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Swimming instructions in Space and Time

**The Development and Attainment of Swimming in Hungarian
Public Education**

Doctoral (PhD) dissertation thesis booklet

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1. Introduction

Changes can be experienced concerning our manner of life both in Hungary and internationally. Depending on the eras, our lifestyle adapts to social and environmental changes (Szatmári, 2009). The development of modern technology and the presence of the era of information; the “sedens” (from homo sedens) type of behavior, namely the sitting way of life, pushed the number of participants in regular physical activities to the background (Soós et al., 2009). In order to establish balance with the given environment for the maintenance of health, the individual has to balance his/her physical, psychological, and social indexes (Biróné, 2004; Pucsok, 1990). Today’s youth, just like adults, are less active, overweight, unhealthful more than ever; admittedly, major changes are needed to protect the future of our children (Cooper, 2019).

On both international and national levels, the promotion of physical activities became a priority in every age group; the importance of sports and regular exercise is recognized everywhere around the globe. Daily physical education classes expanded the physical and mental capacity of students, making distinct educational forms in various environments more consistent and effective. With its different environment the case of swimming education is similar, to which the joint program (2013) - established by the Hungarian Government and the Hungarian Swimming Association - titled “Every Child Should Learn to Swim” is connected (Tóth and Kiss, 2014). Thus, the purpose of this program is to provide an opportunity, encouraging the little ones to swim, so if they want, they could become swimmers who compete with time. In fact, there is space for these types of programs to be filled, and these plans are recognized and supported by the European Union, the European Swimming League, and the World Health Organization because of the life-saving function of swimming skills.

2. Aims

Our aim is to examine the implementation of swimming movements from the beginning to the end, within the brackets of educational processes in our country to this day. We establish the historical and theoretical background of swimming lessons by reviewing the most significant domestic and international academic literature; we also present the appearance of swimming movements, its areas of use, and the development of the changing methodological and environmental conditions of swimming lessons. In addition, we set all these things in parallel with the contents of school curriculums, drafts, and instructions.

Our further goal is to explore and compare the instructions and curriculums of elementary and civic schools to the eight-grade folk schools founded between 1928 and 1940, as well as the changes in the contents of “school” swimming lessons in primary school curriculums and projects; paying special attention to the implementations of water safety, and swimming competencies.

3. Research questions and hypothesizes

3.1 Research questions

Q1: How did the questions of swimming lessons circulate and change in public education; what role did it have in physical education curriculums from its occurrence to this day?

Q2: What water safety and swimming competencies occurred in different physical education curriculums, instructions, and supplementary documents of the eras?

Q3: How and in what way do physical education teachers, educators participate in swimming education; are there any personal influencing factors, and if so, what are they?

Q4: How is school swimming education implemented in practice every day; how does the “Every Child Should Learn to Swim” program appear in the school environment?

3.2 Hypothesizes

H1: Despite the infrastructural flaws and political regulations, swimming education has made its way in different eras.

H1/a: Aside from the presence and quality of swimming pools – during the changes of the eras – swimming lessons were not an essential part of the physical education curriculums.

H2: Due to the continuous expansion of the swimming education program established by the Hungarian Swimming Association, physical education teachers, PE teachers (with collegiate school degree), educators are partially or completely excluded from school swimming lessons, and this has an impact on their motivation and enthusiasm.

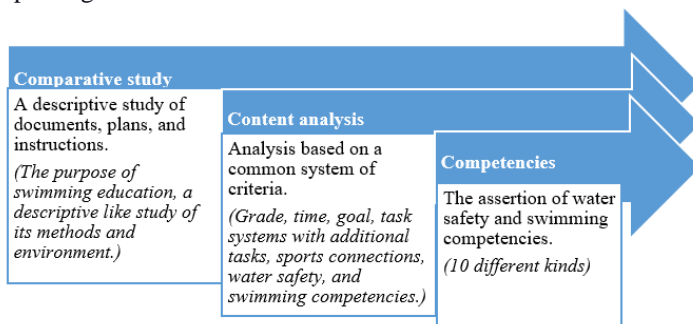
H2/a: Those physical education teachers, educators who have some relation to swimming are more confident and enthusiastic with respect to teaching.

H2/b: If more physical education teachers, educators were to take part in swimming lessons, the main goal of the “Every Child Should Learn to Swim” program would be obtained to a greater degree, that is, to help more children acquire water-safe swimming skill.

H3: Within physical education curriculums (in comparison of contents), the sufficient requirements of swimming lessons were not always determined on the basis of water safety.

4. Material and Methods

Our research consisted of two parts. First was the historical study of curriculum accompanied by academic literature, which served as a theoretical background and as a foundation to our second examination through a questionnaire. Our first research was based on a comparative, descriptive type of historical analysis in which we compared curriculums, instructions, and supplementary documents distinct in time from one another. We divided the comparative study into five time periods. Hence the curriculums and instructions cannot be compared in a one-on-one manner - we added a common system of criteria based on content analysis so that we could carry out the comparison. The examined time period is between 1869 and 2020. The number of examined sources is 45. We highlighted and emphasized water safety and swimming competencies while we took the paradigm of our time into account.



1. Figure: Flowchart of the historical examination of the Hungarian school swimming curriculum. Source: own editing (2020).

In the second part of our research, we conducted an online survey amongst physical education teachers, PE teachers (with collegiate school degree) who teach in primary school grades (1-8). In total, counting the sub-questions as well – depending on whether swimming lessons take place or not – the respondents answered 33 or 54 questions. The number of samples examined was 412, which is 7.25% of the given population. We utilized Microsoft® Office Excel for

registry and descriptive statistical analysis. From the Statistical Package for Social Science (SPSS), we performed the Pearson-chi-square test, which is often used in statistics.

5. Results

5.1 Historical-comparative analysis

During the examined period of 1869, 1872, 1877, 1905, 1914, 1918, 1953, 1956, 1958, 1963 there is no mention of swimming lessons in the instructions, drafts, and curriculums. From 1925, learning in water was typically preceded by education on land through several grades. Afterward, teachers started breaking down the educational processes into sub-processes and finally introduced the acquisition of a second swimming style or even further ones. Until 1953, the requirement was either strict, or it was not even framed at all. From 1963, the “occasionally” arranged lessons were replaced by the number of weekly hours (10-16 hours), and the mandatory distance was being re-defined yearly from then on. Indeed, this might have been the result of the wider possibilities offered by swimming facilities under construction (swimming pool construction programs), where in contrast, to open waters, the distance could be measured properly. Eventually, the distance was sometimes increased or decreased (e.g. 10-15-25m). Occasionally, instructors changed the order of swimming styles, plus they decreased and increased the distance as well. The largest number of hours available for learning was 45 hours in 1973. From the second half of the 1960s, swimming was already included in all the allotted curriculums. So, the frequent 32 hours program nowadays can be found in the variant curriculum as a standard since 1978.

In terms of sports overlaps – although irregularly – more water sports occurred in various curriculum changes since 1926. In 1926 water polo, and 1928 lifeguarding (life-saving) were available as an option. In 1941, and 1943, finswimming was introduced into the curriculum. In 1978, bifins (aka. flippers or frog fins) were indicated as aiding

tools, finswimming was acknowledged in 1990, and in 2013, diving became an option too. In order for a student to suffice the latest requirements in 2020, the acquisition of one swimming style as a 'skill at the ready' is necessary for upper grades without defining the bare minimum distance. Furthermore, the curriculum demands a basic knowledge of life-saving and guarding activities and water sports like water polo.

As a result of the competency-based study, it can be stated that the infrastructural conditions developing in a positive direction cannot be paralleled with the emergence of water safety and swimming competencies, which were filtered out from the curriculums. As it turned out, some previously published curriculums and instructions contributed to the quality of swimming lessons with more detailed and goal-oriented tasks and requirements, as opposed to those published since 1995. The latest framework curriculum in 2020 includes all competencies except one. In fact, this means that the curriculum regulations for a competency-based swimming education that promotes water safety are advancing in a positive direction.

5.2 Questionnaire

In our second study, we mapped out the situation of teachers in school swimming education. We concluded that 87% of teachers have swimming included in the assigned curriculum, but it is only possible for 82% of them to carry this out properly. The first group (n = 74), where swimming is not taught, because of the lack of swimming pool facilities (regions of northern Hungary), or the education was marked off by the leadership, and/or there is a lack of professionals (regions of Western Transdanubia). In the second group (n = 338), where education actually takes place, as a matter of fact, 55% of the group teaches, while the other 45% assists a specialist or only accompanies the group. In more than half of the sampled cases in the “Every Child Should Learn to Swim” program is successfully implemented in practice. We also recognized and noted that even though teachers are

qualified, knowledgeable, and enthusiastic towards teaching and even extension courses, they have no control over who is going to teach swimming lessons to their students. If the school institution has contracts with sports clubs, then the professional coach provided by the club will be the one teaching the class. Meanwhile, teachers or instructors are not even required to enter the pool area. Thus, if there are no restrictions for the school to keep (by management, association, city), then the physical education teacher will give swimming lectures. Admittedly, it is a pretty special case if there is a physical education teacher, who also works with a sports association or club teaching simultaneously, but in those cases, the school could also make a contract with them.

The result of the correlation studies: if teachers or instructors have any types of connection (coaching qualification; outstanding swimming techniques, history with sportsmanship, coach and/or sportsman in the family), then they are more positive, determined, confident regarding the implementation of swimming lessons in schools. Types of relations were ranked according to the most positive factors:

1. Presence of a swimming expert/coach in the family of the instructor, educator.
2. The teacher, the educator, has an athletic background in water sports.
3. Presence of a swimming competitor in the family of the instructor, teacher.
4. The teacher, the instructor, has a coaching certificate in swimming and its education.
5. The physical educator has reliable and trustworthy swimming skills.

6. Discussion

Q1: We analyzed the documents going back 151 years, based on which we found that swimming instructions appeared in 1869 originating from the 1918 elementary curriculum issued by the Ministry of Religion and Public Education. From the occurrence of

the first elementary instructions in 1925, swimming education was present, except in four cases since 1925.

Q2: Based on water safety and swimming competencies related content analysis of the physical education curriculums, 10 competencies could be examined in the documents: safe entry competence, breath control, stationary movement on the surface, water orientation, propulsion competence, underwater, safe exit - arrival, open water competence, knowledge of local hazards, rescue competences. We found that a minimum of five competencies can be found in all documents that contain swimming instructions.

Q3: Reviewing the structure of programs helping school swimming lessons, until the implementation based on the questionnaires, it can be said that 82% of the surveyed teachers (n = 412) participate in school swimming education. We found and identified personal influencing factors, which are: based on the admission of teachers and instructors and their swimming knowledge; the possible history with water sports, the presence of a professional in the family or the presence of a competitive swimmer, and last but not least, a qualification enabling one to teach swimming classes.

Q4: In a group where swimming lessons are implemented (n = 338), 53% indicated the utilization of the program "Every Child Should Learn to Swim", which is connected to sports clubs in some manner, framed into actuality in the school swimming lessons.

H1: **Accepted.** Based on the sources in academic literature, and during the historical-comparative descriptive analysis, we recognized that regardless of the environment, political regulations, instructions, curriculums, and drafts (or when swimming instruction was not documented at all), physical educators, instructors thinking in an advanced manner remained active. As a result of their work, school swimming lessons were kept up in some locations.

H1/a **Accepted.** During our historical-comparative study (on 151 years), we found that the importance of school swimming education was documented relatively early in literature and local regulations, but its central definition was not actualized until 1925. From 1925 onwards, swimming lessons appeared regularly with greater or lesser importance in the central curriculums.

Based on our survey with the questionnaire, it can be stated that despite the National Core Curriculum and the Framework Curriculum defining the place, role, and content of swimming education more and more precisely, and despite the presence of the proper infrastructure and the appearance of swimming lessons in the local curriculum, education does not take place everywhere. According to the responses of the smaller group of the examined sample (n = 74), more than 55% indicated that there is a swimming pool facility nearby; as a result of which, education would be more than feasible. However, 27% of the sample (n = 74) reported that swimming was not included in their local curriculum, which is a result that helps to fortify and prove our hypothesis.

H2: **Partially rejected.** We found that as the swimming programs intensified, 55% (n = 187) of the sample (n = 338) is implementing teaching in these classes independently. Older educators are more active and more motivated to participate in swimming lessons than younger ones. However, this complex issue could not be examined easily, as a result of which we could not dig into it further either. A multi-factor set of conditions independent from the educators significantly influences and alters their participation in swimming lessons.

H2/a: **Accepted.** We have proven that physical education teachers, educators who have some relation to swimming are more confident and enthusiastic concerning teaching.

H2/b: **Partially rejected.** By increasing the number of swimming instructors in public education, the ultimate goal of the program could be directly strengthened, utilizing more human resources so that all children could learn to swim, but at the same time, this deserves entirely separate research of its own.

H3: **Partially rejected.** In the light of water safety and swimming competencies in school swimming education, it can be stated that curriculum changes that focused on an approach that led to the development of competency-based curriculum content regulation cannot be compared to the emergence of water safety and its competencies based on curriculums. Distinguishing between water safety and swimming skills, previously issued instructions, curriculum drafts focused more on water safety, in contrast to the early 2000s. In the 2000s, the emphasis shifted from water safety to the acquirement of swimming skills. In the latest (2020) framework curriculum, great emphasis has been placed again on water safety tasks; therefore, it is clear that not only swimming skills, but also competency-based swimming education with an approach focusing its view on water safety are developing in a positive direction.

7. Opportunity for the utilization of results

In the course of our research, we proved the importance of the teacher's, instructor's, educator's personal relationship, and attachment to swimming. A significant proportion of teachers and trainers would be more than happy to further their training in this field of study. The Hungarian Swimming Association's own study also found that few professionals work in swimming pools to effectively complete the program announced and managed by them to reach the program's maximum potential. Although the employment and contracting of professionals through associations and sports clubs are great ideas and opportunities to increase the speed of the recruiting process of the

youth base in swimming, more educators and coaches are needed for all children to achieve water safety and to help them learn to swim.

In order to fill this gap in a short time, we consider it possible to organize competency-based, in-service teacher, educator, and instructor training within the framework and with the cooperation of the Hungarian Swimming Association. We are thinking of a 2x30 hour-long training program, where active educators, teachers, and instructors can not only learn about the latest methodological trends but could also develop their own water safety and swimming skills. In parallel with the theoretical and practical development of the knowledge of teachers, educators, and instructors, their swimming skills can be raised to a higher level as well; all this could be carried out repeatedly under changing conditions, in both closed and open water. Plus, they could expand their domain of knowledge with the execution of various tasks and with experiences acquired through their own skin. During the practice-oriented training, we would strengthen, and we could still influence, the personal-based (swimming skills, education) relations to swimming among the group of educators examined above. This training would ensure that beyond the playful learning of swimming techniques and the beginning stages of water habituation, through the development of water safety competencies, the educators could form children's ability to learn water safety and swimming movements in a safe manner; and that could lower the number of water-related accidents and cases of drowning, which are obviously emphasized by the international academic literature. It is also in the interest of the children to have a confident educator even in changing environments (closed swimming pool, open water) to provide the very best course of actions and reactions in unexpected situations, in accident prevention.

In the conclusion of this in-service teacher training, educators, instructors, and teachers could obtain a teaching assistant qualification, which will encourage them to do more effective work and have a positive effect on their attitudes. If we take into account the rank order of the results from the relation-based correlation study,

then this training can also help to choose the supervisor for swimming education from teaching communities.

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