perhaps that's the way to do it because it's much easier than to write it down.

**SK: Hm. Maybe, could be.**

D: And I'm not a blogger so (laughs) I feel kind of...it's strange to do the blog thing. But perhaps we could do that too.

**14. How did students work in the e-learning part? So how did they work with the platform? Because you said they worked with *CooSpace*.**

D: Yeah. Some of them worked very well, they submitted everything on time and they understood what they had to do. Well most of them sooner or later figured it out how to do that, so it wasn't a problem. What they didn't know was how or whether to actually attach a file or to write the answer in the sports that were provided and actually that way my problem too, because when you're correcting something that is written in Word, it is very easy to use the trackchanges mode. But if they are doing something on *CooSpace* directly, you can't do that so I kind of like highlighted something that was underlined and then called attention to their mistake or lack of coherence or something. So it was harder to actually correct their papers or their assignments on *CooSpace* than if it was an attached file.

**And this answers questions 15 as well (laughs). [Q15: What e-learning platform did you use? How did it work?]**

D: Well okay (laughs).

**16. How were the students assessed?**

D: Well grades based on their assignments. So they had grades throughout the course and there was this closing essay together with the narratives course that they had to submit. And then the final class was partly used for that purpose to discuss the framework of the assignment.

**So similarly to the traditional one?**

D: Yeah, that's right.

**So they had the final essay as well?**

D: Yeah, that's right, it's the same thing.

**And you said...So they got these smaller grades based on the readings or...**

D: Yeah, based on the readings and tasks that I assigned. Tasks that we usually do in the classroom and then...uhm...they actually did that.

**17. I see. What kind of feedback did you use?**

D: I uhm, well I corrected their things and then I wrote a few remarks on *CooSpace*.

**And there were no problems with this in *CooSpace*.**

D: No.

**18. What kind of feedback did you get from the students?**

D: I haven't had the time and chance to look at their feedbacks so I don't know. I will. I think they're in Marianne's office...if they ever arrived. Well I don't know, because perhaps we only get feedback when they actually finished their studies. So for this group it will be another year till we get feedback. I could have, but you know, this time of the year, January is very busy. And last year it was extremely busy cause I wasn't even here so (laughs). Not last year, this January was extremely busy.

**Some of the feedback may be that they had difficulties with *CooSpace* in the beginning or something like this.**

D: Yeah, perhaps or I don't know. My problem is, I don't know how much gets through, basically. Because it doesn't really get from...we don't get really get that from the final assignment.

**19. How did the students respond to the new experiences?**

D: I mean, I don't know much about that in detail, because they never complained cause they

accepted it. You know when you need the degree, Hungarian students are like, it's rude, but it's kind of like a...I don't know...They know they need the degree and that's the final outcome and whatever they have to do for the degree is fine. So, it's kind of like, they're not really used to criticizing things. Which is a problem, because it would be easier for us if they...I mean if they gave meaningful criticism, not like if they got bad grades and they said "this is the worst course ever". Not even thinking a little bit about how they did something or may have done something wrong. And...so that kind of critical feedback we have to teach them, how they give critical feedback that helps, people who you are criticizing to get things better. I keep encouraging people but I don't think that's an important part, because you know they're focusing on the degree and more salary or keeping their jobs so it's understandable. It's just hard.

**Because of this you don't get the feedback you need?**

D: Yeah, I think I...they didn't really care to give too much feedback. They cared more about getting their grades and then forget the course or I don't know. That's what I felt.

**I see, okay, then we skip the sub questions to this because...**

D: No, no, no, I don't know what they appreciated. They usually appreciate the tasks. They find them funny. They appreciate readers that I upload. I uploaded like, I 10 or I don't know 12 readers. Like...they were not really graded readers, they were authentic children's books. They usually appreciate that because...

**Pony Express (laughs).**

D: Yeah, the Pony Express (laughs) or the Goldie Locks and The Three Bears, the Mexican version and the...so there a lot of stuff that I...usually grab a few of those if I get the chance. So they appreciate that usually, but since we don't have like class time to discuss these things together it's really hard to...to sense what they...whether they've actually read them or they haven't read them at all. That's really the hard stuff.

**You don't get feedback whether they used these books or not, because that would be nice, if they...**

D: Yeah, at least they've said that you know this way a fine book. I don't know. I...of course I know these are the drawbacks and I'm thinking about how to tackle those or how to meet these challenges but it's...uhm...it has to be done somehow. We need feedback to get things better.

**20. What experiences did you gather with your first blended learning course? Please list the advantages and disadvantages.**

D: Well an advantage is that you can uhm arrange your own time so once you're done with the tasks you...that's whenever you want to read the papers, you can do that in the evening or at night if you're a night person or early in the morning, whenever. You don't have to be here at a particular time so...But of course the disadvantage is that reading the papers or getting feedback or designing the materials takes a lot more time than actually when you do frontal teaching...and the preparations use much less time. And of course what certainly was a drawback...that sometimes they gave answers in those short papers that somehow was much better than their actual language quality and so I didn't have a grasp on really what they were...because they were so smart, clever, which is fine, to use the original sources and to paraphrase those things so they wouldn't really make mistakes because this is not free language use. But it actually turned that language level was much much much below than that. And then there was this discrepancy in the final assignment and the short assignments on the way. So perhaps I could use a video blog but not me doing it but ask them to reflect on certain articles or something which they would find awkward probably first (laughs) but then it would us a give a kind of clue on how they actually...Because when we do the classroom teaching we actually know them and know that this person has good English, this person has weaker English, the capacity of this person is way below this, I mean that she has submitted. And that helps a lot to decide whether I have to seek for plagiarism for example or not. And that's something that I'll have to figure out. So there are a lot of these things that actually, you take for granted when you teach in a classroom but they're not so granted when you do it blended, I think.

**A course I took on Coursera did this. It was about how to argue and they had an optional task to upload your own video arguing about a topic. So they kind of asked to students to apply what they have learned and use it in an e-learning format. So, upload a video and**

**they discussed this and you could comment on this. But I don't know whether you can do this on *CooSpace*.**

D: Yeah, that's what I was thinking about whether *CooSpace* is really suitable for sharing all these things. Perhaps...Yeah! There is a forum but I don't know whether you can upload personal videos on the forum. We'll have to figure it out.

**But you can upload it to your *YouTube* channel and you can link it.**

D: Yeah, that's right.

**And bypass this limitation to this.**

D: Yeah, that's what I did, because it was too limited for when I converted a video. And YouTube will allow you to have it specified to how many people you want to view it or...so I didn't make it public. Yeah, I was thinking about it before, that we need to get some kind of feedback on how they are able to use language. Because otherwise...really, these written assignments are very limited in terms of their output. I mean to judge their feedbacks, it really not kind of very widespread.

**21. What should be changed and what kind of help is needed in terms of course delivery?**

D: Hm. It would be nice to have somebody who could do the uploading for you, who could just show you...not so much...I know that there are organized grad tours, no, organized courses on how to use the *CooSpace* properly, but you never go to such courses. I mean, Magdi did once, and it's really nice of her, but I always feel I could use my time better than this. Of course which is foolish, because when you are there to use it, you don't know much about the potentials. But really, like, it would be handy to have somebody to reach when I, you know, I need now very focused information on how to do this and that on *CooSpace*. Because sometimes those general courses are about what I can figure myself out, but when I really face the problems, they could comment. So I think that would be nice. Definitely, I think if this university plans to go blended, they need some very mobile people to provide help with a lot of things, because you cannot require the instructors to learn all this by themselves.

**Of course.**

D: This would be nonsense. And...uhm...well, I think that's one of the largest issues. Otherwise, I'm fine. I'm kind of figuring things out myself. That's no problem.

**Are there further courses you would like to do in a blended learning or fully online way?**

D: Hm. For the time being, I don't know. There isn't a real need for the time being...I mean for any of the courses to go online or partly blended. What would be good though, because there are short-term research trips that we go away for two weeks and then we have to cover those areas, like in, we have to find the spare time for those classes to be held. It would be nice to do occasionally than a blended e-lecture, and then just on American history and then send it to students or upload it someplace and then do that. So that would be kind of like a good solution. I wouldn't make it totally blended because for the time being, there is no need for that, but occasionally it would help. Kind of like a ten year plan to do all the lectures in an e-lecture format and then just you the ones that I need on a particular semester. I think that would be a good idea.

**Okay, I see. Thank you very much for your help.**

D: You're welcome. I hope it helps too!

**Definitely!**

## Interview E2: Lucy

### **1. Thank you very much for doing this interview and my first question is what blended learning course did you teach?**

L: Uhm (laughs), not that it was very long ago but I still have to think about this...I think there were three, or there have been three so far. One was a narratives course, Narratives in TEFL. The other one was...there were two...the other one was a reading a writing course. Yes, the narratives course was together with Móni and this is why I taught there were three. Right.

### **So the same courses that we had in the teachers' MA program.**

L: Partly the same courses. Reading and writing was a BA course for correspondence students, so there were two meetings altogether with them.

### **Did you also teach the CLIL course this way?**

L: No, not as far as I remember (laughs). No, I don't think so.

### **1. How much information did you have about e-learning and blended learning before doing this?**

L: Uhm, not much, except from what I've read on the Internet. When I had to do the course of course I started kind of updating myself and I also attended a talk by Kormos Judit, who has been running these courses in England and that was very interesting and I thought it would be a challenge. And it was in very many ways.

### **So the Internet and this lecture. This is where got your knowledge about this.**

L: Yes.

### **3. What were your first thoughts in connection with blended learning?**

L: Well, long before I ever had insights into how it worked really, I thought this was a great idea. At the time when I was a student in Transylvania I thought if I ever had the chance to participate in such courses that would really open up possibilities. And even later, when I started listening to lectures, Stanford University and also even the TED lectures, I think this is something really wonderful . A lot of people who don't have the time or simply are not in that stage of life, can get access to all sorts of information in a structured way. Now if it's blended learning really for the university, I think that's also good, because we know the timetable and all sorts of problems students have. So...and also the fact that teachers very often don't have the time to be here if they come from elsewhere and they can organize their material differently. I think it's a grand idea.

### **4. Why did you decide to do this course in a blended way?**

L: Time limitations. It's not very nice to say this. But we simply couldn't multiply. So we had to run so many courses...uhm...yeah, I think this was the...And not only us, but also the students, those correspondence students who have to fit in all their course, all their sessions in one day, and simply they couldn't be at some many places at the same time from morning to evening to fit in everything. So, instead of squeezing tiny little sessions with one after the other, we decided to have this option.

### **And these were all exclusively correspondence students?**

L: Yes. In my case.

### **5. How many students participated in this course?**

L: Uhm, for the reading and writing course, there were like 9-ish, 10, most probably 9. And for the other one 20-ish.

### **For the teachers'...**

L: For the narratives course, for correspondence students. Teachers' actually, masters course.

### **6. What ratio was implemented in this blended learning course? So how many contact lessons were there and how many...**

L: Uhum. There were two contact lessons. This first one and one somewhere in the middle and..uhm..the rest of them very obviously...well they...I set up a forum, had to make



comments, depending on the course. That differed. You'll probably ask more details later on so I won't...

**Yes.**

### **7. How did you design your blended learning course, or in this case, courses?**

L: Uhm, partly in the same way, only partly, and the same way as I would any other course. So I used the same materials that I wanted them to read. They had to hand in I guess very similar assignments, partly. On the other hand, of course the courses had the specific aspects of a blended learning course, so they offered very different opportunities. They took away certain opportunities and at the same time, they offered something else for it. For example, we set up a forum for the narratives course, where they had to comment, where they had to make two comments for their...uhm...let me think about...let me think a little (laughs)...for whatever they've read, and they had to make a comment in response to someone else's comment.

**So one about the reading and one response.**

L: One about the reading, and one response to someone else's comment. And shall I go into details now or will you ask the questions whether this was good or bad? I'll give you your own time.

**You can do this now.**

L: Okay, good. Obviously this was very interesting and I think we both, both parties learned a lot. First, they were a bit taken aback. Like what this is going to be like. I'm talking about the narratives course. These were teachers and we previously had the CLIL course together, this was a traditionally structured course. Uhm, and my difficulty with that course was that, like with any other course, they didn't always have the time or whatever...for whatever reason, they sometimes did not read what they were supposed to read. If they've read the readings, they went through them. Some of them made comments in the sessions, some of refrained from even, you know budging the session. And when they did make comments, obviously...I say obviously, but this is a sad edition, but they usually made a lot of mistakes. These were people who came from very diverse backgrounds, most of them lower-primary school teachers and then specialized...who became specialized in English afterwards. Most of them long passed their critical periods, so it was quite difficult to react to their language mistakes in a constructive way. Obviously, I could give some feedback, but still, I had to spontaneously always decide, whether to focus primarily on the content, which I did. On the content of what they were saying, and on their self-esteem and only marginally carrying out indirect correction. Now, this changed, this always changes when you...when they make a written comment and you...Not only that you have evidence of the gaps they have and later you can think about how to redress them, but also they become more aware. When a next time I gave them the task to reread their own comments, and I got this piece of advice from Marianne, and I used it to reread their comments and to self-correct and think about how they would build on, how they would work with this specific error in their classes from a methodological point of view. Well, I found this was an extra benefit of the blended learning course. To say nothing of the fact that they all had to make their comments, so there was no way out. And they could...I think this was more humanistic, also because we know that teachers are tremendously overloaded so they simply could organize whatever they had to do, according to their own schedule. The way the...it wasn't like that you have to come with the readings read by Friday. It was like they had an amount of time, an interval, during which they had to read and make their comments. So this was the really...the great benefit of it. Partly that they all contributed and I've heard (laughs), I've read people's comments, whose comments I had never heard before because they were silent during those five sessions. You realize that in the case of correspondence students, the passage from five to two sessions is not that big a difference so that if we meet five times a year in a fairly well-hurried way, or twice a year or during a semester, but we still have plenty of interaction. Plenty for me because I had to read everybody's comments (laughs), that wasn't such...that was a...uhm...that was a smooth transition and actually it was much better. Another thing was that...so like I've said they benefitted, I think, they had to make their comments...they benefitted languagewise, so not only contentwise. I also did methodologically, and there was one thing that I wanted to say...Yes! That I also learned that I had to become very specific in my instructions. So if I tell them 'read

and make a comment and respond to someone else's comment' I had to realize that some people could fairly easily get away with something like "Wow guys, that was something" upon reading Bettleheim's introduction.

**(laughs)**

L: So I had to...and I couldn't go back and say 'this is not a comment', so I had to make the instructions more specific. And I...obviously I didn't interfere but...Yes! I tried to create situations where I don't have to interfere by saying 'this is not an appropriate comment referring to content'. And also I had to realize that some people were prone to making more content-specific comments, whereas others tended to make more classroom-specific comments...how they linked these to their classroom settings and that was also fine. This gives me food for thought for the future, like in case I want this kind of comments, I should make it again specific. That kind specific. Yes.

**I see.**

L: Okay (laughs). Is this going to be difficult to take into pieces? According to your questions?

**No, no.**

L: No? Okay (laughs).

**This is great, this is good.**

### **8. What experiences did you have with e-learning before doing this course?**

L: No experiences whatsoever.

**So you didn't take any online courses or?**

L: No, unlike Magdi, for example, I didn't feel the drive. I simply couldn't attend those...the course ran by, I think the IT department, which Magdi says was really, really useful.

**What was that course about?**

L: Blended learning, exactly and it was sometime during, like this time of the year, June-ish and then in September we started running the courses. And she said whatever she learned there was really useful so she could build on it.

**I see.**

### **9. What did you foresee in the planning phase as possible difficulties?**

L: I was thinking that, first of all, that all these technical...these technicalities would present a great challenge to me that I won't be able to handle this and that (laughs) and then Magdi said it's not that difficult to set up a forum, to uhm, use all these functions on the...well even on the *ETR* and *CooSpace*. And then I...well gradually socialized into some of them, I believe. This was one of the things, the other things I predicted...I, actually this is not a difficulty, but it turned out to be one. Shall I go into it now?

**Yes, of course!**

L: I thought they would be enthusiastic about...simply about not having to attend so many sessions. Not because I thought they were getting bored, it's just that I thought they would take it as a relief that they can organize their own time. It turned out that the...they were...well not puzzled, but first they looked surprised when on the first session I said there was going to be a forum. Obviously, they were maybe even less familiar with the idea than I was. No wonder. These were primary school teachers, most of them. Some of them were younger than me, probably for them this...even the idea wasn't...didn't imply any threat. But like overall, what I saw as a first reaction was 'oh my God, what's going to happen'. And then gradually I learned that...I realized that they were...some of them were very spontaneous with their comments, they liked making them. Some of them, most probably, those who...well...No. I'm reconsidering what I'm saying. Actually, the first ones, who reacted were the ones that were the older teachers and probably wanted to get the task done very quickly. But I'm not sure about this. Later on, it turned out that actually they thought that these two occasions were not enough. So they wanted...they would have felt more secure and more...kind of...they would have felt probably more support if we had met more often.

**Like four-ish?**

L: Like the usual five occasions.

**So like half of the semester?**

L: Yes.

**So one week that's not a contact lesson and the other that is?**

L: Like the usual set up. I think one of the difficulties for them was to take a step back and think along a different paradigm, like a different setting. This was most probably one of the things...one of the reasons they thought this was more difficult. The other reason was that most probably I didn't use all the opportunities offered by this context. Uhm. We talked about this with Móni and with Magdi and then we started brainstorming about what could have gone differently and now I have more ideas about what we want to do. For example with Móni we'll run this narratives and cultural course together, and we think we'll want to include more practical sessions where they have to plan and we can kind of supervise the planning and make our comments. I've never used the...like the online discussion seminar group, whatever can be used. For example which could be...I know that there can... you can have group work within blended learning, something that I didn't even have the time to think of. Now maybe I will. Hopefully.

**10. How did you redesign the materials for the course?**

L: Like I said, this is what I have in mind now, like adding...using more of these functions and options, but also methodologically. I realized...you also attended the narratives course so, it's good to have contact lessons because you see so many of the materials. Whereas, and this is what I also tried, I asked them to browse websites and have a look at materials, but it gives a different feeling from having this you know, hands-on experience with certain picture books for example and having a look at them on the Internet. And also I uploaded some of the things, the ones that you know, you scanned and Anita scanned in, and some of the picture books. But again, and they had known some of these, or the genre, they had been familiar with the genre from the CLIL course. So they knew what this was about. It's just that, what I missed, mostly from the narratives course which is one of my favorite courses that I run, was this shared social experience that we have when we tell a story or work with a story together. And most probably, had I been more of an expert in blended learning, this would have been more successful. I'm not that sure though, because you know, storytelling takes a certain context, asks for certain contexts, but still, I think there's more I could have done and I didn't because of lack of knowledge and all sorts of things, but I plan to redress. However, I still think I would like to run this course more in a contact session format than in a blended learning.

**11. I see. How did you prepare for the course?**

L: Not that I have very much time to prepare, so I asked people for advice I looked at...again on the net what other people were doing and I put into it a lot of thinking. Like knowing these people and knowing about their contexts, because it's not like you can implement anything that other people use. This is what makes experimenting with new teaching materials and formats different. The fact that you have to think about your own context and what works best for you. So these people were...uhm...some of them, like almost myself, aliens in the world of IT. It was different. So I had to think about how to scaffold my own, as well as their understanding of this process. So, like I said, not only learning from other people, which was very useful, for example Magdi, who is always ahead of me (laughs) in this field, but also a lot of thinking of how this could happen to their benefit.

**12. In what ways was preparing for this blended course different from a traditional one? You mentioned the scaffolding and the structuring part, and...**

L: Now, it retrospect I think, I...well...rather for the future. I think I will make use of a lot of other materials that I didn't use then, because this took me...well, I can't say overnight but really, I didn't have much time to prepare for it during the summer, because like always, we have to do something. Mostly for the reading and writing course, which I didn't even talk about. Now I will. I will run a listening and speaking course in this way and I already started asking Joe for tips and advice and I think...it may take a very different kind of preparation.

**13. What kind of e-learning elements were included in the course and how did they work? You mentioned the forums.**

L: Yes and...uhm...that was about it. The forums...I have to think about the reading and writing course...Handing in assignments, obviously uploading them on *CooSpace*...uhm...Now for the listening and speaking I plan to do something...these group work discussions, where they...where I can also listen and well, I don't know if I can chip in but hopefully. So like I said, I wasn't and I'm still not very familiar with the repertoire of what this can offer and this was the great difficulty.

**14. How did students work in the e-learning mode?**

L: What do you mean by how? Easily or...

**What kind of tasks did they have? You mentioned that they had to comment on their reading and on each other**

L: On each other, they had to comment again to redress, to think about, to use their own comments as teaching materials, working...teaching grammar for example. So they had to reflect a lot on what they themselves wrote. Uhm...what else? How did they have to learn...work...

**These assignments at the end handed it. Could they read, or did they have to read each other's?**

L: Yes.

**And did they have to comment?**

L: They had to comment. In the reading and writing course, they had to read each other's assignments, uhm, they even had to...they obviously had to develop materials together. But what I did not do, obviously these were people who regularly met. Had this been a different context like one of them...which could very easily be in the case of a correspondence group, one of them in Sopron and the other in Deberen, they would have teamed up and they could have done something online, but what I also realized was that people try to work together with, obviously that the people they...

**Know?**

L: That they know and that they've shared the car with when they come to the...and this makes a lot of sense obviously.

**15. You mentioned that you used *CooSpace* as an e-learning platform. How did it work? So what are your thoughts about the platform?**

L: I always have problems with *CooSpace*, mostly when they change things over night and I can't make head or tails of it. And for the very few things that I used it, that was okay. This also shows how unimitated I am in the sense that most probably it could work even differently or you could have other options. I'm not very happy about it in...I mean it has these odd behaviors, but for uploading things, I think that was okay.

**16. How were the students assessed?**

L: They were...uhm...I gave them feedback, continuous feedback, so during the course and I tried to create, in both groups, but I think this is especially important in the case of teachers who were in-service teachers. I tried to scaffold this understanding that learning is...you should have this process-based regard for learning, instead of looking at it as the product only. So obviously, this is why I gave continuous comments. I also asked them, usually I do this in traditional courses as well, I ask for feedback during the course once and I ask for feedback at the end of the course. Like what they liked, what they didn't like, what they would do differently. I also ask them about how well did they think they did on the course. I did this at the end, and this is when I ask them for feedback. I assessed them based on their comments and based on the final assignment that they handed in.

**You also answered with this the next one [Q17: What kind of feedback did you use?]**

L: Thank you! How great! (laughs)

**18. What kind of feedback did you get from the students?**

L: I think I talked about this, that they...that some of them were...

**Puzzled.**

L: Yes. Were puzzled and that overall they said they would have liked more contact. Although they obviously realized that it was simply not feasible. For nobody. Not only me but also for them staying here until late in the evening.

**19. How did the students respond to the new experiences? You mentioned that they were puzzled.**

L: Yes.

**What did you think they appreciated?**

L: I'm quite sure this is what they pointed out, they like the idea of a forum and mostly probably those who otherwise did not have the chance to contribute. Not because others did not allow them to, simply, you know, it's part of group dynamics. Some people tend to be more there to show that they are there and some are more silent or simply don't have the drive to say anything. And I think this is why they liked it because they felt, that they could be part of it. Some pointed out that the...it made them think more. The fact that...and we know that this is true, when you have to write about something, it takes you...it generates more ideas, further and more in-depth analysis. So I think this was a very clear benefit that they also were aware of.

**You mentioned a couple of difficulties that you noticed during the course, like they had problems with the CooSpace, using it as a platform. How did you manage this?**

L: Uhm...problems...They had their fears from the CooSpace and from the forum and I (laughs), I tried to be very reassuring. This was the first way to handle it. And I said that the...it will be obviously very clear as soon as they start using it. And when we set up a forum, this was also a place for asking questions about how to do this or that. So even if...sometimes I didn't even get to answer a question that they had, somebody else had already done it.

**This is great.**

L: This is good.

**So they had their own troubleshooting forum.**

F: Yes. And I think the forum is good because it also develops a kind of support system within the group. Although I had not thought about this before. You see how narrative contributes to understanding things and organizing ideas. It's just that most probably this is very useful. No wonder students rely on these things. So maybe more bottom-up should...it should be more bottom-up planning in our courses. Think about what they use anyhow. Except that these people don't very often use these forums, because it's a very different age group and with very different tasks. Uhum. But this was something that happened.

**20. This is great. What experiences did you gather with your first blended learning course? Please list the advantages and disadvantages.**

L: Hm. I think I did this.

**Yes you did this.**

### **21. What should be changed and what kind of help is needed?**

L: Uhm. I'm quite sure that I need to update my knowledge in this area and also be more risk taking and experimenting. This also takes for some amount of time. Some people learn easier, some people have more interest in this kind of thing. I can't say that I don't have an interest. I have to have one, because it's part of my life. So I'd better be interested in it. However, I think that I did not have enough time for thinking about how to do it and all these possibilities. This is what I should change. Now I know when I start the listening and speaking course, I think I want to have a very clear understanding beforehand of what the options are, what the methodological tips are that I can use to everybody's benefit in this context. And also because...and this is more course-specific, not mode-specific, because it's a listening and speaking course that I hadn't taught for years, of course I want to get new materials ready. And the good thing in this is that this is new course and not something that I always have, is that when you have new materials, and you think about these materials in this very new context, is that you start associating new methodological ideas with it. So you...it's easier to take the break from the traditional lines that you had been going along for like forever. It's something like, 'aha you can do this, with this like this'. It's maybe easier and it's more interesting because it's something new.

### **My last question is, are there further courses you would like to do in a blended learning or fully online way?**

L: Uhm. I will do this listening and speaking course. It would certainly be a challenge to do the narratives course again, although it's like I said, I love it, so I like it this way. I'm thinking about maybe doing the CLIL course, which is both good and bad. It's bad because this is the first course in the masters' program that is more methodologically related, more practical. But still, I think because it's so varied topicwise. That would be very interesting for them to experience like this.

**I see. Thank you very much for your answers.**

L: Thank you, it was a pleasure.

## **Interviews E3 and E4: Alice**

### **1. What blended learning course did you teach?**

I did two courses in the MA in TEFL/TESOL programme: Instructed Second Language Acquisition and Teaching Vocabulary.

### **2. How much information did you have about e-learning and blended learning? Where did you get it from?**

Not very much at the beginning, but I gradually collected more and more info, however, I must say I am still not an expert ☺. First, the head of the programme, Prof. Marianne Nikolov invited a guest to our department a couple of years ago, Dr. Judit Kormos, who used to be a former colleague of ours at ELTE university, but is now in charge of e-learning programmes in the Department Linguistics and English Language, Lancaster University, UK. This was my first experience with e-learning and blended learning, and this talk inspired me to browse the internet for research papers and sources on the topic. Then I bought a book titled Online Language Teacher Education in a conference I attended, and I also did a course on Coursera on statistics to see how such a course goes in practice. I also attended two closely related courses on how to design e-learning materials at the University of Pecs, which was supported by a TAMOP grant.

### **3. What were your first thoughts in connection with blended learning?**

I found it great, inspiring and challenging at the same time, and I thought it would especially fit the needs of our in-service teachers in the MA in TEFL/TESOL correspondence programme, who are overloaded with work as teachers at their workplaces in primary schools, have families to take care of and are expected to do an awful lot of courses in their masters programme to get their degrees in 2, 3 or 5 semesters.

### **4. Why did you decide to undertake this option?**

It was not my deliberate choice to be honest, it was imposed on us by the organizers and coordinators of the MA programmes of UP by not being able to make a feasible time-table for the correspondence students, as there were too many courses assigned for Fridays and too few time slots available for the courses to fit in. Students used to have classes from 8 am to 7 pm. Impossible!

### **5. How many students participated in the course?**

I have been doing these courses for 6 semesters now, if I'm not mistaken. The number of students varies from semester to semester, but I would say about ten students per class on average. I do both courses every semester.

### **6. What ratio was implemented in a blended learning format?**

In normal correspondence courses student are expected to have 5x2 contact sessions a semester which is about 12-13 weeks long. In the blended learning course, I planned 3x2 contact sessions and 9 e-learning sessions, which is overall similar to the 12x2 sessions full-time students have a semester.

### **7. How did you design your blended learning course?**

First, I considered the ratio of contact hours and e-learning hours in the 12-week semester, but this was given. I suspected this course would be much more work, both for me and for the students, based on the request of Prof. Nikolov that students should be provided tasks to do weekly. I also decided to develop my own electronic materials for the courses.

### **8. What experiences did you have with e-learning before doing this course?**

Nothing at all in terms of planning and implementing one, except for what I have mentioned earlier at question number 2.

### **9. What did you foresee in the planning phase as possible difficulties?**

You mean difficulties for me or for the students? As for me, I was wondering how to find time for preparing the electronic course materials besides the normal teaching load and publication requirements we have. In UP we are required to do 5-6 courses a semester. It took me the whole summer holidays to develop materials for the Teaching Vocabulary course only, and I did not manage to complete it in one go. So materials development is time-consuming and tedious, if you want to do a good job, but I thought I would only need to update it a little bit in the subsequent semesters. I was also worried about the technicalities of e-materials design, even though I had done two courses on this and was enthusiastic about using new technology in the courses.

As for the students, I suspected they would find the course more difficult than other courses due to having to prepare weekly instead of bi- or tri-weekly. Also, in a blended learning course no one can “hide”, everyone’s work is clearly visible on the platform, unlike in “traditional” classrooms. I also expected that some students would have technical difficulties as most of them in the programme are not young, going for their second degree, in their forties or even fifties sometimes. Using the internet, *CooSpace* and other electronic platforms would be new or even alien to them. So I expected some resistance in this respect.

### **10. How did you (re)design the materials for the course? How did they work?**

I used Exe editor for designing the whole course and the materials, which was uploaded to *CooSpace* in scorm format and students could work on the tasks on their own. The syllabus assigned the weekly parts to be completed in the e-material and *CooSpace* was used for submitting tasks, readings were uploaded here in the documents section and students also had regular discussion type of tasks on *CooSpace* Forum. They worked very well with most students, but there were some who had serious technical difficulties, as I had predicted, and even asked me to give them the materials in *Word* doc format instead ☺

### **11. How did you prepare for the course?**

I intended to prepare all the materials and tasks in advance, before the semester started. I did not manage the first time, but in two or three semesters I completed them and only revised and updated them later, at the beginning of each new semester, based on my experiences with the application of the material.

### **12. In what ways was preparing for this blended course different from a traditional one?**

It requires much more work in the preparation phase, definitely, and regular work in the application phase as well. So it is not at all less work than traditional classes, as many people would think, on the contrary, it is much more work for everyone. But it can be very efficient I think.

### **13. What e-learning elements were included in the course? How did they work?**

I made the materials interactive, so students could check their own understanding of the materials they worked on. Forum discussions were regular in which they either had to give their



opinions on a certain issue, comment on each other's views or negotiate and reach an agreement on something. One of the aims of such tasks was to form a community.

#### **14. How did students work in the e-learning mode?**

Every week they read or did the assigned chapter/section of the interactive material (available on *CooSpace* in scorm format) on their own, and did a task that was involved in the material. The weekly tasks were of two major types: forum discussion or submitting something on *CooSpace*.

#### **15. What e-learning platform did you use? How did it work?**

I used *CooSpace* and *Exe editor*, they both worked well, I am satisfied with them. Only one student did not manage to open the Exe materials, or gave up too soon. I like using *CooSpace*. I know Moodle, too, but that is not supported if I happen to have any technical problems, so I assume *CooSpace* is OK for my purposes. One can always ask for extension of space or assistance if in trouble. I know Exe is old and not developed any longer, so I'd be interested in trying out new ones in the future.

#### **16. How were the students assessed?**

They were assessed based on their forum comments (how regular they were and their content) and the submitted tasks. In the first semester I asked them to submit a research paper at the end of the course individually, but later I experimented with projects in groups of three or four, which turned out to be successful.

#### **17. What kind of feedback did you use?**

If it was a *CooSpace* submission, students uploaded their files, I downloaded them, read them and wrote my comments into the document, then uploaded the files on *CooSpace* with my comments. They could ask questions right there and I replied on the same spot. This proved to be very efficient for me, much better than searching for and losing emails. This is what I do in "traditional" courses as well. If it was a Forum task, I read their comments and discussions regularly, "liked" them (or not), and added my own comments occasionally. Sometimes it was necessary to clarify the task, or restrict or direct the "conversation" a little bit.

#### **18. What kind of feedback did you get from the students?**

I used a focus-group interview at the end of the semester, that is I asked the students about their opinions in class.

#### **19. How did the students respond to the new experiences? What did you think they appreciated? What difficulties did you notice? How did you manage them?**

They said they enjoyed the forum discussions very much and doing the interactive materials, but they said they would not like to have another blended learning course in the future as it was a lot of work. I understand this fully, as, as far as I know, in foreign countries where blended or e-learning has its traditions now, students are required to take about three courses a semester, whereas here it is not uncommon to have 13-18 different courses a semester in their two majors. I think it would be more efficient to give them more about less subjects, that is to go deeper into some subjects than having so many courses touching upon issues superficially. But this is a curriculum design issue ☺

**20. What experiences did you gather with your first blended learning course? List the advantages and disadvantages.**

Overall, I had positive experiences. I was a bit frustrated about not being able to prepare everything I had planned on time, but this was remedied in the next semesters, and I think the courses are improved every semester. The advantages, I would say, are that students can spare travel costs and can work from their homes at their own pace. This is very important for in-service teachers or parents with young babies. The weekly tasks link them to other group members, so they do not feel lost and can learn a lot from each other. This is why the project tasks worked well, too. If they have questions, they can ask each other or the tutor online. I can't really think of any serious disadvantages from the students' point of view, if not the amount of work, as has already been mentioned. It might happen that some students are too shy to ask questions, but that also happens in class. From the tutor's point of view, it is positive that the progress of the students is easy to follow through the weekly tasks, everyone must do the work, there is less chance to remain invisible, like in a traditional classroom. A disadvantage can be the amount of work required for preparing a good blended course, but then the implementation phase is rewarding.

**21. What should be changed and what kind of help is needed? Are there further courses you would like to do in a blended learning or fully online way?**

I expect that the amount of work put into developing an online course would not be appreciated much by the leaders of the university. Progress in this area can only be expected if this type of extra work is more appreciated both financially and by making time available for participating tutors for course development. I would also be glad to have technical support, e.g. personnel and equipment for making video recordings or digitalizing the materials I develop. The beginnings of this process can be seen in the TAMOP projects, but this is only available for a short period of time. Still, I'd be willing and glad to do future blended learning courses, and I deliberately say blended and not e-learning courses, as contact hours are necessary and beneficial in my experience.

## **Interview E5: William**

### **1. What blended learning course did you teach?**

I taught “New Englishes”, a course about different variants, dialects of English spoken by native and non-native speakers of the language throughout the world.

### **2. How much information did you have about e-learning and blended learning? Where did you get it from?**

I used to have course in pedagogy a couple of years ago where we learned about various types or kinds of education of which non face-to-face learning (aka distance learning) was a part. It was there that I heard and read about distance and blended learning in more details.

### **3. What were your first thought in connection with blended learning?**

I had had the opportunity to participate in a kind of blended learning course as student prior to I was honored with the task of teaching a course that was to be delivered partially online. At that time when I was a student participant, I found it convenient as we did not have to move from home. On the other hand, there was a speck of a strange notion to it in a sense that it lacked personal contact. But answering your original question, my first thought was pretty optimistic, I think I was eager to learn about the experience. If there is such technology at our disposal, why should we leave it unexploited, after all?

### **4. Why did you decide to undertake this option?**

The decision to choose this option was not mine. In actuality, I merely got the opportunity to continue the course that I had taught in the previous semester. But this time, it had been redesigned into a blended course. As a matter of fact I was interested to see how this method was going to evolve and work out for us.

### **5. How many students participated in the course?**

9

### **6. What ratio was implemented in a blended learning format?**

We had two sessions according to the traditional scenario. A two-hour session at the first occasion was an introductory seminar regarding both the basic topic and personal introductions. In the second half of the seminar students chose a topic (some of them sent their choice later on via email) which they prepared for and presented during our second in-class session. The time period between these two sessions was supposed to be used for preparation and on-line consultations. Literature that students could choose to rely on was made available on Coospace. In the introductory course we agreed upon “coming together” on Skype for personal consultations. Not many students were knocking on the virtual door, I must tell. But those who logged in seemed to have found the interactions useful. At least that is what they said. 😊

### **7. How did you design your blended learning course?**

Since there were only occasions for us to meet personally, the rest of the seminars had been planned to be held online throughout the semester. During the first class details were discussed about technological details. However, Skype or online call possibilities provided by Gmail seemed to be viable options. The question was, when shall we “convene” online? Option for classes were narrowed down Saturday as it did not seem to interfere with other daily duties on weekdays. The exact time for our classes was discussed during the first class in order for us to find the best time slot. When students had picked a topic, they were asked to research it as thoroughly as possible and present it via Skype and Gtalk on one of the dates we agreed on. It was also agreed upon that we kept track of the process in which it gears toward completion by means of continuous online contact through which we would see the development of your work phase by phase. Phases included their research plan (approach and aims of research, what literature(s) they intended to use), drafts of papers, etc.

### **8. What experiences did you have with e-learning before doing this course?**

It was completely a maiden voyage for me as a teacher. Like I have written above, I had had experience with this method only as a student prior to these sessions.

### **9. What did you foresee in the planning phase as possible difficulties?**

I had the premonition that without face-to-face contact and the physical “constraints” of the classroom atmosphere, motivation for active participation might ebb away (based on how I occasionally felt for my online course as a student).

### **10. How did you (re)design the materials for the course? How did they work?**

I had uploaded all the “compulsory” materials on *Coospace* but it was no novelty. I had done that previously as well. The new “design” was that I had planned more one on one virtual meetings with individual students. This meant that I had the literature for each topic plus some individual research I thought to be useful to share with each student via *Skype* calls when they discussed the relevant phase of their research.

### **11. How did you prepare for the course?**

I kept the introductory course according to its original scenario (i.e. PPT presentation) and I broke down the topics to individuals (looking for additional information and preparing questions to them).

### **12. In what ways was preparing for this blended course different from a traditional one?**

I think it was the time issue. One on one consultations would give more time to spend with students who eventually sent their emails to assign for a personal online discussion.

**13. What e-learning elements were included in the course? How did they work?**

See above. Regretfully, not all of the students would turn up on online consultations.

**14. How did students work in the e-learning mode?**

Most of them sent their projects (draft and/or complete) via emails or *Coospace* and did not want to use the opportunity offered by *Skype* or *GTalk*.

**15. What e-learning platform did you use? How did it work?**

*Coospace*, *Skype*, *Gmail* chat. Even *Facebook*. ☺ To sum it up, I'd say that I failed to motivate students for more active participation in online discussions.

**16. How were the students assessed?**

Evaluation was based on your oral presentation (50%) on your chosen topic, and the research paper (50%) you write on the topic you previously presented. Important aspects of evaluating their presentation were:

- how many sources they had managed to synthesize in their presentation (more than 5)
- how representative and reliable their sources were (no anonymous notes from the Internet),
- how independent the presentation was (do not read out written notes!),
- how helpful their handout was for the audience
- how correct the references were
- handouts were supposed to be sent over to other students or distributed on spot

**17. What kind of feedback did you use?**

Points highlighted in Q16 were discussed with students. In the case of online talks we negotiated how good and lucrative the direction of the research paper seemed to be.

**18. What kind of feedback did you get from the students?**

**19. How did the students respond to the new experiences? What did you think they appreciated? What difficulties did you notice? How did you manage them?**

Answer to Q17-20: Students' feedbacks were reflections given mostly on the material, the topics we had covered. Highlights mentioned how they could incorporate the materials into their everyday teaching practice (students were teachers doing their MA studies via correspondence). So far as reactions to online learning was concerned, I understood they found it interesting but not on a highly excited level. Embedded online resources such as media files were thought to be amusing and entertaining. Students expressed difficulties that manifested themselves in the quantity of material to be learned (mostly in other courses) therefore admittedly they lacked the

time to exploit the possibilities online learning put forth at their disposal. My major intention was to give them insights into the domain of dialects laced with interesting non-linguistic issues such as historical background and reference to current issues. Their time problems I could not solve and I was not that strict when I gave them their grades. As a matter of fact, they came up with pretty good papers! If I did it again, I would be more “serious” on participating in online discussions and would request that students follow each other in these virtual platforms more consistently. On the whole applying the Internet and its various channels in learning is very useful, even indispensable if we consider the vast vault of information we can elicit from them. The greatest advantage of it is what is its disadvantage. It is the fact that you are not there in person, therefore traditional personal contact is lost a bit in the cracks of the ether. This is why it can happen that you do not feel certain obligations to fulfill such as keeping deadlines or maintaining contact via these online platforms.

**20. What experiences did you gather with your first blended learning course? List the advantages and disadvantages.**

**21. What should be changed and what kind of help is needed? Are there further courses you would like to do in a blended learning or fully online way?**

### **Interview E6: Elisabeth**

**1. What blended learning course did you teach?**

In the Spring Term of 2012, I taught the seminar Portraits of British Canonical Authors.

**2. How much information did you have about e-learning and blended learning? Where did you get it from?**

I discussed what blended learning means with Marianne Nikolov and with my colleague, Mónika Fodor.

**3. What were your first thoughts in connection with blended learning?**

I was worried that there would not be enough time to properly explain the texts to students.

**4. Why did you decide to undertake this option?**

There could not be many enough courses squeezed into the time-schedule of correspondence students in the MA programme of Teaching English Language and Culture.

**5. How many students participated in the course?**

There were eight students in the course.

**6. What ratio was implemented in a blended learning format?**

Two-third was implemented in a blended-learning format.

**7. How did you design your blended learning course?**

First, I wrote the programme of the seminar then I decided which sessions should require the presence of the students and which themes and readings they can work on at home.

**8. What experiences did you have with e-learning before doing this course?**

Not much: I had heard about e-learning before and, occasionally, searched the internet for information on existing e-learning courses.

**9. What did you foresee in the planning phase as possible difficulties?**

Oral communication during the sessions would have to be reduced to written responses sent to *CooSpace*, therefore students will be less willing to express their thoughts.

**10. How did you (re)design the materials for the course? How did they work?**

I asked for more response papers and I also asked students to upload and peer-review their papers. Students mostly praised each other's work and most responses were short and without any focus.

**11. How did you prepare for the course?**

I knew what material I wanted to teach and I had to think about with what new methodologies I could achieve results.

**12. In what ways was preparing for this blended course different from a traditional one?**

I had to think more about the proper method of communication and how to give feedback on student work.

**13. What e-learning elements were included in the course? How did they work?**

Texts were uploaded to *CooSpace* and students were asked to send me their response papers and essays which I then uploaded for them to read and comment upon each other's works.

**14. How did students work in the e-learning mode?**

They communicated with each other and with me mostly through *CooSpace*.

**15. What e-learning platform did you use? How did it work?**

*CooSpace*: it served my purposes.

**16. How were the students assessed?**

They commented on each other's works and I evaluated their papers and their participation, electronical and personal, in the course.

**17. What kind of feedback did you use?**

Again, *CooSpace*, they sent comments there.

**18. What kind of feedback did you get from the students?**

Comments and remarks when they came to a session.

**19. How did the students respond to the new experiences? What did you think they appreciated? What difficulties did you notice? How did you manage them?**

They found it a bit difficult first. They appreciated the opportunity to read the works of their groupmates and also to comment on them. The difficult part for them was the uneven load of reading during the term. I cannot manage it better unless I reduce the number of novels that they are asked to read.

**20. What experiences did you gather with your first blended learning course? List the advantages and disadvantages.**

Advantages: it helps students improve their writing skills and this is perhaps a new way of communication, through *CooSpace*, between the students and the teacher, which has its own advantages, too.

Disadvantages: students are not given the chance to talk so much during sessions, writing comments and submitting written work dominate in the class.

**21. What should be changed and what kind of help is needed? Are there further courses you would like to do in a blended learning or fully online way?**

Perhaps a more sophisticated *CooSpace*, which would allow us to do more things online, would make those blended learning classes more colourful. I would need professional help in how to use *CooSpace* better. Online learning can be a good and profitable kind of teaching if you are aware of the different methods and pedagogical aims of how to teach such courses.



## 2.2 Study 4: Addressing structured vocabulary development and practice

### Appendix F: The final vocabulary test using the *Vocabulary Knowledge Scale* in the 2015/2016 fall semester

Name: \_\_\_\_\_

Final (in-class) vocabulary test

Instructions

Welcome to the final (in-class) vocabulary test in the Listening and Speaking Skills I seminar!  
You can fill out maximum two of the five options together for one word (for example IV and V).

Please do not fill out III and IV together for one word because you will not get extra points for it.

When writing sentences go for the best one you can think of and try to avoid oversimplified sentences like the one you can see in the sample solution with *beautiful*.

The scoring of the items is the following:  
I & II: 0p,  
III: 1p,  
IV: 2p and  
V: 4p.

List of words	I. I don't remember having seen this word before (✓)	II. I have seen this word before, but I don't know what it means (✓)	III. I have seen this word before, and I think it means: (synonym or translation)	IV. I know this word. It means: (synonym or translation)	V. I can use this word in a sentence. (Write a sentence.)
verdict (recommended solution)				<i>final score</i>	<i>The final verdict the judges gave was a perfect 10.</i>
beautiful (not recommended solution)					<i>Beautiful apple.</i>

Good luck!

<b>List of words</b>	<b>I. I don't remember having seen this word before (✓)</b>	<b>II. I have seen this word before, but I don't know what it means (✓)</b>	<b>III. I have seen this word before, and I think it means: (synonym or translation)</b>	<b>IV. I know this word. It means: (synonym or translation)</b>	<b>V. I can use this word in a sentence. (Write a sentence.)</b>
<i>audience</i>					
<i>bargain</i>					
<i>common</i>					
<i>contemporary</i>					
<i>discipline</i>					
<i>ensure</i>					
<i>establish</i>					
<i>former</i>					
<i>genuine</i>					
<i>interior</i>					
<i>justification</i>					
<i>leisure</i>					
<i>manufacture</i>					
<i>neglect</i>					
<i>obtain</i>					
<i>opportunity</i>					
<i>primarily</i>					
<i>purpose</i>					
<i>quote</i>					
<i>regulation</i>					
<i>scholarship</i>					
<i>tension</i>					
<i>ultimate</i>					
<i>volunteer</i>					
<i>waste</i>					

## Appendix G: Categorized lists of the vocabulary items used in the *LSSI* course in the 2015/2016 fall semester

**Table G1:** The number of word-class items of the student presentation vocabulary lists

Vocabulary set	Number of items			
	Noun	Verb	Adjective	Adverb
27 club	12	6	2	0
Alcatraz prison	8	7	5	0
Arctic Monkeys	16	0	4	0
Bass guitars	19	1	0	0
Bestsellers	9	7	3	1
British culture	15	2	3	0
<i>Dancing With The Stars</i>	13	4	3	0
Equestrianism	15	3	2	0
Grunge	14	2	4	0
Guns N' Roses	10	5	5	0
<i>How I Met Your Mother</i>	17	2	1	0
How to avoid winter depression	14	2	3	1
Legends, myths and curiosities	10	4	5	1
London	18	1	1	0
Metallica	12	3	5	0
Online shopping	12	4	4	0
Thanksgiving	13	2	4	1
The sixties	15	4	1	0
Vlogs	17	1	2	0
<b>Total number of items</b>	<b>259</b>	<b>60</b>	<b>57</b>	<b>4</b>

**Table G2:** The number of word-class items of the *NGSL + AWL* and the listening + Nation and Beglar (2007) lists used throughout the semester

Vocabulary set	Type of set	Number of items			
		Noun	Verb	Adjective	Adverb
1a	<i>NGSL + AWL</i>	14	11	9	1
2a	<i>NGSL + AWL</i>	17	10	8	0
2b	Listening tasks	9	3	3	0
3a	<i>NGSL + AWL</i>	19	9	6	1
3b	Listening tasks	5	1	9	0
4a	<i>NGSL + AWL</i>	20	8	6	1
4b	Listening tasks	6	5	3	1
5a	<i>NGSL + AWL</i>	20	9	4	2
5b	Listening tasks	11	2	2	0
6a	<i>NGSL + AWL</i>	14	14	6	1
6b	Listening tasks + 5k	7	4	4	0
7a	<i>NGSL + AWL</i>	8	13	9	5
7b	Listening tasks + 11k	11	2	2	0
8a	<i>NGSL + AWL</i>	13	9	11	2
8b	Listening tasks + 14k	7	3	4	1
9a	<i>NGSL + AWL</i>	13	13	7	2

9b	Listening tasks + 10k	8	3	4	0
10a	NGSL + AWL	17	8	8	2
10b	Listening tasks + 6k	8	2	5	0
11a	NGSL + AWL	19	8	6	2
11b	Listening task + 7k	12	2	1	0
12a	NGSL + AWL	14	15	6	0
12b	Listening tasks + 12k	12	2	1	0
<b>Total number of items</b>		<b>284</b>	<b>156</b>	<b>124</b>	<b>21</b>

**Table G3:** The sorted lists of every vocabulary item used in the course

<b>Selected items from the <i>NGSL</i> 1<sup>st</sup> 1,000 words</b>		<b>Selected items from the Nation and Beglar (2007) test</b>	
affect	responsibility	aperitif (11k)	gauche (14k)
feature	similar	atop (14k)	haze (12k)
former	skill	awe (10k)	hutch (11k)
increase	statement	azalea (7k)	limpid (14k)
indicate	suggest	bawdy (14k)	malign (6k)
maintain	supply	bristle (7k)	mussel (11k)
obvious	suppose	canonical (14k)	pallor (11k)
particular	tend	cavalier (6k)	quilt (7k)
performance	throughout	coven (12k)	refectory (12k)
potential	treat	cranny (10k)	reptile (12k)
purpose	ultimate	crowbar (10k)	soliloquy (12k)
range	various	demography (7k)	stealth (7k)
recently		devious (6k)	threshold (6k)
reduce		egalitarian (10k)	upbeat (10k)
reference		emir (11k)	veer (6k)
<b>Selected items from the <i>NGSL</i> 2<sup>nd</sup> 1,000 words</b>			
annual	majority	promote	severe
decision	manufacture	properly	shelter
device	minority	proportion	shout
emphasize	motion	provision	solve
engage	multiple	pursue	struggle
entire	narrow	quantity	sufficient
exchange	negotiate	quote	suitable
exhibition	occasionally	recommendation	surface
expand	occupy	recover	survey
expectation	oppose	refuse	suspect
fault	origin	reject	temporary
federal	outcome	relatively	twice
grant	outline	rely	unable
hardly	participate	request	unlike
immediately	peak	requirement	urge
independent	permanent	retire	vary
internal	practical	reveal	volunteer
introduction	prevent	route	wage
investigate	primarily	schedule	waste
landscape	principle	scheme	witness
leadership	priority	sequence	
legislation	proceed	settlement	
<b>Selected items from the <i>NGSL</i> 3<sup>rd</sup> 1,000 words</b>			
contest	intent	praise	specify
creature	interior	preference	stake
density	interpret	preparation	steady

dispute	involvement	pretend	strengthen
entertain	lecture	privilege	submit
equivalent	liability	probability	subsequent
exceed	measurement	proof	substitute
fascinate	membership	qualification	summary
flexible	modify	reasonably	supplement
foundation	mutual	recognition	suspend
fragment	neglect	recruit	sustain
framework	numerous	regularly	tension
fulfill	obligation	reliable	tongue
genuine	opponent	remarkable	trace
gradually	overcome	remote	translate
grand	ownership	resist	uncertainty
hypothesis	parallel	restore	underlie
implementation	peer	reverse	undertake
incorporate	penalty	revise	venture
initially	pension	secondary	violent
innocent	perception	shore	wise
inquiry	permission	significance	withdraw
intense	personnel	silent	

---

**Selected items from the AWL**

---

accommodation	approve	circumstance	continuity
accompany	architecture	cite	contradict
accomplish	argument (2x)	clarify	controversy
accuse	arise	collapse	conventional
achievement	arrangement	commercial	convince
acquire	arrival	commitment	cope
addition	artificial	committee	correspond
adequate	assure	common	counsel
adjust	attempt	compare	counter
admire	attitude	compensation	coverage
adolescent	attribute	competent	credibility
advertise	audience	competitive	criterion
advise	authority	compliant	crucial
affirm	barely	comprehensive	currency
afford	bargain	compromise	decade
agenda	behavior	concern	declare
alter	benefit	conduct	decrease
amount	bias	confident	definite
ancestor	bilingual	confuse	delay
announce	briefly	consequence	deliberately
anxious	broadcast	considerable	demand
appearance	burden	consideration	depict
applause	candidate	constitute	destination
application	capable	construction	disadvantage
appointment	charity	consumer	disagree
appreciate	circulation	contemporary	discipline
appropriate		content	dismiss
distant	formerly	meaningful	scenario
distinguish	fortune	mobility	scholarship
divide	fraction	observer	separation
domestic	gender	obtain	simplify
duration	generalize	offspring	socialize
efficiency	gently	overview	sophisticate
elaborate	govern	parental	standardize
emerge	guideline	parenthesis	straightforward
embarrass	habitat	partial	surplus
enable	harvest	phenomenal	synthetic

---

encounter	headquarter	plausible	thesis
encourage	identical	postgraduate	thirst
enhance	indigenous	preliminary	tournament
enormous	industrialization	presume	trait
ensure	infinite	profound	tremendous
enterprise	initiate	progression	undermine
essence	interface	quantitative	underneath
establish	interrupt	questionnaire	unify
estimation	inversion	regime	unity
eventually	irrelevant	regression	unstable
evidence	judgment	reinforce	uplift
excitement	justification	reliability	upward
exclude	leisure	replicate	usage
execute	likelihood	resemble	vague
explicit	linguistic	retrieve	valid
extraordinary	manual	ridiculous	verbal
formation	marginal	scatter	widespread

---

**Items from the listening exercises vocabulary sets**

---

accentuate	ubiquitous	deficit	forage
addictive	weep	devotion	fume
alleged	candid	dial	gather
anniversary	CEO	dim	geek
appealing	clunky	disproportionately	gorgeous
assertive	collective	distraction	graphology
attach	comeback	doofus	hostile
ban	comprehension	doppelganger	hypodermic
bankrupt	congregate	doppelnamer	icing
barbed wire	consensus	drudgery	illuminate
basket case	constant	emperor	impediment
blazing	crayon	enchant	impertinent
blossom	cruel	enthusiasm	initial
boombox	curator	entrepreneur	interfere
breeze	curiosity	establishment	interleave
bully	curriculum	flip	interweave
burst	decipher	fluorescent	intricate
invest	patent	revenue	store
jammed	plywood	robin	strive
jock	portable	rouge	stumble
layer	prestigious	sailor	surveillance
lean	prudent	scavenger	suspicious
limb	Quaker	scrap	sustainable
locate	rage	screening	taxonomy
manuscript	ramification	script	thread
medic	real estate	shift	thumb
memorize	refurbish	shutter	torment
merge	remedy	skew	trade
mishaps	renewable	sniff	transcend
networking	repetition	solidarity	transition
niche	reputation	soothing	upheaval
nominee	resemblance	spontaneous	valor
outskirts	resurrect	standpoint	wasteland
pastor	retirement	stich	

---

**Items from the student presentation vocabulary sets**

---

ability	appetite	bombard	comedian
absence	artist	bootlegging	common
acquire	artist	broadcast	community

adaptation	ash	browse	competition (2x)
addiction	associate	burden	compiler
advertise	attain	bury	complex
advertising	attraction	cake	compound
aggressive	audience	capital	concern
airport	audience	capital	confine
album	award	capitalism	confinement
alder	banish	casserole	consist
alienation	bargain	cast	consistent
amplifier	base on	catchphrase	constituent
amputate	bean	century	consumer
anger	beauty guru	chart	consumerism
anniversary	bestseller	cheat	contemporary
announce	bite	cheeky	contestant
Antarctica	blessing	childlike	contract
apathy	blockbuster	climate	counterculture
appear	boil	collapse	
create	dissonant	equip	faulty
cricket	distortion	equipment	feedback
criticism	ditch	equipment	felon
crowd	double bass	era	flagship
culinary	double-decker	establish	flashback
culture	dressage	estimate	form
cumulative	drums	estranged	formation
curly	edge	exaggeration	fortress
debut album	education	examination	framing device
define	elaborate	execute	freeze
depend	eliminate	expand	French horn
depression	emerge (2x)	expansion	fret
depression	endure	experiment	fretboard
destroy	enlarge	expert	gamer
diminish	ensure	explanation	gap
disadvantage	entertainment	fake	garage band
disc	enthusiastic	fame	genre
discipline	environmental	fan	genuine
discount	equestrianism	fatality	gobble
disorder	friendliness	fault	gravy
groupie	immerse	legend	monopolize
grunge	incident	liberation	monotonous
guard	indie	light therapy	motionless
habit	induct	loan	movement
hacker	influence	lyrics	mug
harmony	injury	magnetic	multiple
harmony	international	mahogany	mushroom
harvest	invasion	mainstream (2x)	music producer
haul	island	manager	national
haunted	isolate	manipulative	native
headstock	item	manufacture	nickname
herd	judge	maple	nomination
hippie	keep	marketing	norm
homicide	kettle	materialism	notorious
hormonal	kick	merch	nursery school
host	labyrinth	middle class	observe
humbug	lane	misinterpret	obsession (2x)
hype	laser tag	mixed	obstacle
hypothermia	lead	moniker	opportunity
illusion	lead guitar		

overdose	prehistoric	railway	revolution
overhead	premature	range	rhythm
palace	presence	range	rhythm
parade	prevent	rank	riot
parliament	primarily	raw	river
passage	prisoner	rebellion	roam
pecan	privacy	record	rock and roll
penitentiary	process	recreation	rocket
percentage	producer	refer	Roman
performance (2x)	progressive	regard	root
pick	prohibition	regular	root
pickup	prominent	regulation	rosewood
pitfall	prominently	religious	saddle
poplar	proper	remain	scene
population	psychedelic	reminiscent	scholarship
postage	psychedelic	residence	score
prank	publish	retailer	Seasonal Affective
preceding	pumpkin	reunion	Disorder (SAD)
precisely	purpose	review (2x)	secular
	race		separate
			severe
ship	symbol (2x)	tutorial	
show jumping	symptom	unconventional	
sight	term	underrate	
significant	tertiary	united	
sinister	texture	unkempt	
sitcom	theory	verdict	
slap	therapy	victim	
social media	therefore	video	
soldier	thrift	virtual	
soundboard	time-consuming	vlog	
spam	tone	vocal	
spokesman	tour	vocals	
station	tower	volunteer	
storyline	trample	vote	
string	transport	vulnerable	
studio	treason	walnut	
subgenre	tribe	womanizer	
suggestion	trophy	worldwide	
suicide	tube	wound	
supposedly		writer	

---



## Appendix H: Supplementary tables to Study 4

**Table H1:** Items with 81-100% completion on the first online vocabulary test (*italics*: matching items) in the 2015/2016 fall semester

		<b>Online vocabulary test #1 (1/5)</b>				
		SD	Mean	Correct	Incorrect	Not completed
Items with 81-100% competition (16-19/19 points)	<i>admire</i>	0.374	0.842	16	3	0
	<i>appealing</i>	0.229	0.947	18	1	0
	competent	0	1	19	0	0
	<i>confuse</i>	0.315	0.894	17	2	0
	<i>content</i>	0	1	19	0	0
	crash	0.315	0.894	17	1	1
	<i>decipher</i>	0.374	0.842	16	3	0
	<i>declare</i>	0.315	0.894	17	2	0
	<i>decrease</i>	0	1	19	0	0
	<i>distant</i>	0	1	19	0	0
	<i>domestic</i>	0	1	19	0	0
	<i>entire</i>	0.229	0.947	18	1	0
	<i>evidence</i>	0	1	19	0	0
	<i>exchange</i>	0	1	19	0	0
	fault	0.229	0.947	18	1	0
	<i>faulty</i>	0.315	0.894	17	2	0
	habitat	0.229	0.947	18	1	0
	<i>judgment</i>	0.229	0.947	18	1	0
	<i>offspring</i>	0	1	19	0	0
	<i>qualitative</i>	0.315	0.894	17	2	0
	<i>recruit</i>	0.229	0.947	18	1	0
	<i>reliable</i>	0	1	19	0	0
	<i>reputation</i>	0.315	0.894	17	2	0
	<i>strive</i>	0.374	0.842	16	3	0
<i>sustain</i>	0.315	0.894	17	2	0	
tongue	0.229	0.947	18	1	0	
witness	0.315	0.894	17	1	1	

**Table H2:** Items with 61-80% completion on the first online vocabulary test (*italics*: matching items) in the 2015/2016 fall semester

		<b>Online vocabulary test #1 (2/5)</b>				
		SD	Mean	Correct	Incorrect	Not completed
Items with 61-80% competition (12-15/19 points)	browse	0.418	0.789	15	4	0
	CEO	0.418	0.789	15	4	0
	<i>genuine</i>	0.425	0.736	14	5	0
	impertinent	0.477	0.684	13	4	2
	independent	0.477	0.684	13	5	1
	merge	0.495	0.631	12	7	0
	mishaps	0.495	0.631	12	4	3
	<i>praise</i>	0.418	0.789	15	4	0
	<i>trait</i>	0.418	0.789	15	4	0

**Table H3:** Items with 41-60% completion on the first online vocabulary test in the 2015/2016 fall semester

<b>Online vocabulary test #1 (3/5)</b>						
	Item	SD	Mean	Correct	Incorrect	Not completed
Items with 41-60% competition (8-11/19 points)	appropriate	0.507	0.421	8	11	0
	attitude	0.507	0.578	11	6	2
	competent	0.512	0.526	10	7	2
	consumer	0.507	0.578	11	8	0
	interfere	0.512	0.473	9	5	5
	majority	0.507	0.578	11	6	2
	proceed	0.512	0.526	10	5	4

**Table H4:** Items with 21-40% completion on the first online vocabulary test in the 2015/2016 fall semester

<b>Online vocabulary test #1 (4/5)</b>						
	Item	SD	Mean	Correct	Incorrect	Not completed
Items with 21-40% competition (4-7/19 points)	bargain	0.452	0.263	5	11	3
	fascinate	0.495	0.368	7	10	2
	principle	0.477	0.315	6	10	3
	retirement	0.452	0.263	5	14	0
	sequence	0.452	0.263	5	13	1
	statement	0.495	0.368	7	10	2

**Table H5:** Items with 0-20% completion on the first online vocabulary test in the 2015/2016 fall semester

<b>Online vocabulary test #1 (5/5)</b>						
	Item	SD	Mean	Correct	Incorrect	Not completed
Items with 0-20% competition (0-3/19 points)	comprehensive	0.229	0.052	1	17	1

**Table H6:** Items with 81-100% completion on the second online vocabulary test (*italics*: matching items) in the 2015/2016 fall semester

		<b>Online vocabulary test #2 (1/5)</b>					
		Item	SD	Mean	Correct	Incorrect	Not completed
Items with 81-100% competition (17-20/20 points)	<i>accommodation</i>	0	1	20	0	0	
	<i>accomplish</i>	0	1	20	0	0	
	anniversary	0	1	20	0	0	
	<i>bilingual</i>	0	1	20	0	0	
	<i>blazing</i>	0	1	20	0	0	
	<i>broadcast</i>	0	1	20	0	0	
	<i>compensation</i>	0.223	0.95	19	1	0	
	<i>competition</i>	0	1	20	0	0	
	<i>complaint</i>	0.223	0.95	19	1	0	
	<i>consumerism</i>	0	1	20	0	0	
	<i>contemporary</i>	0	1	20	0	0	
	<i>drudgery</i>	0	1	20	0	0	
	<i>enchant</i>	0.307	0.9	18	2	0	
	<i>exaggeration</i>	0.366	0.85	17	3	0	
	<i>exhibition</i>	0	1	20	0	0	
	<i>herd</i>	0	1	20	0	0	
	<i>host</i>	0	1	20	0	0	
	<i>illuminate</i>	0	1	20	0	0	
	<i>influence</i>	0	1	20	0	0	
	<i>intricate</i>	0	1	20	0	0	
<i>irrelevant</i>	0.223	0.95	19	1	0		
<i>questionnaire</i>	0	1	20	0	0		
<i>quote</i>	0.223	0.95	19	1	0		
<i>remedy</i>	0	1	19	0	0		
<i>restore</i>	0.307	0.9	18	2	0		
scholarship	0.307	0.9	18	2	0		
trophy	0.366	0.85	17	2	1		
weep	0.366	0.85	17	0	3		

**Table H7:** Items with 61-80% completion on the second online vocabulary test (*italics*: matching items) in the 2015/2016 fall semester

		<b>Online vocabulary test #2 (2/5)</b>					
		Item	SD	Mean	Correct	Incorrect	Not completed
Items with 61-80% competition (13-16/20 points)	ancestor	0.489	0.65	13	7	0	
	audience	0.41	0.8	16	4	0	
	bankrupt	0.41	0.8	16	1	3	
	outskirts	0.489	0.65	13	6	1	
	<i>reminiscent</i>	0.444	0.75	15	5	0	
	screening	0.47	0.7	14	5	1	
	volunteer	0.41	0.8	16	3	1	

**Table H8:** Items with 41-60% completion on the second online vocabulary test in the 2015/2016 fall semester

<b>Online vocabulary test #2 (3/5)</b>						
	<b>Item</b>	<b>SD</b>	<b>Mean</b>	<b>Correct</b>	<b>Incorrect</b>	<b>Not completed</b>
Items with 41-60% competition (9-12/20 points)	depict	0.512	0.5	10	9	1
	distinguish	0.502	0.6	12	8	0
	landscape	0.512	0.5	10	10	0
	manufacture	0.51	0.45	9	7	4
	preparation	0.51	0.45	9	7	4
	soothing	0.512	0.5	10	8	2

**Table H9:** Items with 21-40% completion on the second online vocabulary test in the 2015/2016 fall semester

<b>Online vocabulary test #2 (4/5)</b>						
	<b>Item</b>	<b>SD</b>	<b>Mean</b>	<b>Correct</b>	<b>Incorrect</b>	<b>Not completed</b>
Items with 21-40% competition (5-8/20 points)	attach	0.444	0.25	5	10	5
	barely	0.444	0.25	5	9	6
	likelihood	0.47	0.3	6	12	2
	origin	0.502	0.4	8	11	1
	privilege	0.47	0.3	6	12	2
	shore	0.47	0.3	6	12	2

**Table H10:** Items with 0-20% completion on the second online vocabulary test in the 2015/2016 fall semester

<b>Online vocabulary test #2 (5/5)</b>						
	<b>Item</b>	<b>SD</b>	<b>Mean</b>	<b>Correct</b>	<b>Incorrect</b>	<b>Not completed</b>
Items with 0-20% competition (0-4/20 points)	advertising	0.41	0.2	4	16	0
	scenario	0.41	0.2	4	13	3
	verdict	0.41	0.2	4	14	2

**Table H11:** Items with 81-100% completion on the third online vocabulary test (*italics:* matching items) in the 2015/2016 fall semester

<b>Online vocabulary test #3 (1/5)</b>						
	<b>Item</b>	<b>SD</b>	<b>Mean</b>	<b>Correct</b>	<b>Incorrect</b>	<b>Not completed</b>
Items with 81-100% competition (16-18/18 points)	<i>acquire</i>	0	1	18	0	0
	<i>assure</i>	0.323	0.888	16	1	1
	<i>atop</i>	0.235	0.944	17	1	0
	<i>canonical</i>	0.235	0.944	17	0	1
	<i>capital</i>	0.235	0.944	17	0	1
	<i>clunky</i>	0.235	0.944	17	0	1
	<i>constituent</i>	0	1	18	0	0
	<i>cranny</i>	0.235	0.944	17	1	0
	<i>egalitarian</i>	0.235	0.944	17	1	0
	<i>elaborate</i>	0	1	18	0	0
	<i>examination</i>	0	1	18	0	0
	<i>extraordinary</i>	0.235	0.944	17	0	1
	<i>felon</i>	0	1	18	0	0
	<i>haunted</i>	0	1	18	0	0
	<i>hutch</i>	0.235	0.944	17	0	1
	<i>limpid</i>	0.235	0.944	17	0	1
	<i>monotonous</i>	0	1	18	0	0
	<i>mussel</i>	0.235	0.944	17	0	1
	<i>pallor</i>	0	1	18	0	0
	<i>population</i>	0.235	0.944	17	0	1
	<i>prohibition</i>	0	1	18	0	0
	<i>regulation</i>	0	1	18	0	0
	<i>settlement</i>	0.323	0.888	16	1	1
<i>suggestion</i>	0	1	18	0	0	
<i>upbeat</i>	0	1	18	0	0	
<i>wise</i>	0.235	0.944	17	0	1	

**Table H12:** Items with 61-80% completion on the third online vocabulary test (*italics:* matching items) in the 2015/2016 fall semester

<b>Online vocabulary test #3 (2/5)</b>						
	<b>Item</b>	<b>SD</b>	<b>Mean</b>	<b>Correct</b>	<b>Incorrect</b>	<b>Not completed</b>
Items with 61-80% competition (12-15/18 points)	<i>attraction</i>	0.383	0.833	15	3	0
	<i>banish</i>	0.485	0.666	12	4	2
	<i>crowbar</i>	0.485	0.666	12	5	1
	<i>discipline</i>	0.383	0.833	15	2	1
	<i>motionless</i>	0.485	0.666	12	5	1
	<i>prehistoric</i>	0.383	0.833	15	1	2
	<i>revise</i>	0.383	0.833	15	2	1
	<i>sniff</i>	0.427	0.777	14	4	0
	<i>tribe</i>	0.383	0.833	15	2	1

**Table H13:** Items with 41-60% completion on the third online vocabulary test in the 2015/2016 fall semester

<b>Online vocabulary test #3 (3/5)</b>						
	Item	SD	Mean	Correct	Incorrect	Not completed
Items with 41-60% competition (8-1/18 points)	common	0.501	0.611	11	4	3
	concern	0.514	0.5	9	7	2
	fortress	0.511	0.444	8	9	1
	proof	0.501	0.611	11	6	1
	request	0.511	0.555	10	2	6
	residence	0.501	0.611	11	5	2

**Table H14:** Items with 21-40% completion on the third online vocabulary test in the 2015/2016 fall semester

<b>Online vocabulary test #3 (4/5)</b>						
	Item	SD	Mean	Correct	Incorrect	Not completed
Items with 21-40% competition (4-7/18 points)	gap	0.46	0.277	5	8	5
	initiate	0.46	0.277	5	12	1
	permanent	0.501	0.388	7	11	0
	prominent	0.427	0.222	4	13	1
	remarkable	0.427	0.222	4	13	1
	scatter	0.501	0.388	7	9	2
	spokesman	0.501	0.388	7	10	1

**Table H15:** Items with 0-20% completion on the third online vocabulary test in the 2015/2016 fall semester

<b>Online vocabulary test #3 (5/5)</b>						
	Item	SD	Mean	Correct	Incorrect	Not completed
Items with 0-20% competition (0-3/20 points)	flagship	0	0	0	17	1
	grand	0.235	0.055	1	15	2

**Table H16:** The grouped results of the 150 vocabulary items used in the three online vocabulary tests throughout the 2015/2016 fall semester

Online vocabulary test #1			Online vocabulary test #2			Online vocabulary test #3			
Items with 81-100 % completion			Items with 81-100 % completion			Items with 81-100 % completion			
<i>admire</i>	<i>distant</i>	<i>offspring</i>	<i>accommodation</i>	<i>contemporary</i>	<i>intricate</i>	<i>acquire</i>	<i>elaborate</i>	<i>pallor</i>	
<i>appealing</i>	<i>domestic</i>	<i>qualitative</i>	<i>accomplish</i>	<i>drudgery</i>	<i>irrelevant</i>	<i>assure</i>	<i>examination</i>	population	
competent	<i>entire</i>	<i>recruit</i>	anniversary	<i>enchant</i>	<i>questionnaire</i>	<i>atop</i>	<i>extraordinary</i>	<i>prohibition</i>	
<i>confuse</i>	<i>evidence</i>	<i>reliable</i>	<i>bilingual</i>	<i>exaggeration</i>	<i>quote</i>	<i>canonical</i>	<i>felon</i>	<i>regulation</i>	
<i>content</i>	<i>exchange</i>	<i>reputation</i>	<i>blazing</i>	<i>exhibition</i>	<i>remedy</i>	capital	<i>haunted</i>	<i>settlement</i>	
crash	fault	<i>strive</i>	<i>broadcast</i>	<i>herd</i>	<i>restore</i>	<i>clunky</i>	<i>hutch</i>	<i>suggestion</i>	
<i>decipher</i>	<i>faulty</i>	<i>sustain</i>	<i>compensation</i>	<i>host</i>	scholarship	<i>constituent</i>	<i>limpid</i>	<i>upbeat</i>	
<i>declare</i>	habitat	tongue	<i>competition</i>	<i>illuminate</i>	trophy	<i>cranny</i>	<i>monotonous</i>	wise	
<i>decrease</i>	<i>judgment</i>	witness	<i>complaint</i>	<i>influence</i>	weep	<i>egalitarian</i>	<i>mussel</i>		
Items with 61-80% completion			<i>consumerism</i>	Items with 61-80% completion			Items with 61-80% completion		
browse	impertinent	mishaps	Items with 61-80% completion			attraction	<i>discipline</i>	<i>revise</i>	
CEO	independent	<i>praise</i>	ancestor	outskirts	screening	banish	motionless	sniff	
<i>genuine</i>	merge	<i>trait</i>	audience	<i>reminiscent</i>	volunteer	crowbar	prehistoric	tribe	
Items with 41-60% completion			bankrupt	Items with 41-60% completion			Items with 41-60% completion		
appropriate	consumer	majority	Items with 41-60% completion			common	fortress	request	
attitude	interfere	proceed	depict	landscape	preparation	concern	proof	residence	
competent			distinguish	manufacture	soothing	Items with 21-40%			
Items with 21-40%			Items with 21-40%			gap	prominent	scatter	
bargain	principle	sequence	attach	likelihood	privilege	initiate	remarkable	spokesman	
fascinate	retirement	statement	barely	origin	shore	permanent			
Items with 0-20%			Items with 0-20%			Items with 0-20%			
comprehensive			advertising	scenario	verdict	flagship	grand		

**Legend:** *italics*: matching items (see Figure 4 for example), regular print: gap-filling items (see Figure 5 for example)

**Table H17:** Summary of the results of the final in-class vocabulary test in relation to the VKS and corpus data in the 2015/2016 fall semester

Item	Does not know/recognize		Correct synonyms and translations (word-classes)				Correct sentences (word-classes)	Most frequent 2 string N-gram	Most frequent keyword in the text after the item (keyword ratio)
			Eng. syn.	Eng. phrase	Hun. phrase	Hun. translation			
1. <i>audience</i>	0	0	1 (n)	4 (n)	0	15 (n)	19 (n)	the audience: 16	perform (0.028)
2. <i>bargain</i>	0	1	2 (n)	2 (np)	2 (n)	11 (n), 3 (v)	11 (n), 3 (v)	a bargain: 5	market (0.011)
3. <i>common</i>	0	0	3 (ad)	1 (ad), 1 (vp)	0	20 (ad)	17 (ad)	a common: 7	-
4. <i>contemporary</i>	1	0	0	1 (vp), 1 (np)	0	12 (ad)	14 (ad)	contemporary authors: 5	author (0.019)
5. <i>discipline</i>	3	0	0	1 (np)	0	13 (n), 1 (v)	12 (n), 1 (v)	a discipline: 3	-
6. <i>ensure</i>	0	0	0	3 (vp)	0	13 (v)	15 (v)	ensure you: 5	safe (0.014)
7. <i>establish</i>	0	0	2 (v)	1 (vp)	0	16 (v)	15 (v)	was established: 9	company (0.016)
8. <i>former</i>	0	0	2 (av)	1 (avp)	0	12 (av)	13 (av)	the former: 5	-
9. <i>genuine</i>	0	0	6 (ad)	0	0	15 (ad)	11 (n)	a genuine: 3	gold (0.014)
10. <i>interior</i>	0	0	0	2 (np)	0	15 (n), 2 (ad)	11 (n), 2 (ad)	the interior: 8	design (0.026)
11. <i>justification</i>	1	0	1 (n)	0	0	4 (n)	3 (n)	the justification: 3	prison (0.023)
12. <i>leisure</i>	1	0	1 (n), 2 (ad)	1 (vp)	0	7 (n), 3 (ad)	8 (ad), 4 (n)	leisure time: 6	-
13. <i>manufacture</i>	0	0	1 (v), 2 (n)	0	0	9 (v), 3 (n)	7 (v), 6 (n)	the manufacture: 5	product (0.02)
14. <i>neglect</i>	0	2	0	2 (vp)	3 (v)	3 (n), 5 (v)	10 (v), 1 (n), 1 (ad)	been neglecting: 2	-
15. <i>obtain</i>	0	2	5 (v)	0	0	6 (v)	10 (v)	to obtain: 5	-
16. <i>opportunity</i>	0	0	5 (n)	1 (np)	0	15 (n)	18 (n)	opportunity to: 9	travel (0.021)
17. <i>primarily</i>	0	0	6 (av)	0	0	16 (av)	12 (av)	concentrate on: 3	concentrate (0.019)
18. <i>purpose</i>	0	0	7 (n)	0	0	14 (n)	17 (n)	purpose of: 6	life (0.012)
19. <i>quote</i>	0	0	4 (v)	1 (vp)	0	7 (n), 9 (v)	13 (v), 4 (n)	quote from: 3	Shakespeare (0.02)
20. <i>regulation</i>	0	0	2 (n)	0	0	18 (n)	16 (n)	the regulation: 6	strict (0.03)
21. <i>scholarship</i>	0	0	1 (np)	0	0	18 (n)	18 (n)	a scholarship: 9	semester (0.015)
22. <i>tension</i>	0	2	0	0	0	12 (n)	11 (n)	the tension: 6	tense (0.007)
23. <i>ultimate</i>	0	0	3 (ad)	0	0	12 (ad)	12 (ad)	the ultimate: 9	solution (0.013)
24. <i>volunteer</i>	0	0	1 (n)	3 (np)	0	15 (n), 1 (v), 2 (ad)	14 (n), 2 (v), 1 (ad)	a volunteer: 8	shelter (0.023)
25. <i>waste</i>	0	0	1 (n)	0	0	16 (n), 8 (n)	11 (n), 6 (v)	waste your: 4	-

**Legend:** n: noun, v: verb, ad: adjective, av: adverb, np: noun phrase, vp: verb phrase, avp: adverbial phrase



**Table H18:** The overall vocabulary profile of the students in the *Listening and Speaking I* course in the 2015/2016 fall semester

Student	Vocabulary level at the start of the semester	Online vocabulary test #1		Online vocabulary test #2		Online vocabulary test #3		Final (in-class) vocabulary test	Frequency lists (%) word and phrase 1-500, 501-3000, >3,000, academic				Vocabulary level at the end of the semester
		Score	Time	Score	Time	Score	Time		Score	1-500	501-3000	3000+	
<b>S1</b>	12,100 words	36/50 (72%)	17:22	36/50 (72%)	21:49	37/50 (74%)	24:48	130/100	67	14	19	6	12,400 words
<b>S2</b>	9,000 words	48/50 (96%)	17:52	41/50 (82%)	29:33	41/50 (82%)	30:02	136/100	70	13	17	9	not completed
<b>S3</b>	12,800 words	36/50 (72%)	30:25	32/50 (64%)	30:25	35/50 (70%)	30:08	80/100	59	18	23	11	not completed
<b>S4</b>	8,400 words	not completed	-	28/50 (56%)	20:30	not completed	-	not completed	-	-	-	-	not completed
<b>S5</b>	11,000 words	46/50 (92%)	20:27	44/50 (88%)	29:59	41/50 (82%)	30:03	122/100	68	13	18	6	12,700 words
<b>S6</b>	9,200 words	30/50 (60%)	12:27	32/50 (64%)	18:27	not completed	-	96/100	63	15	22	8	not completed
<b>S7</b>	12,600 words	28/50 (56%)	31:05	40/50 (80%)	30:33	38/50 (76%)	31:09	62/100	66	11	22	9	11,000 words
<b>S8</b>	9,600 words	33/50 (66%)	27:46	41/50 (82%)	34:34	36/50 (72%)	24:26	107/100	64	14	22	7	9,500 words
<b>S9</b>	5,400 words	26/50 (52%)	19:44	27/50 (54%)	19:28	30/50 (60%)	23:55	83/100	61	13	26	8	9,200 words
<b>S10</b>	not completed	23/50 (46%)	27:28	36/50 (72%)	29:56	35/50 (70%)	29:52	100/100	61	17	23	11	9,100 words
<b>S11</b>	not completed	33/50 (66%)	28:33	33/50 (66%)	30:33	34/50 (68%)	30:31	62/100	74	14	15	9	11,600 words
<b>S12</b>	9,900 words	43/50 (86%)	23:39	42/50 (84%)	18:22	39/50 (78%)	30:27	117/100	58	15	27	8	10,900 words
<b>S13</b>	12,700 words	42/50 (84%)	30:30	48/50 (96%)	27:05	41/50 (82%)	13:11	117/100	63	16	21	8	not completed
<b>S14</b>	12,700 words	42/50 (84%)	30:12	40/50 (80%)	30:17	44/50 (88%)	30:24	143/100	61	14	24	7	12,800 words
<b>S15</b>	not completed	46/50 (92%)	22:57	40/50 (80%)	18:06	39/50 (78%)	24:21	150/100	67	13	20	9	10,700 words
<b>S16</b>	8,400 words	31/50 (62%)	21:21	42/50 (84%)	25:56	34/50 (68%)	28:05	82/100	66	14	20	8	9,100 words
<b>S17</b>	7,800 words	38/50 (76%)	28:05	38/50 (76%)	30:39	40/50 (80%)	30:15	125/100	65	12	23	10	9,700 words
<b>S18</b>	not completed	44/50 (88%)	22:49	38/50 (76%)	21:07	44/50 (88%)	24:05	144/100	62	16	23	9	11,100 words
<b>S19</b>	10,100 words	46/50 (92%)	16:06	42/50 (84%)	30:02	43/50 (86%)	30:14	110/100	67	12	22	8	not completed
<b>S20</b>	8,500 words	39/50 (78%)	30:54	35/50 (70%)	33:11	21/50 (42%)	30:23	108/100	71	11	18	7	10,100 words
<b>SD/</b>	2151.811	7.521		5.369		5.583		25.567	64	14	22	8	1317.611
<b>mean</b>	10012.5	37.368		37.75		37.333		109.157	Total: 2,374 words				10707.14

**Legend:** red colored highlighting: decrease, green colored highlighting: increase

### 3. Research phase three: Evaluation

#### 3.1 Study 5: Student satisfaction in the redesigned blended learning Listening and Speaking Skills course

##### Appendix I: Supplementary tables to the needs-analysis questionnaire

**Table II:** The results of the general information part of the need-analysis questionnaire in the 2015/2016 fall semester

<b>Q1. Gender</b>				
Female	Male			
12 (67%)	6 (33%)			
<b>Q2. Age</b>				
18 years	19 years	20 years	21 years	Average age
3	8	6	1	19.27 years
<b>Q3. What program are you enrolled in?</b>				
BA	Teacher training			
12 (67%)	6 (33%)			
<b>Q4. Do you have previous experience with e-learning?</b>				
Yes	No			
7 (39%)	11 (61%)			
<b>Q5. What is your primary device/ gadget for learning?</b>				
laptop	smartphone	PC	tablet	
14	6	5	3	
<b>Q6. If you use a further learning device, please describe it here.</b>				
1. PC and Smart phone				

**Table 12:** The results of the listening skill self-assessment part of the need-analysis questionnaire in the 2015/2016 fall semester

Q7. How would you rate your own listening skill? (1= needs a lot of development, 4= does not need further development)					
1 (needs a lot of development)	2	3	4 (does not need further development)	Mean	SD
0	12	6	0	2.33	0.49
Q8. What do you do to develop your listening skill?					
<ol style="list-style-type: none"> <li>1. watching movies, listening songs and after that check the lyrics</li> <li>2. I usually watch films with original title, listening to english music</li> <li>3. reading english music lyrics</li> <li>4. mostly watching series and films</li> <li>5. Watch series and films in English, speak to foreign people on the internet, take a look at lyrics while listening to music.</li> <li>6. watching films in English, reading foreign books or short stories/news, listening music and checking lyrics</li> <li>7. Watching series.</li> <li>8. Watching a lot of series and listening to music.</li> <li>9. Watch films, videos, listen to music and to people speaking English</li> <li>10. I watch a lot of series</li> <li>11. I watch movies, series, videos on youtube and clips in english without subtitles. I listen carefully to the teacher during classes.</li> <li>12. watching movies in english</li> <li>13. listening to music that's in english, watcing series, movies in english, talk to my cool british highschool teacher :)</li> <li>14. Watch films and different lectures in English.</li> <li>15. Listening to music and then checking the lyrics, watching movies and series, videos on Internet</li> <li>16. I watch all kinds of movies and TV shows almost exclusively in English, I also listen to music and</li> <li>17. Watching movies in English, Listening to song lyrics, and I also havea job, where I speak with tons of foreign people in English</li> </ol>				<p>Grouped answers:</p> <ul style="list-style-type: none"> <li>• movies: 13</li> <li>• songs /music/ lyrics: 12</li> <li>• TV series/ shows: 8</li> <li>• online videos: 3</li> <li>• speaking to foreign people: 2</li> <li>• : 1</li> <li>• books/ news/ short stories: 1</li> <li>• people speaking English: 1</li> <li>• lectures: 1</li> <li>• teacher: 1</li> </ul>	
Q9. What do you feel you need help with?					
<ol style="list-style-type: none"> <li>1. Yes</li> </ol>				<p>Grouped answers:</p>	

- |   |  |
|---|--|
| <ol style="list-style-type: none"> <li>2. watching english movies</li> <li>3. improving my speaking skills and getting more confidence to speak up</li> <li>4. I'd want to get such a listening skill that makes me understand a lot of varieties of accents in English.</li> <li>5. be able to interpret what I've heard before and answer the given questions(mostly short questions in exam) in the tasks</li> <li>6. I think I just need more practice.</li> <li>7. With the accents and to learn more words.</li> <li>8. I want to be able to concentrate a lot better, also hear out words more clearly</li> <li>9. learning new words, grammar</li> <li>10. I need help with my insecurity and with my speaking skills.</li> <li>11. vocabulary and sleeping time.</li> <li>12. To develop my speaking skill.</li> <li>13. To understand what I hear better and I think new words, expressions would be also useful.</li> <li>14. How to sort out the valid information and map out a listening task.</li> <li>15. Better understanding when someone mumbles or just quite inaudible.</li> </ol> | <ul style="list-style-type: none"> <li>• listening development: 5</li> <li>• speaking development: 4</li> <li>• vocabulary development: 4</li> <li>• confidence building: 2</li> <li>• information processing development: 2</li> <li>• accents: 2</li> <li>• practice: 1</li> </ul> |
|---|--|

**Table I3:** The results of the speaking self-assessment part of the need-analysis questionnaire in the 2015/2016 fall semester

Q10. How would you rate these aspects of your speaking skill? (1= needs a lot of development, 4= does not need further development)						
Item	1 (needs a lot of development)	2	3	4 (does not need further development)	Mean	SD
Presentation skill	1	12	5	0	2.22	0.55
Pronunciation	0	7	9	2	2.72	0.67
Vocabulary	1	8	8	0	2.41	0.62
Formal accuracy	0	11	7	0	2.39	0.5
Effective communication	1	8	7	2	2.56	0.78
Discussion skill	2	8	4	4	2.56	0.98
Argumentative skill	1	9	6	2	2.5	0.79

---

**Q11. What do you do to develop your speaking skill?**

---

1. try to communicate with my **foreign relatives, and their friends**
2. I always learn some new expressions, **talk to other people in English**
3. **speaking a bit more in english**
4. trying to extend my active vocabulary, **talking to myself in English** to get used to my voice
5. Just **speak a lot in English** on regular basis. For example, my brother, my classmates and to people throughout the internet.
6. I have **friends from abroad** and I'm keeping in touch with them regularly; **using English at home**
7. Actually **nothing**, I can't practice speaking english, I have nobody to talk with.
8. **In some situations I think about how a sentence would sound in English.**
9. I speak **English with acquaintances and foreign students**, also listen and watch a lot of **English videos, films, read articles**, etc
10. I **speak during classes**. Sometimes I find **foreigners** to speak with.
11. again, talk to my **highschool teacher**, furthermore, be **active during class**, and try to make friendship with my **turkish classmate**.
12. I'm tryig to **speak in English as often as I can.**
13. Nothing interesting..**reading** aloud, or **helping others if needed**, and I think **singing** to the lyrics of songs can be also very helpful.
14. I participated in **exchange student programs** and I think keeping in touch with my new friends definitely helps.
15. I have a **job** where I speak with a lot of foreign people in English, I also have a **few friends** from other countries like Belgium, Portugal and so on.

Grouped answers:

- **communicating with foreign relatives/ friends**: 7
- **speaking English**: 6
- **talking to oneself**: 1
- **nothing**: 1
- **inner translation**: 1
- **watching videos/ films**: 1
- **reading**: 1
- **speaking during classes**: 1
- **singing**: 1
- **job**: 1

---

**Q12. What do you feel you need help with?**

---

1. a good **teacher**
2. getting enough **confidence** to speak up, self-expressing
3. Improvement in active **vocabulary**.
4. enlarge my vocabulary; improve my **grammar**; be able to use synonyms not just the basic same words for things
5. If I **practice**, I will be ok.
6. To be more **confident** in speaking.

Grouped answers:

- **confidence**: 5
  - **pronunciation**: 2
  - **grammar**: 2
  - **vocabulary**: 1
  - **practice**: 1
  - **fluency**: 1
-

- 
7. I sometimes get stressed if I make mistakes or lose fluency, also I can't concentrate on formality as I speak, plus sometimes I forget words which could help me expressing
  8. myself during my speech
  9. I need help with my presentation skill.
  10. confidence :D
  11. I am a bit too nervous when I need to present something, especially in front of unknown people, and I'm sure my pronunciation could get better as well.
  12. Somehow decrease the stress i feel before very presentation...
  13. Grammar, and maybe a bit of pronunciation.
- 
- presentation skill:
  - teacher: 1

**Table I4:** The results of the grammar self-assessment part of the need-analysis questionnaire in the 2015/2016 fall semester

Q13. How would you rate your use of grammar? (1= needs a lot of development, 4= does not need further development)					
1 (needs a lot of development)	2	3	4 (does not need further development)	Mean	SD
1	9	8	0	2.39	0.61

**Q14.** What do you feel you need help with?

1. i need a lot of help
2. Make lots of exercises
3. more grammar exercise
4. I want to able to use grammar more accurately while speaking.
5. Sometimes I use conjunctions wrongly during speaking.
6. use the important rules in practise properly; using appropriate tenses;
7. I think my grammar is bad enough.
8. To use the tenses right.
9. To get the most difficult parts of English grammar right, and know Grammar, not just use it
10. Tenses.

Grouped answers:

- tenses: 4
- specified outcome: 2
- exercises: 2
- specific mistakes: 1
- following rules: 1
- lot of help: 1

- 
11. use of tenses
  12. uhh gee, i don't know, i guess you'll see :D
  13. I don't know the correct grammar rules, because I learned English on my own mostly.
- 

**Table I5:** The results of the vocabulary self-assessment part of the need-analysis questionnaire in the 2015/2016 fall semester

Q15. How would you describe your vocabulary level? (1= needs a lot of development, 4= does not need further development)					
1 (needs a lot of development)	2	3	4 (does not need further development)	Mean	SD
1	8	8	0	2.41	0.62
Q16. What do you do to develop your vocabulary?					
1. watching movies, learn new words from lyrics					Grouped answers: <ul style="list-style-type: none"> <li>• reading: 7</li> <li>• watching movies: 5</li> <li>• using dictionaries/ looking up words: 4</li> <li>• listening to music with or without lyrics: 3</li> <li>• general learning: 3</li> <li>• writing: 2</li> <li>• watching TV series: 2</li> <li>• tests: 1</li> <li>• blogging: 1</li> <li>• surfing on the Internet: 1</li> <li>• talking with friends from abroad: 1</li> <li>• listening to speakers: 1</li> </ul>
2. I always learn new words, expressions					
3. vocabulary tests					
4. reading, listening to music, watching movies and series, blogging on tumblr, browsing on English sites, learning new words and trying to understand their structure					
5. Read a lot in English, and use a dictionary to translate unknown words.					
6. watching films; reading books and news; lookin up synonyms for basic words; talking with friends from abroad; writing down the new words and trying to bulid in in					
7. communication					
8. Reading, learning words, watching movies.					
9. I search for the meaning of the words that I do not know.					
10. I use online dictionaries while reading anything, and I translate words I don't know. I also learn words assigned by teachers					
11. I read in english. Listen to speakers carefully and try to memorize the words. I write the meaning of words into a vocabulary booklet.					
12. listening to music in english, watching movies in english (with english subtitle)					
13. nothing, ain't nobody got time for look up words when you're watching the most badass scene in Game of Thrones history...					
14. Reading books					
15. Reading English books, articles, checking lyrics.					

---

16. I read books, articles and the

---

**Q17.** What do you feel you need help with?

---

1. Films, computer games
  2. i don't know
  3. my active vocabulary isn't as extensive as my passive
  4. A huge improvement in my vocabulary, to make sure I can pass the final exam.
  5. learn which word is more fitting in the given situation(there are many words for one thing); leran important words and phrases
  6. I have to be more studious.
  7. To have a more ornate usage.
  8. Learn advanced expressions, change some words to more professional ones, develop vocab by default
  9. I need help with memorizing words.
  10. motivation
  11. Expanding the size of my vocabulary.
- 

**Table I6:** The results of the expectations and help part of the need-analysis questionnaire in the 2015/2016 fall semester

---

**Q18.** What do you expect from this course?

---

1. i would like to pass the proficiency exam
  2. I would like to develop my listening and speaking skills.
  3. developing in speaking skills and presentations
  4. the improvement of both my listening and speaking skills, of course
  5. Improvement in my listening skills mostly, and improvement in my active vocabulary skills.
  6. I expect that my vocabulary will enlarge, my speaking skills will improve and I can learn how to make easier the listening tasks on what should I concentrate and so on..
  7. I'm sure that this course will be very useful.
  8. I expect that my skills will emprove.
  9. By the end of the course I would like to develop my listening skills by a mile, loosen my stress during presentations, and continue mastering English of course
  10. I expect it to be productive. I would like to talk a lot.
  11. I hope that at the end of the course I achieve the deserved level of listening and
- 

Grouped answers:

- listening development: 7
- speaking development: 6
- general skill development: 3
- vocabulary development: 2
- presentation skill development: 2
- specific tasks: 1
- mood: 1
- passing the Proficiency Exam: 1



---

speaking skills

12. fun :D
  13. To use skillfully the English Language again.
  14. To improve myself and my abilities.
  15. To help me be better at listening tasks.
  16. Knowing different accents better, being able to talk more fluently.
- 

**Q19.** How much time do you plan to spend weekly on preparing for the course?

---

1. 7-8 hours
  2. 2-3 hours
  3. 2-3 hours
  4. 1 hour a day
  5. I don't know it yet, but a little bit every day.
  6. Depends on the task. From half hour up to 2 or 3.
  7. I would like to learn and revise new words on each day; in other case it depends on homework and whether I should make presentation or something
  8. I don't know yet, I will see.
  9. 1-2 hours
  10. Depends. If I have a presentation task, I always prepare well, except I'm rather groovy than studious.
  11. I think, I am going to spend around 2 hours to prepare for the course.
  12. about 1 hour
  13. as small as possible, jk.
  14. As much as I can since the half of the proficiency exam at the end of the next semester is about speaking and listening skills.
  15. A few hours.
  16. I work at least 20 hours a week plus movies and so on.
- 

**Q20.** What do you wish to see in the course?

---

1. good marks :)))
2. a lot of movie and music
3. discussions about interesting topics
4. Maybe some new things that could contribute to the improvement of my English.
5. get know ideas how to learn words easily and usefully;
6. Improvement for everybody.

Grouped answers:

- enjoyment: 4
  - improvement: 2
  - presentations: 2
  - assessment: 1
  - task types: 1
  - vocabulary development: 1
-

- 
7. Mainly I want to **enjoy** it. Any class can be great if the teacher teaches us excitingly. I want to see active mates and stress-free mood. • **content types: 1**
8. I wish to see great **presentations**, lots of discussions and **funny moments**.
9. good **presentations**, good taste in music, art etc..
10. Actually... **Everything** I've seen so far seems awesome and very useful. So I "wish to see" no change at all. :)
11. **Happy people?**
- 

### Appendix J: Supplementary tables to the student satisfaction questionnaire

**Table J1:** The results of the quantitative items of the in-class tasks section of the questionnaire in the 2015/2016 fall semester

**Q1.** In this section you see a number of statements. Please indicate your opinion after each statement by selecting one of the options on the right for each line.

Items	strongly disagree	disagree	party disagree	partly agree	agree	strongly agree	Mean	SD
1. I found the weekly lessons beneficial for my language development.	0	0	0	5	5	3	4.85	0.80
2. The presentation task was beneficial for my language development.	0	0	0	2	9	2	5	0.58
3. The picture talks were beneficial for my language development.	0	0	0	2	8	3	5.08	0.64
4. The group tasks were beneficial for my language development.	0	0	1	5	4	3	4.69	0.95
5. The discussion tasks were beneficial for my language development.	0	0	1	4	5	3	4.77	0.93
6. The listening tasks were beneficial for my language development.	0	1	0	1	5	6	5.15	1.14
7. I found listening to the presentations of my classmates beneficial for my language development.	0	0	2	4	5	2	4.54	0.97

**Q2.** In this section you see a number of statements. Please indicate your opinion after each statement by selecting one of the options on the right for each line.

Items	1 (easy)	2	3	4	5	6	7 (difficult)	Mean	SD
1. I found the presentation task	3	5	2	1	1	1	0	2.62	1.56
2. I found the picture talks	2	6	2	2	0	1	0	2.62	1.39
3. I found the group tasks	1	5	2	3	2	0	0	3	1.29
4. I found the discussion tasks	1	6	1	2	2	1	0	3.08	1.55
5. I found the listening tasks	0	0	0	5	1	1	6	5.62	1.45

6. I found the final vocabulary test	1	5	3	2	1	1	0	3	1.41
<b>Q3. Please check the features you see most fitting for describing the tasks. You can select more than one for each task.</b>									
Items	useful	boring	useless	interesting	overcomplicated	fun	difficult	beneficial	
1. presentation tasks	10	2	0	9	1	6	0	8	
2. picture talks	10	1	1	3	1	3	1	6	
3. group tasks	3	1	0	4	2	7	1	5	
4. listening tasks	7	2	0	0	2	0	10	8	
5. final vocabulary test	8	1	0	3	0	1	2	9	

**Table J2:** The results of the open-ended item in the in-class tasks section of the questionnaire in the 2015/2016 fall semester

<b>Q4. Please write down any further comments and feedback you have about the in-class tasks.</b>									
1.	This class was one of my favourite ones. I feel the improvement on myself due to the task we got. Usually it was fun to be there and participate.								
2.	Thank you for this semester and class, it was really beneficial, it is just pity that we can't do these on other lessons as well. Learning words and be able to speak is for me the most important and my skills have developed during this semester.								
3.	Sometimes I forgot about the Listening task I had to do until Friday midnight, and I didn't mean not to do it. Most probably, the deadline on Friday was the problematic.								

**Table J3:** The results of the quantitative items of the online tasks section of the questionnaire in the 2015/2016 fall semester

<b>Q5. In this section you see a number of statements. Please indicate your opinion after each statement by selecting one of the options on the right for each line.</b>									
Items	strongly disagree	disagree	partly disagree	partly agree	agree	strongly agree	Mean	SD	
1. I found the online part of the course beneficial for my language development.	0	1	3	2	7	0	4.15	1.07	
2. The compulsory online listening tasks were beneficial for my language development.	0	1	2	0	5	5	4.85	1.34	
3. The home practice listening tasks were beneficial for my language development.	0	2	2	2	6	3	4.62	1.33	

4. I watched the video lessons on Coursera.	3	5	3	2	0	0	2.31	1.03
5. I watched the presentation on TED.	2	7	0	1	2	1	2.77	1.64
6. The online vocabulary tests were beneficial for my language development.	0	0	0	4	6	3	4.92	0.76
7. Creating vocabulary flashcards in Quizlet was beneficial for my language development.	0	0	1	5	4	3	4.69	0.95
8. Studying my classmates' vocabulary flashcards was beneficial for my language development.	0	0	1	2	7	3	4.92	0.86
9. Writing the peer reviews was beneficial for my language development.	1	5	3	3	1	0	2.85	1.14
10. Writing the peer reviews was beneficial for the language development of my classmates.	0	3	3	4	2	1	3.62	1.26

**Q6.** In this section you see a number of statements. Please indicate your opinion after each statement by selecting one of the options on the right for each line.

Items	1 (easy)	2	3	4	5	6	7 (difficult)	Mean	SD
1. I found the compulsory online listening tasks	0	1	1	5	0	5	1	4.77	1.48
2. I found the home practice listening tasks	0	1	2	3	1	6	0	4.69	1.44
3. I found creating the online vocabulary tests	0	1	3	3	4	2	0	4.23	1.24
4. I found creating a vocabulary flashcard set	1	6	3	2	1	0	0	2.69	1.11
5. I found vocabulary flashcard sets	0	1	7	4	1	0	0	3.38	0.77

**Q7.** In this section you see a number of statements. Please indicate your opinion after each statement by selecting one of the options on the right for each line.

Items	1 (useless)	2	3	4	5	6	7 (useful)	Mean	SD
1. I found the Coursera video lessons	1	3	4	2	2	1	0	3.31	1.44
2. I found the TED presentations	1	3	2	1	3	0	3	4.08	2.1
3. I found the online vocabulary tests	0	0	1	0	6	1	5	5.69	1.25
4. I found writing peer reviews	1	3	2	4	1	1	1	3.62	1.71

**Q8.** Please check the features you see most fitting for describing the items. You can select more than one for each task.

Items	useful	boring	useless	interesting	overcomplicated	fun	difficult	beneficial
1. compulsory online listening tasks	8	5	1	1	2	0	7	7
2. home practice listening tasks	7	2	2	3	1	0	4	3
3. Coursera video lessons	3	1	2	4	2	0	0	0
4. TED presentations	4	0	3	6	1	3	0	4
5. vocabulary flashcards	10	1	0	6	1	2	0	6
6. doing the peer reviews	3	4	5	2	2	4	0	3

**Table J4:** The results of the open-ended item in the online tasks section of the questionnaire in the 2015/2016 fall semester

<b>Q9.</b> Please write down any further comments and feedback you have about the online tasks.									
1. It was a bit of stressful not to forget these, because we had 3 days for doing that and if I didn't check my emails in time it happened a few times that I did the tasks in the last moments.									
2. The Friday night deadline is problematic regarding compulsory listening task.									

**Table J5:** The results of the quantitative items of the Edmodo section of the questionnaire in the 2015/2016 fall semester

<b>Q10.</b> Please indicate your opinion by selecting one of the options on the right.									
Items	1 (easy)	2	3	4	5	6	7 (difficult)	Mean	SD
1. I found registering to Edmodo	8	3	0	1	0	1	0	1.85	1.52
<b>Q11.</b> Please check the option you see most fitting for describing Edmodo.									
Items	easy to navigate			confusing			boring	Mean	SD
1. I found the interface of the online segment of the class on Edmodo	10			3			0	1.23	0.44
<b>Q13.</b> Please check the option or options you see most fitting. You can select more than one.									
Items	skill development		additional practice				exploring new websites		
I used the materials available in the folders on Edmodo (grammar, vocab, listening and speaking development) for the following	8		3				1		
	<b>watching instructional videos</b>		<b>trying out new software</b>				<b>participating in online courses</b>		
	0		0				2		
	<b>all of the above</b>		<b>none of the above</b>				<b>I did not know about the folders</b>		
	1		0				2		
<b>Q15.</b> Please indicate your opinion by selecting one of the options on the right.									
Items	1 (useless)	2	3	4	5	6	7 (useful)	Mean	SD
1. I found the online vocabulary tests	0	0	1	0	4	4	4	5.77	1.17
<b>Q16.</b> Please indicate your opinion by selecting one of the options on the right.									
Items	1 (easy)	2	3	4	5	6	7 (difficult)	Mean	SD
1. I found the online vocabulary tests	0	1	0	2	6	4	0	4.92	1.12
<b>Q17.</b> Please indicate your opinion by selecting one of the options on the right.									
Items	1 (not beneficial)	2	3	4	5	6	7 (beneficial)	Mean	SD
1. I found the online vocabulary tests	0	0	0	0	5	3	5	6	0.91
<b>Q18.</b> Please indicate your opinion after each statement by selecting one of the options on the right for each line.									

Items	strongly disagree	disagree	party disagree	partly agree	agree	strongly agree	Mean	SD
1. I encountered a small number of errors on Edmodo (not more than 5).	1	4	1	3	1	3	3.62	1.76
2. The number of errors I encountered on Edmodo had a negative effect on my task completion.	1	7	0	2	3	0	2.92	1.44
3. I would recommend using Edmodo in other courses as well	0	1	1	5	4	2	4.38	1.12

**Table J6:** The results of the open-ended item in the Edmodo section of the questionnaire in the 2015/2016 fall semester

<b>Q12.</b> Please add anything else you would like to say to describe the user interface of Edmodo
1. First, it was hard to see it through but then I got use to it.
<b>Q14.</b> Please add anything else you would like to say about these folders on Edmodo:
1. wow did they exist
<b>Q19.</b> Overall, my final recommendation for Edmodo is the following:
1. I would recommend this website because we did the useful tasks there, it was good to have those things in one place
2. suck it Edmodo :*
3. I'd recommend it, easy and fun to use.
4. Edmodo is really useful for learning languages and offer a wide variety of opportunities..
<b>Q20.</b> My reasons for recommending are:
1. none
2. It's simple to use. It is easy to use.
3. There are many things which you can try (watching videos, learning words, etc.)
<b>Q21.</b> My reasons for not recommending are:
1. It is good, but first I felt that it won't be useful at all
2. a lot, jk its useful once you realize how to use that fckn thing
3. Relatively often there is some kind of problem with the website.

**Table J7:** The results of the quantitative items of the Quizlet section of the questionnaire in the 2015/2016 fall semester

<b>Q22.</b> Please check the option you see most fitting for describing Quizlet.									
<b>Items</b>	<b>easy to navigate</b>			<b>confusing</b>		<b>boring</b>		<b>Mean</b>	<b>SD</b>
1. I found the interface of Quizlet:	9			3		1		1.38	0.65
<b>Q24.</b> Please check the features you see most fitting for describing the items. You can select more than one for each task.									
<b>Items</b>	<b>useful</b>	<b>boring</b>	<b>useless</b>	<b>interesting</b>	<b>overcomplicated</b>	<b>fun</b>	<b>difficult</b>	<b>beneficial</b>	
1. creating vocabulary flashcards	10	3	0	3	1	4	1	7	
<b>Items</b>	<b>useful</b>	<b>boring</b>	<b>useless</b>	<b>interesting</b>	<b>overcomplicated</b>	<b>fun</b>	<b>difficult</b>	<b>beneficial</b>	
2. being able to listen to the flashcards	7	1	2	3	1	3	0	7	
3. the practice features	7	0	1	2	1	1	0	6	
4. the vocabulary sets of my classmates	11	2	0	4	0	5	0	6	
5. learning new words this way	11	1	0	3	0	5	0	9	
6. knowing whether the words is a noun, verb, etc.	9	0	1	1	1	0	0	7	
7. the sample sentences	10	1	0	2	1	1	0	4	

**Table J8:** The results of the open-ended item in the Quizlet section of the questionnaire in the 2015/2016 fall semester

<b>Q23.</b> Please add anything else you would like to say to describe the user interface of Quizlet:
1. I could not navigate on this website
2. “wtf”
<b>Q25.</b> What dictionary did you use to add the definitions to your flashcards?
1. oxford dictionary
2. the first that came up on google
3. <a href="http://www.thefreedictionary.com/">http://www.thefreedictionary.com/</a>
4. Oxford Dictionaries
5. Google translator
6. Printed dictionary
<b>Q26.</b> Please write down any further comments and feedback you have about Quizlet.
1. I find it really useful, it helped a lot broadening my vocabulary
2. worse than edmodo

**Table J9:** The results of the quantitative items of the feedback section of the questionnaire in the 2015/2016 fall semester

<b>Q27.</b> Please indicate your opinion after each statement by selecting one of the options on the right for each line.								
<b>Items</b>	<b>strongly disagree</b>	<b>disagree</b>	<b>partly disagree</b>	<b>partly agree</b>	<b>agree</b>	<b>strongly agree</b>	<b>Mean</b>	<b>SD</b>
1. The feedback I received from my teacher in class was beneficial for my language development.	0	1	0	1	6	5	5.08	1.12
2. The feedback I received from my classmates in class was beneficial for my language development.	1	1	0	3	5	3	4.46	1.51
3. Receiving feedback from two teachers on the assessment sheets was beneficial for my language development.	0	0	0	2	7	4	5.15	0.69
4. Receiving feedback from my classmates on the assessment sheets was beneficial for my language development.	0	2	0	4	4	3	4.46	1.33

<b>Q28.</b> Please check the features you see most fitting for describing the items. You can select more than one for each.								
<b>Items</b>	<b>useful</b>	<b>boring</b>	<b>useless</b>	<b>interesting</b>	<b>overcomplicated</b>	<b>fun</b>	<b>difficult</b>	<b>beneficial</b>
1. in-class feedback from my teacher	8	0	1	5	1	0	0	9
2. in-class feedback from my classmates	5	1	3	5	1	0	0	4
3. feedback from two teachers on my presentations	10	0	1	6	0	1	0	9
4. feedback from my classmates on my presentations	8	1	2	6	1	1	1	4

**Table J10:** The results of the open-ended item in the feedback section of the questionnaire in the 2015/2016 fall semester

<b>Q29.</b> Please write down any further comments you have about the feedback you received.
1. I was excited to see the feedbacks and it helped a lot
2. was there in-class feedback? lol
3. Feedback from classmates look like: Feedback #1: "It was very fluent." Feedback #2: "Omg, speak slower." Example 2: Feedback #1: "You kept eyecontact well with the audience." Feedback #2: "Keep eye contect!" Aaaaaaand at last: Most peer reviews on my presentation was like this: 5 5 5 4 4 (Really, like all reviews were fives and some fours) Yet somebody gave me 2 2 4 3 3 (Only one). Well, atleast you know that someone hates you from that class.



**Table J11:** The results of the quantitative items of the overall impressions section of the questionnaire in the 2015/2016 fall semester

<b>Q30.</b> Please indicate your opinion after each statement by selecting one of the options on the right for each line.								
<b>Items</b>	<b>strongly disagree</b>	<b>disagree</b>	<b>party disagree</b>	<b>partly agree</b>	<b>agree</b>	<b>strongly agree</b>	<b>Mean</b>	<b>SD</b>
1. I enjoyed the course.	0	0	2	1	7	3	4.85	0.95
2. I feel I was able to develop my English proficiency.	0	0	0	6	4	3	4.77	0.83
3. Having an online part was beneficial for my language development.	0	1	1	3	6	2	4.54	1.13
4. I would recommend Edmodo to others.	1	0	1	3	6	2	4.46	1.33
5. I would recommend Quizlet to others.	1	0	1	5	4	2	4.31	1.32
6. I would like to have more courses with online elements.	1	0	1	5	4	2	4.31	1.32

**Table J12:** The results of the open-ended item in the feedback section of the questionnaire in the 2015/2016 fall semester

<b>Q31.</b> What would you have liked to have more of in this course?
1. It was good the way it was, I would not recommend anything.
2. more talking
3. in-class tasks, argumentative tasks.
4. More speaking assignments. Like in groups, or in pairs.
5. More discussions and group speeches
6. Probably more lightning talks part
<b>Q32.</b> What would you have liked to have less of in this course?
1. tasks :)
2. Less difficult listening tasks
3. fckn online stuff
4. Too many presentations and picture talks for lessons.
5. Listening tasks online
6. Nothing. I think mostly everything was okay.
<b>Q33.</b> Please add any other feedback and recommendations for the course:
1. I recommend more in-class tasks that develop our speaking skills, like discussions, because at the end of the classes we didn't have much time for those
<b>Q34.</b> What would you recommend for the next blended version of Listening and Speaking Skills?
1. more sympathy

- 
2. More speaking.
  3. Be similar to this!!! :)
  4. Keep using online elements .
- 

**Table J13:** The results of the quantitative items of the about you section of the questionnaire in the 2015/2016 fall semester

<b>Q35. Your age</b>									
Age	<b>18</b>		<b>19</b>		<b>20</b>		<b>21</b>		<b>22</b>
	2	6	5	0	0				
<b>Q36. Your gender</b>									
Gender	<b>Female</b>					<b>Male</b>			
	10					3			
<b>Q37. Your program</b>									
Program	<b>English BA</b>					<b>Teacher training</b>			
	8					5			
<b>Q38. Please indicate your development in the areas by selecting one of the options on the right for each line</b>									
Items	<b>much worse after the course</b>	<b>worse after the course</b>	<b>somewhat worse after the course</b>	<b>somewhat better after the course</b>	<b>better after the course</b>	<b>much better after the course</b>	<b>Mean</b>	<b>SD</b>	
1. presentation skill	0	0	0	4	6	3	4.92	0.76	
2. argumentative skill	0	0	0	9	4	0	4.31	0.48	
3. pronunciation	0	0	0	10	2	1	4.31	0.63	
4. vocabulary	0	0	0	2	10	1	4.92	0.49	
5. grammatical accuracy	0	0	0	11	2	0	4.15	0.38	
6. effective communication	0	0	0	7	5	1	4.54	0.66	
7. discussion skill	0	0	1	8	4	0	4.23	0.6	
8. critical thinking	0	0	0	8	5	0	4.38	0.51	
9. assessment skill	0	0	0	5	8	0	4.62	0.51	
10. self-assessment	0	0	0	6	7	0	4.54	0.52	

## 3.2 Study 6: Teacher challenges in correspondence blended skill development

### Appendix K: The interview items sorted into corresponding research question units

blended learning understanding:

1. How much information did you have about blended learning before teaching the course and where did you get it from?
2. What were your first thoughts in connection with blended learning?
3. Why did you undertake this option?
4. What ratio was implemented in the blended course?
5. Your research area is mobile learning. In what ways did you implement it in your course?

blended course instruction:

6. How did you design your blended learning course?
7. What experience did you have with blended before this course?
8. What did you foresee in the planning phase as possible difficulties?
9. How did you decide which elements to keep or change from the previous *Listening and Speaking Skills* courses' syllabus?
10. What e-learning platform did you use? How did it work?
11. How were the students assessed?
12. What kind of feedback did you use?

student engagement:

13. How many students participated in the course?
14. What was the age and gender distribution in the course?
15. How did students work in the face-to-face and online sessions?
16. What forms of in-class and online interaction did the students find motivating?
17. What forms of in-class and online interaction resulted in forms of student resistance?
18. How did you deal with demotivation?

further challenges:

19. You had some experience with *Edmodo* during the previous *Listening and Speaking Skills* courses. How far was being familiar with the basics of the website useful for course usage?
20. How did the students respond to the new experiences?
21. What kind of feedback did you get from the students?
22. What experiences did you gather with your first blended learning course? Please list the advantages and disadvantages.

23. We had a number of consultation sessions concerning task creation and online solutions in January and February. In your opinion, what kind of help would be needed for teachers who have never previously used these solutions?
24. In your opinion, what kind of help/ training/ consultation would be needed to prepare teachers for blended instruction?

## **Appendix L: Interview transcription**

### **1. How much information did you have about blended learning before teaching the course and where did you get it from?**

I have learnt about blended learning from one of my PhD. classmates. He ran a course entitled Listening and Speaking Skills in two consecutive semesters for 1st year BA students. To be honest, I have not known anything about it, neither heard about it, until I got a chance to talk to him about blended learning and to observe his weekly classes. I found very up-to-date, motivating and useful to integrate technology and internet in English language classes and for improving listening and speaking skills. Blended element of the class served for students as a great opportunity for home practice.

### **2. What were your first thoughts in connection with blended learning?**

I could not imagine how it will work in practice until I could see it with my own eyes. Maybe I was even skeptical but I have to admit that it really works! I wanted to learn as much about it as I could, so I kept asking the course teacher how things work, what and how can be moved on-line, what tasks can be given to students. He always introduced me into the topics, the tasks and submissions student had to deal with. And of course, I was afraid that the technological part will cause some difficulties for the students to submit their works, either for not being good enough using technology, or for not having internet connection, what is a great threat in blended learning.

### **3. Why did you undertake this option?**

In my case it was a great idea and advantage to implement the blended element in my course. As I taught part-time (correspondence) students, we did not have a chance to meet on a weekly basis, so I had to solve this somehow to make up for the lost time. By lost time I mean those weeks when we did not have a class, because we had it every second week. So I think this solution was the most convenient only for them, but for me too. I could prepare material which did not require teacher assistance and they could do it anytime and anywhere by keeping the deadline, of course.

### **4. What ratio was implemented in the blended course?**

In the beginning of the course I planned the in-class and the online tasks to make up 50%-50% of their final mark. I was asked by the students to have more speaking tasks, because they didn't have opportunity to practice speaking at home, so decided to move all the listening tasks online.

**5. Your research area is mobile learning. In what ways did you implement it in your course?**

As mobile learning is claimed to be an anytime and anywhere learning, students could write up and submit their tasks anytime and from anywhere using *Edmodo*. I know about one student who accessed the material from her phone and did the listening tasks from her mobile. Unfortunately from teacher's account I could not follow their submissions properly, and the application many times asked me to sign in to my account through search engine. I wish I could use the application for assessing and reading the submissions, but I could not. Partly it works, but I don't trust the Edmodo app.

**6. How did you design your blended learning course?**

see the syllabus of the Listening and Speaking Skills II course (2015/16 spring semester) [she is referring to communication via e-mail]

**7. What experience did you have with blended before this course?**

The experience I had was from my former classmate. I observed almost all his blended learning classes. Although these courses were held by someone else, I think students found it interesting and motivating, and of course it has helped me a lot to plan my own course.  
see also Q1

**8. What did you foresee in the planning phase as possible difficulties?**

I was afraid that students won't be able to use Edmodo and they won't take the online tasks seriously. My further concern was planning the tasks and squeeze them into the 5 online classes we had during the semester. I had to choose the tasks very deliberately, to help them to practice for the Proficiency exam they have to take at the end of the semester. Since we did not meet on a weekly basis, I was afraid if they have a question, they will not be able to ask me and we cannot discuss their concerns. It was very difficult to decide what tasks, which discussion topics and what videos to include on one hand to help to improve their skills, on the other hand to maintain their interest.

**9. How did you decide which elements to keep or change from the previous *Listening and Speaking Skills* courses' syllabus?**

I had to bear in mind, that they will not have time to do totally similar tasks as they full-time peers. I knew, that neither the number of tasks, nor the variety of tasks cannot be implemented. They did not have time for more than one presentation, furthermore they needed to expand their vocabulary and improve their argumentation skills. As they were from different ages, I knew they expect tasks which are suitable for their age. By this I mean, they did not have to make up and tell stories (storytelling tasks) to their peers based on given pictures and phrases (although I find it a very creative task), but they had picture talks about serious issues, like natural disasters, inequality, generation gap...

**10. What e-learning platform did you use? How did it work?**

I used *Edmodo*. Its interface is very similar to *Facebook's*. When I figured out how to use it, it was easy to use, but I had some difficulties in the beginning. Although I had seen it before, uploading my tasks and saving them, set a deadline, follow their semester-long submissions were not easy.

Sometimes the website has stopped working, it had frozen. But I can still say, that it was a pleasure to use it, and despite the difficulties I still find it a great e-learning platform.

### **11. How were the students assessed?**

they were expected to

- attend seminars
- participate in discussions and classroom tasks actively
- not miss more than one session
- participate in the peer review process actively and watch the *Coursera* video lessons and *TED* talks
- do one presentation on topic of their choice
- make comments online on the assigned *Coursera* and *TED* videos
- do the online listening tasks

and were assessed based on the following criteria:

in class tasks (40%):

- speaking scores (30%):
  - presentations (10%)
  - in class discussions/role plays (10%)
  - picture description (10%)
- peer reviews (10%)
  
- online tasks (60%):
  - online listening scores (40%)
  - feedback on *Coursera* and *TED* videos (20%)

### **12. What kind of feedback did you use?**

I used a written feedback along the following 5 criteria: Communicative effectiveness, Fluency , Vocabulary resource, Structures, Pronunciation/Intonation. Their skills were assessed on a 1 - 5 point scale. Moreover, I added my comments. See the template I attach.

### **13. How many students participated in the course?**

9 students in the beginning, but one decided to finish the whole programme, so there were 8.

### **14. What was the age and gender distribution in the course?**

Well, I have not asked their age, so I don't have a record about it, but there were 7 female, 1 male. The one who had finished her studies was a female. Their approximate age range was from 20 to 45.

### **15. How did students work in the face-to-face and online sessions?**

Face-to-face interactions were surprisingly very interactive, they liked the discussion topics and talked about them for a long time. Many times I had to ask them to finish, because we were running out of time. They were very talkative and presented their ideas fluently and their reasoning skills were amazing. They raised great ideas and understood the tasks well. Their presentations were much longer than they were supposed to be. Some tried to make it interactive, some read almost their whole presentation and did not keep eye-contact with the audience.

However, the online sessions were many times a disappointment, because they could never stick to the deadline and they always asked for postponing the submission deadlines and most of them submitted the tasks in the last minutes.

**16. What forms of in-class and online interaction did the students find motivating?**

They liked the picture description tasks and the discussion topics. Most of them had a stage fright when they had to stand in front of their mates and do their presentations. The on-line listening tasks were very motivating for them, and they asked to have more of them. I was very happy to see that they want to practice. 2 or 3 students submitted their works as soon as they could, and also asked for some help either after classes or in e-mails.

**17. What forms of in-class and online interaction resulted in forms of student resistance?**

Where I perceived a kind of resistance, were the submission deadlines of the on-line tasks. During the in-class tasks I did not perceived any resistance.

**18. How did you deal with demotivation?**

I do not know to what extent were their late submissions due to demotivation, but I explained them the difference between the full-time students' course requirements and theirs. They have noticed that there was a huge difference and did not complain about any of the tasks. I think they were not demotivated, but rather overloaded with the information of their classes. I could see that those who had a permanent job, were more tired, overwhelmed and slower in submitting the on-line tasks.

**19. You had some experience with *Edmodo* during the previous *Listening and Speaking Skills* courses. How far was being familiar with the basics of the website useful for course usage?**

It has helped me a lot, that I had someone who showed me how the website works and what purposes it can be used for. Although, I knew it to some extent before I started to use it myself, I still needed to explore it by myself. I still cannot say that I know all the features of it, many of them has remained unexplored for me.

**20. How did the students respond to the new experiences?**

They were excited and frightened, I think. For one of them was difficult to understand how it works, but as soon as she figured it out, she was eager and motivated to do her tasks. Most of them did not have any experience with e-learning courses, but they appreciated they could practice at home through *Edmodo*.

**21. What kind of feedback did you get from the students?**

Mostly positive, but there was a student who considered the course inconsistent, because we did not follow the deadlines on the syllabus, although she was one of those students who asked for postponing the deadlines... and the only one who submitted everything in the last second. She also added in her e-mail that she thinks it is unfair to not accept submissions 2 or 3 hours after the deadline, and I should understand that she does not have time to submit the online tasks because she is working 8 hours per day.

**22. What experiences did you gather with your first blended learning course? Please list the advantages and disadvantages.**

Advantages

useful  
motivating  
time-saving  
easy to follow the results of the students  
easier to assess the students based on their online performance  
enables anytime and anywhere learning  
easy to keep in touch with the whole group

Disadvantages

needs internet connection  
the website freezes  
time to prepare the material

**23. We had a number of consultation sessions concerning task creation and online solutions in January and February. In your opinion, what kind of help would be needed for teachers who have never previously used these solutions?**

They would definitely need training and to experience blended learning and e-learning from the student and teacher perspective as well. In the training they should be shown/taught what kind of tasks to include online and how and where they can find sources.

**24. In your opinion, what kind of help/ training/ consultation would be needed to prepare teachers for blended instruction?**

I think, nobody can try to teach a blended course without seeing it or trying it. All the teachers should attend a training which prepares them for blended teaching. It should not last for weeks or years, but at least 5-10 hours to get familiar with the aim of it and the usage of it, and probably a concise theoretical background should be provided to future blended learning teachers.



**Doktori (Ph.D.) értekezés tézisei**

**BLENDING IS TRENDING:  
APPLYING BLENDED LEARNING TO MEET EFL  
STUDENTS' LANGUAGE NEEDS IN LISTENING AND  
SPEAKING SKILLS DEVELOPMENT**

Simon Krisztián

Témavezető: dr. habil. Horváth József

Doctoral Programme in English Applied Linguistics and TEFL/TESOL

Pécsi Tudományegyetem

2016

321

## Kutatási téma és célkitűzések

Az e-learning, vagy elektronikus oktatás, egy olyan megközelítés, melyben a technológiai oldal kulcsszerepet játszik. Folyamatosan fejlődő területként az e-learning nagyban kihatott az oktatás jelen fogalmára. Gyakran hozzák kapcsolatba paradigma váltóként is oktatási megközelítésekben (ld. Kőfalvi, 2006, 33). Jelenleg az e-learning a 2.0 stádiumban van, amit gyakorlatban azt jelenti, hogy a lehetőségek feltérképezésében a szoftver és hardver korlátok immáron nem képeznek jelentős akadályt és túlnyomórészt az oktatási célok megvalósításán van a hangsúly. Ebben a folyamatban jelentős mérföldkő volt a Web 2.0, amely azon kívül, hogy tömeges hozzáférést tett lehetővé online anyagokhoz és forrásokhoz, a hagyományos tanár-diák és oktatás-tanulás folyamatokat is átformálta.

Gyorsan fejlődő terület az e-learningen belül a blended learning, ami az online és a hagyományos oktatási módszerek egybeolvasztásával célozza meg az oktatási környezet javítását (Holmes & Gardner, 2006, 110). Tagadhatatlan előnye az online felület integrációjának a rugalmasság, ami legfőképpen az oktatási és órarendi idő bővítésére hathat (Liu & Tourtellott, 2011, 4) és eredményezhet új környezeteket. Természetesen egy efféle megközelítés az oktatási modell újraértelmezésével jár (Hinkelman & Gruba, 2012, 3). A modell összetettségéből adódóan ez olyan változókkal is jár, amik hagyományos oktatási környezetben nincsenek vagy más formában vannak jelen.

A technikai előrehaladás sajátossága, hogy kialakul egy generáció, akiknél az adott fejlődő technológia szocializáló szerepet tölt be. Prensky (2001, 1) modelljében megkülönböztette a digitális bennszülötteket és a digitális bevándorlókat, mint ugyanazon technológia eltérő felhasználóit. Jones, Ramanau, Cross és Healing (2010, 723, 731) megközelítésében ez egy 25 éves kor maximumot jelent, azonban Jones et al. a csoport sokszínűségére hívják fel a figyelmet. Oktatási szempontból ez azt jelenti, hogy a diákok technikai szocializációjából fakadóan az olyan anyagok, amelyek azt figyelmen kívül hagyják, nem érik el a maximális lehetőségüket.

Három vezető e-learning megoldásokkal foglalkozó folyóirat – *Computers & Education*, *ELT J* és *Language Learning & Technology* – elemzése azt mutatta, hogy a produktív és receptív nyelvi készségek, valamint a nyelvtan és szókincs fejlesztése döntő részben technikai segítséggel történt 2005 és 2015 között a megvizsgált mintában. A tisztán e-learning megoldások száma alacsony volt. Bár a minta feltáró volt és nem reprezentatív, a 27

tanulmányban a blended learning vezető szerepet töltött be. Következésképpen bár növekedik a blended learning szerepe, átfogó megoldások még nem állnak rendelkezésre.

A disszertáció célja, hogy áthidaló megoldást találjon egyetemi szintű angol nyelvű beszédképesség- és hallott szövegértés-fejlesztés (*Listening and Speaking Skills*) kurzusokra amódon, hogy illeszkedjenek a hallgatók e-learning elvárásaihoz és a nemzetközi trendekhez. A technika térnyerésével fontos, hogy a felsőoktatás aktívan részt vegyen a hallgatók technikai szocializációjak szervezett fejlesztésében és kiaknázásában. A nyelvoktatás különösen előnyös helyzetben van, hiszen a nyelvtudás katalizátorként működhet különböző tudományterületek között. A disszertáció tanulmányai blended learning struktúrára épültek, mivel az együttesen alkalmazza az online és hagyományos oktatási megközelítéseket.

A disszertáció kutatásai célzottan a nappali és a levelező kurzusok blended átstrukturálására törekedtek. A hat projekt kvantitatív, kvalitatív és vegyes kutatási módszerekkel azonosította a blended oktatás kulcsterületeit hallgatói és oktatói oldalról egyaránt. Összesen két BA-s hallgatói csoport (N=36) és hat oktató vett részt a kutatásokban a Pécsi Tudományegyetem Anglisztika Intézetében a 2014/2015 tavaszi és 2015/2016 őszi félévek alatt. A kutatások három részben zajlottak a feltáró, alkalmazó és értékelő fázisokban. Valamennyi fázis során az első kutatás felmérte a lehetőségeket, majd a második alkalmazta a első eredményeit.

Az első fázis fő célja a blended learning lehetőségeinek feltárása volt. Az **első tanulmány** a *Listening and Speaking Skills II* kurzus keretében felderítette a modellben rejlő nyelvfejlesztési lehetőségeket és a diákok elégedettségét mérte az oktatási módszerrel. Ezt követően a **második tanulmány** online szótesztelés lehetőségeit mérte a blended környezetben. A második fázis az alkalmazásban rejlő lehetőségeket kutatta. A **harmadik tanulmány** a blended modell oktatói oldalát vizsgálta strukturált, összehasonlító interjú megközelítéssel. A **negyedik tanulmány**, a második eredményeire építve, a szókincsfejlesztést és tesztelést strukturált online környezetbe helyezte. A záró, értékelő fázis tanulmányai a végső következtetéseket vonták le a kutatással kapcsolatban. Az **ötödik tanulmány**, a diákok *Listening and Speaking Skills II* kurzus záró kérdőívére adott válaszaiból kiindulva, átdolgozta és véglegesítette a kurzus blended struktúráját. Végül, a **hatodik tanulmány** szintén egy interjú keretein belül mérte, hogy miként tudja egy másik oktató ezt a blended modellt levelező *Listening and Speaking Skills* kurzusokra alkalmazni.

## 1. táblázat: A doktori disszertáció felépítése

---

### Bevezetés

- Bevezetés, kutatási célok
- A disszertáció felépítése

---

### IRODALMI ÁTTEKINTÉS

#### I. E-learning, mint tudományterület

##### Első fejezet: Elméleti keret

- A konstruktivizmusnak, behaviorizmusnak és kognitivizmusnak az e-learningre tett hatásainak elemzése.
- A konstruktivizmus alkalmazhatóságának bemutatása a nyelvoktatás keretén belül.

##### Második fejezet: Az e-learning definíciója

- A szakirodalom e-learning megközelítésének felhasználásával saját e-learning definíció bemutatása.
- Az e-learning keret részletezése.

##### Harmadik fejezet: Az e-learning fejlődése

- Az e-learning fejlődésének elemzése történelmi perspektívából.
- Az oktatás lehetséges kivitelezésének lehetőségei: online, számítógépes, mobil és virtuális környezetek.
- Az e-learningre jellemző eszköz perspektíva elemzése.
- Az e-learning paradigma lehetséges jövőbeli fejlődésének ecsetelése.

#### II. Tartalomfejlesztést befolyásoló tényezők az e-learningben

##### Negyedik fejezet: Egyéni különbségek

- A nyelvoktatásban és e-learningben is jelen lévő egyéni különbségek bemutatása a koron, motiváción, kognitív stílusokon és autonómián keresztül.
- Az e-learningre jellemző egyéni különbségek bemutatása a nem, technológia használati hajlandóság (willingness to use technology), online interakciók és a 21. századi készségek alapján.

##### Ötödik fejezet: Jelen trendek az e-learningen belül

- Az e-learningben alkalmazott oktatási és technikai keretek elemzése.
- Jelen oktatási és technikai trendek elemzése az e-learningen belül.

---

### EMPIRIKUS KUTATÁSOK

##### Hatodik fejezet: A kutatás fázisai

- A kutatás fázisainak áttekintése és a blended learning alkalmazásának és megvalósításának részletezése.

##### Hetedik fejezet: Feltáró fázis

- A feltáró fázis két kutatásának bemutatása (első és második tanulmány).

##### Nyolcadik fejezet: Alkalmazó fázis

- Az alkalmazó fázis két kutatásának bemutatása (harmadik és negyedik tanulmány).

##### Kilencedik fejezet: Értékelő fázis

- Az értékelő fázis két kutatásának bemutatása (ötödik és hatodik tanulmány).

---

##### Tizedik fejezet: Záró konklúziók és jövőbeli kutatások

- A fő eredmények összefoglalása és a kutatási korlátok bemutatása.
  - Jövőbeli kutatások rövid összegzése a disszertáció eredményei alapján.
-

## A doktori disszertáció felépítése

A disszertáció két fő részre osztható; az irodalmi áttekintésre és a tanulmányokra. Ez összesen tíz fejezetet jelent, ahol az első öt a szakirodalom strukturált áttekintése és a második öt a disszertáció keretein belül elvégzett empirikus kutatásokat mutatja be. Mivel az e-learning egy átfogó terület bőséges szakirodalommal, az irodalmi áttekintés a terület kulcsaspektusaira koncentrált. Így az alapvető fókusz a pszichológiai és történelmi fejlődés elemzésére esett. Az így azonosított trendek alkalmazhatók az e-learning megvalósítására és az eszközökre is és kevésbé vannak kitéve a technikai elévülésnek, mint egy tisztán technológiai elemzés.

Az irodalmi áttekintés első részében a központi kérdés az e-learning elemzése kutatási és tudományterületként. Első lépésként a konstruktivizmus kerül bemutatásra, mint az e-learning elméleti kerete (ld. Friesen, 2009, 81; Holmes & Gardner, 2006, 76; Lehmann & Chamberlin, 2009, 21; McCarty, 2007, 94). Ezt különböző e-learning megközelítések összehasonlító bemutatása követi, ami egy definícióval és a keret működésével zárul. A történelmi, kivitelezési és eszköz perspektívás bemutatás során az e-learning jelen 2.0-s státusza áll az elemzés középpontjában. Végül, az e-learning fejlődését keretbe foglalva, egy lehetséges 3.0-s szint kerül bemutatásra.

Az irodalmi áttekintés második része az első rész eredményeit alkalmazva azonosít számos, tartalomfejlesztést befolyásoló tényezőt. A változóknak ezek olyan csoportjai, amik egyéni különbségekként meghatározó hatást fejtenek ki az e-learningre jellemző tanulási folyamatokra. A fejezet úgyszintén bemutatja és elemzi a jelen e-learning trendeket, hogy bepillantást nyújtson a nyelvtanításhoz kötődő e-learning kutatások alakulására 2005 és 2015 között. A fő összehasonlítási szempont a különböző nyelvi készségek fejlesztése volt e-learning megoldásokkal. Zárásként az értékelés lehetséges megvalósításaira tér ki a fejezet.

A disszertáció második hányadát az empirikus kutatások bemutatása teszi ki. Átfogó cél volt ezekben a projekteknél, hogy megoldást találjanak Pécsi Tudományegyetem Anglisztika Tanszékének beszéd-készség és hallottszövegértés fejlesztés kurzusának (*Listening and Speaking Skills*) nappali és levelező tagozatos blended learning kivitelezésére. A kutatási cél teljesítésére hat projekt került kidolgozásra, feltáró, alkalmazó és értékelő fázisokban. A kutatást két fő faktor indokolta. Először, az Anglisztika Tanszék Alapvizsgáján – egy szűrő teszt az első tanév végén, ami meghatározza a hallgatók továbbhaladását – folyamatosan csökkentek az elért pontszámok. Másodsor, a diákok a fent említett *Listening and Speaking Skills* kurzusok keretein belül kitöltött félév eleji igényfelmérés során számos olyan nyelvi

készség fejlesztését jelezték, amire a hagyományos időkeren belül nem lett volna lehetőség. Következésképpen, egy blended learning megközelítéssel online felületekre is ki lehetett terjeszteni a nyelvi készségek fejlesztését. Így a hallgatók a kötelező feladatok teljesítésén kívül, személyre szabhatták a saját nyelvi fejlődésüket.

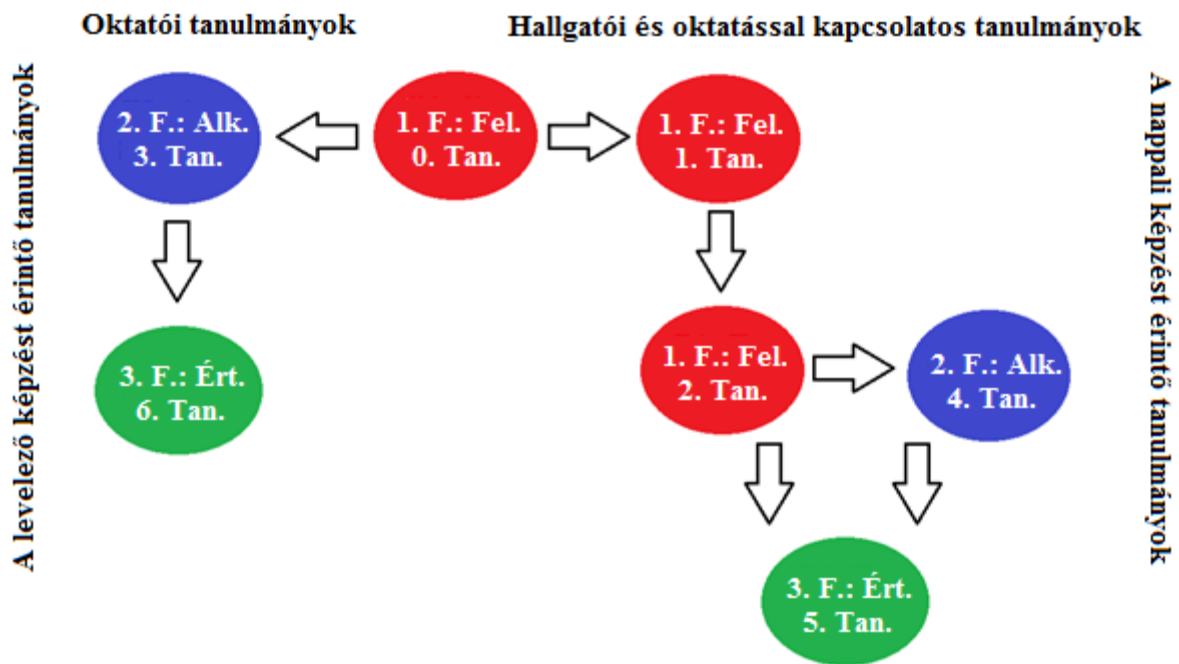
Az első fázis célja a nyelvoktatásban rejlő blended lehetőségek feltárása volt. Bár mindhárom fázis két tanulmányt tartalmaz, itt egy kiegészítő kérdőíves projekt is része a csoportnak. A 2012-es kutatás (**nulladik tanulmány**) egyik fontos eredménye az volt, hogy felderítette a strukturált e-learning komponens szükségességét, mind hallgatói, mind tanári oldalról. Erre az eredményre építve, az **első tanulmány** a pilot fázisát mutatja be a blended *Listening and Speaking Skills* kurzusnak, majd a **második tanulmány** egy szókincsfejlesztési alprojektet részletez.

Az alkalmazási folyamat szintúgy két kutatásból állt. A **harmadik tanulmány** egy strukturált, kontrasztív interjú kutatás, ami első alkalmas blended oktatók e-learning felfogásait, kurzus felépítését és hallgatói visszajelzéseit elemezte az angoltanár MA programban. Az modell tanári oldalának vizsgálata kulcsfontosságú, hiszen az oktatási és elméleti ellentmondások beazonosítása elősegítheti a sikeresebb e-learning alkalmazást. A **negyedik tanulmány**, a második eredményeire építve, a strukturált, korpusz-alapú online szókincsfejlesztés lehetőségeit vizsgálta.

A kutatások utolsó stádiuma azt elemezte, hogy mennyire volt sikeresen a blended keret alkalmazása, illetve, hogy milyen további kihívásokkal és lehetőségekkel lehet számolni. Az **ötödik tanulmány** az első eredményeire építve átdolgozta a *Listening and Speaking Skills* kurzust, majd annak sikerességét egy kérdőíves kutatás során értékelte. A **hatodik tanulmány** a levelező programot érintette és egy interjú tanulmányt foglal magában egy oktatóval. A kutatási alany különlegessége, hogy PhD hallgatóként részt vett megfigyelőként a korábbi fázisok projektjeiben és azoknak eredményeit alkalmazva állította össze saját levelezős blended *Listening and Speaking Skills* kurzusát. A zárókutatás azt elemezni, mennyire alkalmazható a nappali program blended kerete a levelező csoportokra.

Összességében, a hat kutatás eredményei azt mutatják, hogy a blended keret sikeresen használható, motiváló és hatékony mind a nappali, mind a levelező programban. Azonban sikeressége erősen függ az oktató megfelelő technológiai háttérétől és a megnyerő e-learning megoldásoktól, amik a hallgatói igényeket és nyelvi szükségleteket egyaránt érintik.

1. ábra: A disszertáció tanulmányainak átfogó kapcsolatai



**Rövidítések:**

**F.:** fázis

**Fel.:** feltárás

**Alk.:** alkalmazás

**Ért.:** értékelés

**Tan.:** tanulmány

**2. táblázat:** A disszertáció kutatási fázisainak bemutatása

<b>Fázis</b>	<b>Résztevők</b>	<b>Kutatási kérdések</b>	<b>Adat források</b>	<b>Elemzési módszer</b>
	<b>0. tanulmány (2012)</b> 21 BA és 8 MA hallgató	1: Mit gondolnak az angol szakos hallgatók az e-learningről? 2: Hogyan jellemezhetők az e-learning szokásaik? 3: Hogyan képzelik el az e-learninget?	hallgatói kérdőív	kvalitatív tartalom elemzés
<b>Feltárás</b>	<b>1. tanulmány (2015)</b> 15 BA hallgató	1: Miként támogathatja egy blended megközelítés a hallott szövegértés és beszédkészség fejlesztését? 2: Mely feladatokat találták a hallgatók a leginkább és legkevésbé hasznosnak? 3: Milyen lehetséges kihatásai vannak a blended keretnek a levelező programra?	hallgatói kérdőívek	kvalitatív tartalmi elemzés
	<b>2. tanulmány (2015)</b> 10 BA hallgató	1: Miként támogathatja egy blended megközelítés a hallgatók szókincs fejlődését? 2: Milyen kiterjedésű a hallgatók aktív és passzív szókincse? 3: Milyen lehetséges kihatásai vannak a blended szókincs fejlesztésnek a további nyelvi fejlődésre?	hallgatói szótesztek	leíró statisztikák
	<b>3. tanulmány (2015)</b> 5 egyetemi oktató	1: Hogyan értelmezik a résztvevők az e-learninget? 2: Hogyan állították össze a saját blended kurzusaikat? 3: Milyen kihívásokkal néznek szembe az oktatók a blended kurzusok keretein belül? 4: Milyen hallgatói visszajelzést kaptak az oktatók a blended kurzusaikra?	fél strukturált és strukturált oktatói interjúk	kvalitatív tartalmi elemzés
<b>Alkalmazás</b>	<b>4. tanulmány (2015)</b> 20 BA hallgató	1: Miként járulnak strukturált e-anyagok hozzá a hallgatók szókincs fejlődéséhez? 2: Milyen mérhető különbségek jelentek meg a hallgatók szókincsében a félév végére?	hallgatói szótesztek	leíró statisztikák
	<b>5. tanulmány (2016)</b> 17 BA hallgató	1: Hogyan értékelték a résztvevők a blended megközelítést? 2: Hogyan értékelték a résztvevők a saját nyelvi készségeik fejlődését? 3: Mennyire valószínűsíthető meg a blended megközelítés a nappali tagozatos kurzusokon? 4: Milyen további kihívások vannak a nappali tagozatos blended projektek megvalósításában?	hallgatói kérdőív	kvalitatív tartalmi elemzés  leíró statisztikák
<b>Értékelés</b>	<b>6. tanulmány (2016)</b> 1 PhD hallgató/oktató	1: Hogyan értelmezi a résztvevő az e-learninget? 2: Hogyan állította össze a résztvevő a saját blended kurzusait? 3: Milyen szintű volt a hallgatói részvétel? 4: Milyen további kihívások vannak a levelező tagozatos blended projektek megvalósításában?	strukturált oktatói interjú	kvalitatív tartalmi elemzés



## A kutatások eredményei

A disszertáció célja olyan nyelvfejlesztési lehetőségek azonosítása volt, amik a hagyományos tanórák keretein kívül is lehetőséget biztosítanak az angol szakos hallgatóknak a készségfejlesztésre. Ennek érdekében, az átfogó oktatási keretet a blended learning jelentette, mivel az a hagyományos és online megoldások kombinációjaként nagy rugalmassággal bír. A kutatási fázisok projektjei minden esetben ugyanazt a struktúrát követték, miszerint az első tanulmány pilot funkciót töltött be, majd a második az eredmények alapján átdolgozta és véglegesítette vagy az oktatási környezetet vagy a mérőeszközt (ld. 1. ábra a 6. oldalon).

Az első kutatási fázis felhasználta egy 2012-es kérdőíves kutatás eredményeit (**nulladik tanulmány**: ld. Simon, 2014), amely felmérte angol szakos hallgatók e-learninggel kapcsolatos fogalmait, szokásait és szükségleteit a Pécsi Tudományegyetem Anglisztika tanszékén. A projekt eredményei és az Alapvizsga csökkenő pontszámai együttesen vezettek az első kutatáshoz, ami a *Listening and Speaking Skills* kurzus blended átdolgozása volt (**első tanulmány**). A 2014/2015-ös tavaszi félév során lehetőséget kaptam a kurzus tanítására. Az e-learning megoldások összeállítását megelőzte egy hallgatói igényfelmérés és az eredmények alapján az *Edmodo* külső weboldal töltötte be az e-learning platform szerepét a kutatásban. A választás fő okait a felhasználói felület *Facebook* szerű felépítése, számos funkció és költségmentes használat jelentette. Szerepelt a kutatásban továbbra még a *MindMup* gondolattérkép alkotó weboldal, valamint egyetemi szintű videó órák a *Coursera*-ról (McGarrity, 2015) és válogatott *TED* előadások. A projekt fókusza a beszédképesség, hallott szövegértés és szókincs fejlesztése volt. A kurzust záró hallgatói elégedettséget felmérő kérdőív eredményei alapján a blended keret sikeresen alkalmazható volt és pozitívan kihatott a hallgatók nyelvi fejlődésére. Továbbá, a választott e-learning platform is túlnyomórészt sikeresen működött és egy intuitív felületet biztosított az online feladatok megvalósítására.

A **második tanulmány** azt vizsgálta, hogy miként adaptálhatók validált online szótesztek (Nation, 1990; Schmitt, Schmitt és Clapham, 2001, 86-88; Martinez, 2011) a blended kurzusban, valamint, miként hatnak ki a szókincs fejlődésére. A projekt ugyanazon *Listening and Speaking Skills* kurzuson belül zajlott, mint az első kutatás. Az eredmények azt mutatták, hogy a hallgatók sikeresen teljesítették a szóteszteket és az ismételt tesztelések javuló pontszámokhoz vezettek. Bár az indirekt szókincsfejlesztés sikeres volt, a hallgatók jelezték az első kutatás zárókérdőívében, hogy igényelik a strukturáltabb szókincs oktatást, gyakorlást és tesztelést.

A kutatások második fázisa a feltáró fázis eredményeit alkalmazta a hallgatói és oktatói igényekre. Az első két tanulmány tervezési, kivitelezési és értékelési fázisai közvetlen blended oktatási tapasztalattal ruháztak fel. Ez egybeesett a Pécsi Tudományegyetem levelező képzést célzó blended kezdeményezéseivel az angoltanár MA programban. A **harmadik tanulmány** ezt a területet kívánta lefedni és egy összehasonlító strukturált interjú kutatás formájában (Dörnyei, 2007, 135). mérte az oktatók e-learning felfogását, blended kurzus szerkezetét, a hallgatói visszajelzést és az észlelt kihívásokat. Az elemzés kimutatta, hogy az oktatók e-learning felfogása és kurzus szerkezete nagyban eltérő lehet, amit elsősorban az e-learning tapasztalok határoztak meg és másodsorban a technikai nehézségek. Annak ellenére, hogy közel mind az öt oktató alkalmazott e-learning megoldásokat, csupán egynél jelent meg a célzott, online tartalomalkotás. A többi oktató elsősorban a hagyományos tananyagait adaptálta.

Az alkalmazó fázisban a **negyedik tanulmány** egyenes folytatása volt a másodiknak. A cél itt is a szókincsfejlesztés volt, azonban ez a projekt ezt célzott online megoldásokkal valósította meg. Egy másik *Listening and Speaking Skills* kurzus keretein belül a 2015/2016-os tanév őszi szemeszterében a hallgatók egy teljesen online szókincsfejlesztő, gyakoroltató és mérő kutatásban vettek részt. Ebben az esetben is az *Edmodo* volt a kurzus fő e-learning platformja, azonban a jelen projektben pusztán az online tesztekét töltötték ki itt a diákok. A szókincsfejlesztésért az online interaktív szókértéka platform, *Quizlet* felelt. A szókértékák döntő részben korpusz alapúak és a fejlődést célzóan a *New General Service List* (Browne, Culligan, & Phillips, 2013) és az *Academic Word List* (Coxhead, 2000) felhasználásával készültek. A kurzus összesen közel 1.000 szót fedett le. A félév elején és végén kitöltött szókincsmérő teszt (Nation & Beglar, 2007) eredménye szerint közel 700 szavas szókincs növekedés volt mérhető és a záró Szókincs Tudás Skálán (*Vocabulary Knowledge Scale*) (Wesche & Paribakht, 1996) azt mutatta, hogy a hallgatók sikeresen tudják az elsajátított szavakat értelmes szöveggörnyezetben használni.

A kutatás utolsó fázisa azt értékelte, hogy a pilot folyamat után újragondolt blended keret mennyire volt sikeres a nappali tagozatos *Listening and Speaking Skills* kurzusok lehetséges nyelvi készség fejlesztésének javítására. Továbbá, cél volt az is, hogy a blended megközelítés alkalmazható legyen a levelező szakos kurzusokra is, hiszen annak rugalmassága kiemelkedően alkalmasá teszi a feladatra.

Az **ötödik tanulmány** az első közvetlen folytatása volt és ugyanazon kurzus keretei között zajlott, mint a negyedik tanulmány. Jelen projekt célja az első kutatás eredményeire építve optimalizálni a blended keretet a beszédképesség, hallott szövegértés és szókinés fejlesztésére. A kurzus eleji hallgatói igényfelmérés és a záró elégedettség kérdőív eredményei azt mutatják, hogy az *Edmodo* és *Quizlet* weboldalak megbízható és motiváló e-learning platformok, amik azon kívül, hogy nagy szabadságot adnak az oktatásban, azt sikeresen támogatják is.

A **hatodik tanulmány** során egy társoktató adaptálta az átdolgozott blended *Listening and Speaking Skills* kurzus sillabuszát egy levelező kurzusra. Az interjú kutatás, a harmadik tanulmányhoz hasonlóan, mérte az oktató kurzus kivitelezését, hallgatói részvételt, valamint a problematikus területeket. Az interjúalany megerősítette az ötödik tanulmány eredményeit, miszerint *Edmodo* megbízható e-learning platform és sikeresen alkalmazható a levelező oktatásban is számos nyelvi feladatra.

Az *Edmodo* weboldallal kapcsolatos eredmények különösen fontosak a jövőbeli blended kurzusok szempontjából, hiszen a Pécsi Tudományegyetem jelenlegi e-learning megoldásai igen korlátozottak. A *Neptun*-ról elérhető *MeetStreet* menü sem oktatói, sem hallgatói szempontból sem felel meg a 21. századi készségek (Partnership for 21st Century Learning, 2007, 2) sikeres fejlesztésére. Továbbá, a felületen nehéz tájékozódni és a lehetséges e-learning opciók száma elenyésző. Jelen állapotában a *Neptun* nem versenyképes és e-learning megoldásokra sem alkalmazható jelentős kompromisszumok nélkül.

Összességében, a hat tanulmány betekintést nyújt a blended lehetőségek kivitelezésére mind a nappali, mint a levelező kurzusok keretein belül. A projektek olyan visszatérő hallgatói igényeket azonosítottak, amikre az *Edmodo* és a *Quizlet* platformok motiváló és intuitív online megoldásokat kínálnak. Az oktatói igények folyamatos technikai támogatásra és a szükséges elméleti háttér elsajátítására utalnak, amik mind szükségesek a sikeres blended kivitelezéshez. Összefoglalóan, a kutatások eredményei lefektettek egy lehetséges blended keretet, amely haszonnal adaptálható több nyelvi készség fejlesztő kurzusra is, legyen szó a nappali vagy levelező programról, és ez egyben a disszertáció egyik jelentős innovatív eredményének is tekinthető.

## Kutatási korlátok

A tanulmányok felépítése és átfogó szerkezete hat kutatási korlátozással járt. Az első ezek közül magára az elméleti háttérre vonatkozik. Mivel az e-learning egy folyamatosan fejlődő, szerteágazó terület, különösen igaz ez a technológiai háttérre, megoldásokra, weboldalakra, platformokra és applikációkra. Valamennyi részterület ki van téve az elévülés veszélyének. Ezért a jelen megközelítésben inkább az e-learning történelmi, pszichológiai és oktatási gyökereire esett a hangsúly. Következésképpen, ez a szelekció azt jelentette, hogy biztos területeket ki kellett hagyni a bemutatásból, mint a virtuális valóságok bővebb részletezése, az e-learning szerepkörök összehasonlítása, az automatizált értékelési folyamat ecsetelése vagy a tartalomkészítés további aspektusainak bemutatása. Annak ellenére, hogy ezek a részek nem szerepelnek közvetlen módon az irodalmi áttekintésben, az empirikus kutatások keretein belül közvetett szerepet kapnak.

A második, harmadik és negyedik kutatási korlátozás szorosan összefügg és a kutatások megvalósításával, ami a résztvevők számából ered (2.) és kihat az eredmények általánosítására (3.) és a mérő eszközök validálására (4.). Mivel a disszertáció célja a lehetséges blended megoldások azonosítása volt a *Listening and Speaking Skills* kurzusokon belül, a résztvevők két csoportból tevődtek össze; 36 diákból és 6 oktatóból. Ebből kifolyólag a validitás egy kulcskérdés. Ahogy Mackey és Gass (2005, 119) magyarázza, belső validitás nélkül általánosítás nem végezhető. Tehát, statisztikai szempontból nézve, a minta eredményei nem általánosíthatók a nagyobb diák- vagy tanárpopulációra. Azonban, az anglisztika szakos hallgatókat és oktatókat érintve a kutatások megbízható betekintést nyújtottak a Pécsi Tudományegyetemen belüli fejlődő és problémás területekbe. Ily módon az eredmények általánosítása a jelen környezetben belül érvényes.

Az ötödik korlátozás magát a validáció folyamatát érinti. A disszertáció projektjei két-kutatásos struktúrát követtek, ami összesen három mérőeszköz alkalmazásának felelt meg. Minden esetben, az első tanulmány szólt a pilot folyamatról, majd a második átdolgozta a mérőeszközt az eredményekre építve. Az **első** és **ötödik** projekt hallgatói elégedettséget mért vegyes módszertani kérdőívvel, a **második** és a **negyedik** szókincs tesztelésre fókuszált tisztán kvantitatív módszerekkel, míg a **harmadik** és a **hatodik** kvalitatív módon interjúkat alkalmazott. Minden esetben a mérőeszköz validációja kulcsfontosságú volt.

Az utolsó korlátozás a részvételemből ered. Az első, második, negyedik és ötödik kutatás során egyszerre voltam jelen oktatóként és kutatóként a *Listening and Speaking Skills*

kurzusokon. Efféle kontextusok valamilyen szinten mindenképpen befolyásolják az objektivitást. Annak ellenére, hogy a mérőeszközök elemzése többnyire leíró statisztikával történt, a kutatói részlelhajlás ettől függetlenül egy lehetséges korlátozó faktor.

### **Konklúzió és pedagógiai implikációk**

A blended *Listening and Speaking Skills* szemináriumok kutatási eredményei alapján egy két-kurzosos átstrukturálás lehetősége rajzolódott ki. Mivel az első, második, negyedik és ötödik projekt résztvevői mind digitális bennszülöttek voltak, a technológiai szocializációjuk fontos változó volt. A szakirodalom eredményei a csoport technológia szocializációjának eltérő jellegét érintően (Jones et al., 2010, 731) megerősítésre kerültek a vizsgált mintában. Mivel az online források, platformok, valamint a mobil applikációk száma folyamatosan növekszik, strukturált bevezetés nélkül a hallgatók akár el is veszhetnek az e-learning szakmai felhasználásának útvesztőiben és megmaradnak személyes használóknak. Természetesen nem a *Listening and Speaking Skills* kurzusok feladata, hogy felruházzák a hallgatókat átfogó e-learning ismeretekkel, azonban a platformok szerves beépítésével képezhetnek hidat a későbbi ismeretbővítéshez.

A kétkurzosos *Listening and Speaking Skills* megközelítés lényege, hogy blended keret segítségével áthidalja a jelenlegi szakadékot a hallgatók hozott tudása és az Alapvizsgára elvárt szint között. Bár B2 szintről C1-re lépés a cél, mégis az Alapvizsgás pontszámok azt mutatják, hogy ez komoly gondot okoz egyre több hallgatónak. Az első félév a Pécsi Tudományegyetem Anglisztika Tanszékén bevezető jellegű, ami alatt a hallgatók megismerik az irodalmi, nyelvészeti és történelemi szaknyelveket. Ezt követően, a második félévben az alkalmazáson van a hangsúly, valamint az Alapvizsga teljesítésén. Olyan hallgatóknak, akik nemrég kerültek ki a középiskolából ez az elvárt fejlődés túl meredek lehet. Továbbá, még sikeres vizsgák esetén is előfordulhat, hogy a hallgatók nyelvi felkészültsége elsősorban azok teljesítésében merül ki és nem az aktív nyelvhasználatban, ami a képzés egyik sarokpontja lenne.

A kurzustervezet során a hallgatók blended környezetben belül ismerkednek meg a szükséges nyelvi készség fejlesztő feladatokkal. A *Listening and Speaking Skills I* szeminárium nem C1-s szinttel indítana, hanem B2-s szintről jutnának el a hallgatók a kurzus végére B2+-ra. Itt a fókusz a hallgatók szókincsének közös nevezőre hozásán lenne a

korpusz-alapú *New General Service List* (Browne et al., 2013) segítségével. A hallgatók probléma-orientált feladatok keretein belül ismerkednének meg a különböző vita és vélemény kifejtő lehetőségekkel és aktívan használnák az angol nyelvtet. A hallott szövegértés fejlesztése egyaránt történne a tanórákon és az online felületeken is. A *Listening and Speaking Skills II* kurzus célja a fejlesztés folytatása lenne és a kurzus végére a diákok a B2+ szintről a kívánt C1-re érnének el. Itt a korpusz alapú szókincsfejlesztés már az akadémiai szavakra fókuszál az *Academic Word List* (Coxhead, 2000) alapján.

Össességében, a fent részletezett struktúra alapja a blended megközelítés. A hallgatói csoportok nyelvi szintjének megfelelően lehet további elemekkel, mint online kurzusok videó órái, *TED* előadások és egyéb megoldásokkal finomhangolni a folyamatot. Továbbá, a disszertáció kutatásai alapján a keret rugalmassága lehetővé teszi ugyanezt a levelező programban is, amennyiben az online elemek kellő fókuszot kapnak.

## Hivatkozások

- Browne, C., Culligan, B., & Phillips, J. (2013). The New General Service List. Elérhető online: <http://bit.ly/1j6EaZJ>.
- Coxhead, A. (2000). The academic word list. Elérhető online: <http://bit.ly/1iAfNzm>.
- Dörnyei, Z. (2007). *Research methods in applied linguistics*. Oxford: Oxford University Press.
- Friesen, N. (2009). *Re-thinking e-learning research: Foundations, methods and practices*. New York: Peter Lang Publishing.
- Hinkelman, D., & Gruba, P. (2012). Power within blended language learning programs in Japan. *Language Learning & Technology*, 16(2), 46-64. Elérhető online: <http://bit.ly/2c9gDaA>.
- Holmes, B., & Gardner, J. (2006). *e-Learning: Concepts and practice*. London: Sage Publications.
- Jones, C., Ramanau, R., Cross, S., & Healing, G. (2010). Net generation or digital natives: Is there a distinct new generation entering university? *Computers & Education*, 54(3), 722-732. <http://dx.doi.org/10.1016/j.compedu.2009.09.022>.
- Kőfalvi, T. (2006). *E-tanítás. Információs és kommunikációs technológiák felhasználása az oktatásban. Alapismeretek a tanári mesterségre készülők számára*. Budapest: Nemzeti Tankönyvkiadó.
- Lehmann, K., & Chamberlin, L. (2009). *Making the move to eLearning: Putting your course online*. New York: Rowman & Littlefield Education.
- Liu, Y.-H., & Tourtellott, M. (2011). Blending at small colleges: Challenges and solutions. *Journal of Asynchronous Learning Networks*, 15(1), 58-67. Elérhető online: <http://bit.ly/2c243bS>.
- Mackey, A., & Gass, S. (2005). *Second language research: Methodology and design*. Mahwah, NJ: Lawrence Erlbaum.
- Martinez, R. (2011). Phrasal vocabulary test. BNC version (1-5k). Elérhető online: <http://bit.ly/1e6gt1m>.
- McCarty, S. (2007). Theorizing and realizing the globalized classroom. In A. Edmundson (szerk.), *Globalized e-learning. Cultural challenges* (pp. 90-115). Hershey, PA: Information Science Publishing.
- McGarrity, M. (2015). *Introduction to public speaking [MOOC]*. University of Washington: Washington. Elérhető online: <http://bit.ly/1OslI9b>.

- Nation, P. & Beglar, D. (2007). *Vocab size test (1-14k)*. Elérhető online: <http://bit.ly/1NLLDrS>.
- Nation, P. (1990). *Recognition test (2-10k)*. Elérhető online: <http://bit.ly/1Ky1TcO>.
- Partnership for 21<sup>st</sup> Century Learning (P21). (2007). *Framework for 21<sup>st</sup> century learning*. Elérhető online: <http://bit.ly/1Wdz27a>.
- Prensky, M. (2001). Digital natives, digital immigrants. *On the Horizon*, 9 (5), 1-6. Elérhető online: <http://bit.ly/IMBu0j>.
- Simon, K. (2014). To e or not to e? Students' e-learning needs and habits at the Institute of English Studies at the University of Pécs. In S. Letica Krevelj & J. Mihaljevic Djigunovic (Szerk.), *UZRT 2014: Empirical studies in applied linguistics* (pp. 110-119). Elérhető online: <http://bit.ly/1LLyxsq>.
- Schmitt, N., Schmitt, D., & Clapham, C. (2001). Developing and exploring the behaviour of two new versions of the Vocabulary Levels Test. *Language Testing*, 18 (1), 55-88. doi: 10.1177/026553220101800103.
- Wesche, M., & Paribakht, T.S. (1996). Assessing second language vocabulary knowledge: Depth versus breadth. *The Canadian Modern Language Review*, 53(1), 13-40.



## A doktorjelölt publikációi az e-learning témában

Simon, K. (2014). To e or not to e? Students' e-learning needs and habits at the Institute of English Studies at the University of Pécs. In S. Letica Krevelj & J. Mihaljevic Djigunovic (szerk.), *UZRT 2014: Empirical studies in applied linguistics* (110-119). Elérhető online: <http://bit.ly/1t1izan>

Simon, K. & Kollárová, K. (2015). Blending with Edmodo: The application of blended learning in a listening and speaking skills development course. In M. Lehmann, Lugossy, R. & J. Horváth (szerk.), *UPRT 2015: Empirical studies in English applied linguistics* (pp. 25-50). Pécs: Lingua Franca Csoport. ISBN 9789636429799

Simon, K. (2015). Coursera. Avagy hogyan tanulhatunk ingyen online bárholonnan, szinte bármit. *Modern Nyelvoktatás*, 21(1), 87-90.

Simon, K. (2016). Where is e-learning headed? Relating simulation and gamification to a possible shift in education. *Argumentum*, 12, 201-215. Elérhető online: <http://argumentum.unideb.hu/angol/contents.html>.

Simon, K. (2016). Edmodo: The Facebook of learning platforms. *TESL-EJ*, 20(1). 1-7. Elérhető online: <http://www.tesl-ej.org/pdf/ej77/m1.pdf>.

## **A doktorjelölt konferenciaelőadásai az e-learning témában**

Simon, K. (2014, május). To e or not to e? Students' e-learning needs and habits at the Institute of English Studies at the University of Pécs. Előadás a University of Zagreb Round Table Conference 2014 c. konferencia során. Zágráb.

Simon, K. (2016, május). Using corpus-based word lists and an interactive flashcard website for vocabulary development in a first-year English major skill development course. Ekőadás a Nyelvtanítás a 21. század kihívásai között c. konferencián. Zalaegerszeg.

Simon, K. & Kollárová, K. (2015, május). Blending with *Edmodo* – The findings of a semester long action research project. Előadás a University of Pécs Round Table Conference 2015 c. konferencia során. Pécs.

Kollárová, K. & Simon, K. (2016, június). Inter-rater reliability in assessing oral presentation skills. Előadás a University of Zagreb Round Table Conference 2016 c. konferencia során. Zágráb.