

THE EFFECTS OF THE LOWERED COMPULSORY SCHOOL ENTRY AGE ON THE CURRICULUM

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Abstract. *The question at what age a child should start compulsory education raises debates both in the scientific and public interest contexts. This topic is also relevant all over the world, but a uniform answer is still not found, so the problem of the research emerges - the disclosure of the prerequisites for the change of the educational content during early primary education. The article raises questions related to the possibilities and assumptions of early school entry age for children and the structuring of educational content. 12 education experts and 6 preschool and primary education pedagogues participated in the study. Qualitative research methodology was chosen for this study: semi-structured interview and group discussion methods. During the research, 4 main topics were distinguished. They are as follows: relevance of lowering the school entry age of children; changes in the educational content when the educational age is advanced; characteristics of age change; change processes taking place in the education system. The research findings state that in order to lower the compulsory school age and achieve quality education, it is necessary to reform the educational content: educational programs must be reviewed, reasoned and changed, educational methods and tools must be selected in a more detailed way, new educational environments created and developed, the evaluation system has to be changed, and teachers must be properly trained to work with younger children.*

Keywords: *curriculum change, lowered compulsory school entry age, primary education.*

Introduction

Scientific research findings reveal the positive aspects of early school entry age: it influences better student achievements, further successful development of the child, reduces social exclusion, increases child accessibility. It also helps to enter the labor market earlier (Guo, Wang, & Meng, 2023; Jerrim, Lopez-Agudo, & Marcenaro-Gutierrez, 2022; Görlitz, Penny, & Tamm, 2022; Le, & Nguyen, 2021). However, there are scientific studies (Jankowska, Bogdanowicz, & Jonak, 2014) which show that starting compulsory education too early can also be harmful to the child: he/she may experience difficulties leading to poorer

educational results. On the other hand, starting compulsory schooling too early can have a negative effect on self-esteem, motivation to learn and cause stress to the child.

The lowering of school entry age is a multidisciplinary concept, opening possibilities for the research of different sciences. In the field of psychology, (Altwicker-Hamori, & Kollo, 2012; Ponzio & Scoppa, 2014; Herbst & Strawinski, 2016; Fortner & Jenkins, 2017) cognitive advantages of older children compared to younger peers have been studied, behavioral aspects (Datar & Gottfried, 2015; Frazier-Norbury et al., 2015) were highlighted as well and mental health (Dee & Sievertsen, 2018; Morrow et al., 2012) outcomes were underlined. The positive and negative factors of a younger child entering school are widely analyzed (Lubotsky & Kaestner, 2016; Clarke et al., 2015; Bassok & Reardon, 2013). Early education in Lithuania has been little studied, no fundamental scientific research has been found. The analysis carried out by Zabalcke and Grazyte (2017) is about the importance of early compulsory education. Valantin's (2011) performance analysis is about the impact of previous education on a child's development.

Education expert Schleicher (OECD, 2017 a, b) states that Lithuania is one of the few countries where compulsory primary education starts late, and after assessing the situation of pupils' achievements and the impact of social exclusion on them, he recommends Lithuania to lower the compulsory school entry age. He also states that for education it is important to consider the developmental needs of children and adapt the content of education to the age of that child. The results of the International Student Achievement Survey (PISA 2016) show that the achievements of Lithuanian students are below the average of OECD countries. Lowering of the primary education age is supposed to improve them. There are children in Lithuania who live in conditions of social exclusion and poverty. To reduce this problem, an early education age is proposed.

The above mentioned issues presuppose the following research questions: what are the reasons for advancing the age of children in formal education and how does this relate to the reform of primary education content? The object of the research is the assumptions of the curriculum change, when the compulsory school entry age is being lowered. The aim of the study is to evaluate the assumptions of the curriculum change, while focusing on the lowering a compulsory school entry age.

The research is based on humanistic and social constructivism theories. In order to answer the research questions, a qualitative semi-structured interview and a focus group discussion were used. Qualitative inductive thematic analysis was used for data analysis.

Literature review

In different countries, the age at which compulsory primary education begins varies widely from 4 to 7 years. In many European education systems, it starts at the age of 6. In the European Union in 2018-2019, primary education was compulsory from the age of 7 in 8 out of 28 states (7 of them from the age of 5 or 6). Primary education is compulsory from the age of 5–5,7 in 3 states (in one of them from the age of 4.7). In the rest, primary education is compulsory from the age of 6 (6 of them from the age of 4 or 5). Children from Eastern Europe (including Lithuania) and Scandinavian countries (Sweden, Finland, Estonia) are the latest to go to school. The children from the British Isles and Luxembourg are the earliest (Eurydice, 2017) to start schooling. In many European countries, the start of compulsory education coincides with the start of primary education. However, there are a number of European countries where compulsory education starts from pre-school or pre-school education. In countries where the beginning of compulsory education is 4 or 5 years old, education is organized in different ways: in some countries, children at this age start attending school, in others, participation in early childhood education is compulsory. According to Eurydice, the school entry age is the only criterion for admission to primary schools in most European countries (Lopez-Agudo, & Marcenaro-Gutierrez, 2022). The school-readiness criterion for admission to primary school is only applied in a few countries. Maturity for school means that children must be emotionally, mentally, psychologically and physically mature enough to be successful in the primary education curriculum.

The OECD (2013) states that European countries which invest more in early childhood education have higher learning achievements and lower inequality. For example, in the United Kingdom, early primary education was linked to child welfare, aimed at protecting children from exploitation. Early schooling age also enabled women to return to the labor market faster, and the children who started school earlier could finish it earlier, and join the labor market earlier. Early school age in Poland has highlighted the benefits of earlier school entry for children from disadvantaged backgrounds due to early educational support and the positive influence of peers with higher socio-economic status (Görlitz, Penny, & Tamm, 2022; Herbst & Strawinski, 2016). In Hungary, it was desired that all children start attending educational institutions at an age when education is most effective. This is extremely important if the child comes from a socially disadvantaged environment, because preschools can offer free school meals and other resources.

Research data show that in the early school years older children have an advantage compared to their younger peers: they are better cognitive (Jerrim, Lopez-Agudo, & Marcenaro-Gutierrez, 2022; Fortner & Jenkins, 2017; Herbst & Strawinski, 2016; Ponzo & Scoppa, 2014), behavioral (Datar & Gottfried, 2015; Frazier-Norbury et al., 2015) and mental health (Dee & Sievertsen, 2018; Morrow

et al., 2015) results. Some studies have found that the positive effects of prior education are significant in adolescence and early adulthood while rating the college attendance (Görlitz, Penny, & Tamm, 2022; Clarke et al., 2015). In contrast, other studies have shown that early age-related differences, if any, quickly disappear. For example, using data from a nationally representative longitudinal survey of more than 15,000 children, Lubotski & Kaestner (2016) found out that academic gaps between younger and older children disappeared after first grade. Datar & Gottfried (2015) reported similar results when analyzing social behavior.

As Valantinas (2011) states, research, which was conducted in various countries (Great Britain, New Zealand, Turkey, Nepal, Mauritius) shows that children who started the education system earlier, passed exams better. The positive effect of previous education was felt even 20 years after the completion of the program. And vice versa, there are scientific studies, which demonstrate that starting compulsory education too early can be harmful to a child, that among students, who are the youngest in the class, problems related to mental health are more common. Early education can have a negative impact on a child's self-esteem, motivation to learn and can cause additional stress and anxiety (Jankowska et al., 2014).

Compulsory primary education in Lithuania starts at the age of 7. Eurydice (2017) data show that the number of countries, which lower the compulsory school entry age, is increasing. Lithuania has also taken the first steps in lowering the schooling age. From 2023 m. pre-school education will start from the age of 5 and after a year, i.e. at the age of 6, the child will go to the first grade. Taking into account the development of each child and in case of need, it will be possible to spend 2 years in the pre-school education program and start primary education later - from the age of 7 (Education Law of the Republic of Lithuania, 2020). These changes aim to individualize/personalize the education of pre-school children. It is expected that the conditions for families raising children of this age will improve; the opportunity to get a place in institutions that run preschool education programs will be guaranteed.

In conclusion, it can be said that there is no universal age when it is recommended to start attending primary school. The age at which compulsory education starts varies widely in different countries - from 3 to 7 years. In most European education systems, compulsory education usually starts at the age of 6. In Lithuania, it starts at the age of 7. In most European countries, age is the only criterion for admission to primary schools.

Methodology

A qualitative research data were collected while conducting expert semistructured interview and focus group interview - discussion. A semi-

structured interview was conducted in 2021, in October and in 2022, in March. Based on the method of targeted criterion selection, educational experts were invited, invitations were sent by e-mail, with the agreement form of the participant for the participation in the interview. Based on the prepared semi-structured interview questions (Table1), an interview was conducted. Prior to that, the informants' agreements were obtained, the purpose of the study and the principles of ethics and the method of presenting the results were explained to them. All interview participants agreed to have their responses recorded. The duration of interviews with experts was about 1 hour. At the end of each interview, research participants were given the opportunity to supplement their narratives with anything that may not have been asked during the interview or that they themselves would like to share. 12 education experts were interviewed. The audio recordings made during the interviews were transcribed into computer files in Microsoft Word format. Each informant was coded with a capital letter and a number.

The purposeful sampling method was also chosen to organize the focus group discussion. Using this selection strategy, 6 educators (2 preschool and 4 primary school educators) were selected. The focus group discussion took place in 2022, in March. Before starting the research, the research instrument was prepared. E-mail invitations were sent to pre-school and primary education teachers to participate in the discussion, which indicated the purpose, time and place of the discussion 6 pedagogues out of 12 responded to the invitation.

The purpose and course of the study, issues of ensuring confidentiality were discussed, and the agreement of the discussion participants to record the conversation with a voice recorder was obtained. The duration of the discussion was 1 hour 15 minutes. The audio recording of the discussion was transcribed into a computer file in Microsoft Word format.

The research instrument used for the interview study is a semi-structured interview. For its implementation, 7 main questions were prepared based on the inductive method (see Table1).

Table 1 Research questionnaire content (made by authors)

<i>No.</i>	<i>Questionnaire type</i>	<i>Qestion content</i>
1.	<i>Expert questionnaire</i>	What do you think, is it relevant to talk about early education in Lithuania? Tell me more about why you think so?
2.		What are the reasons to lower the school entry age ?
3.		What opportunities and/or threats do you see in early education? Can you comment in more detailed way?
4.		What would you, as an expert in this field, suggest paying attention to when talking about lowering the age of primary school children?
5.		How do you think the ongoing early education would affect schools, what would change?

6.		How much do you think the content of education would change by bringing the start of compulsory education earlier? Give specific examples.
7.		Maybe you want to supplement this interview with something that I didn't ask, but you think is important?
1.	Group discussion questionnaire	How do you assess the proposal to start compulsory primary education from the age of 6?
2.		What benefits and/or harms would you see coming to school earlier? Comment more.
3.		How do you think the school should change if younger children come to it?
4.		What would you suggest to pay attention to when talking about lowering the age of a child in primary education in terms of content/activities?

The insights analyzed and presented in the theoretical part were more prerequisite for formulating the questions. During the interview, the research participants were left free to initiate new topics or develop those that seemed important to them, thus leaving enough space for their evaluations. Questions were drawn up for the group discussion with the educators (Table1), based on the results of the first phase of the study.

Research results

After processing the results of the first stage of the research using the method of inductive thematic analysis, four main themes were distinguished: the relevance of early education, the characteristics of the change of age stages, changes in the content of education during the early age of education and the change processes taking place in the education system (Figure 1). These results showed a global picture, which is more oriented to changes at the state level and at the administrative level of the organization.

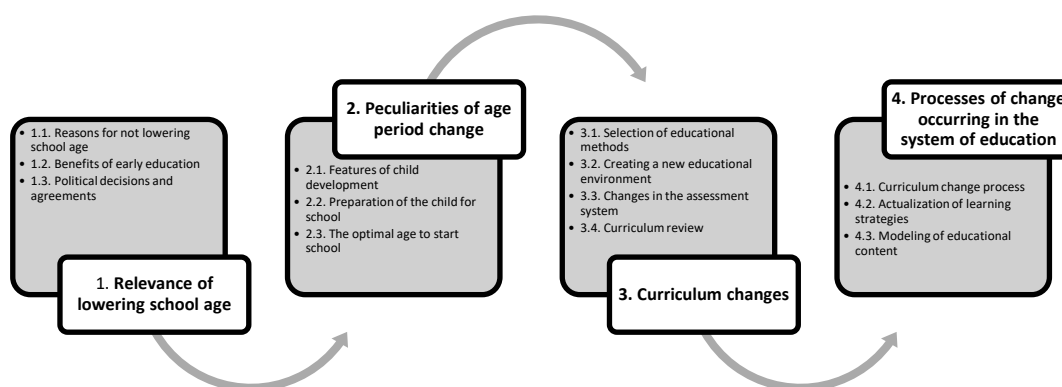


Figure 1 Thematic map of the semi-structured interview (made by authors)

Summarizing the results of the study, the reasons for early education became clear. Advocates of coming to school at a younger age claim that it helps to reduce poverty and social exclusion and has a positive effect on the social and cognitive development of all children. It is also mentioned that this is a purposeful move, due to international research data indicators, student achievement gaps, experiences, and trends in other countries. They claim that early education would be beneficial for all children. They would begin to grow systematically and consistently as individuals earlier, integrate into the school environment faster. Their social abilities, general abilities, communication, cooperation, language skills and learning achievements would begin to be strengthened earlier. However, it is emphasized that the benefit of early education for the child will be active only if the education is of high quality. The child's age period should be considered when an appropriate educational environment is prepared for them. Appropriate educational methods and tools must be selected, and the educational program should be restructured. According to the experts, the most important issue should be the readiness of Lithuanian schools to accept a younger child. Thus, it is necessary to conduct scientific research, analyze the experiences of other countries and then make decisions about early education. If the educational content is not adapted to that age, learning disorders may be misdiagnosed, and the child may experience various psychological difficulties. It is emphasized that it is very important to take into account the peculiarities of the development of the age group in question, to know them well, to evaluate the individual development of the child. Most of the informants say that the beginning of school attendance should not be determined by the child's age, but by his /her maturity and biological capabilities, therefore they advocate a flexible start to primary education.

Research participants emphasize the changes taking place in the education system. They talk about the process of preparing educational programs, updating teaching strategies and modeling educational content. Informants say that educational programs are created for current first graders. If a decision were made to start attending school from the age of six, the curriculum would not correspond to that age group and therefore other solutions would have to be sought, as the programs are drawn up ten years ahead and would not be changed again.

After analyzing the results of the second stage of the research using the method of inductive thematic analysis, three main themes were identified, namely the relevance of early education, the characteristics of the change of age stages and changes in the content of education during early education, and subthemes were identified (Figure 2). The results showed that these three topics, which are also discussed by education experts in the first phase of the study, are identical. It also became clear that there are different opinions regarding early education. Most of the research participants say that education should be compulsory already in pre-school groups, so that all children have the opportunity to develop optimally and be better prepared for school. Special attention should be paid to children

experiencing social exclusion. The results of the study show that children who receive quality education earlier and study longer learn more. It would be easier for them in higher classes, they would have better learning results, and more purposeful life achievements. It would also be easier for educators to organize education and differentiate activities if there were children of the same age in the class.

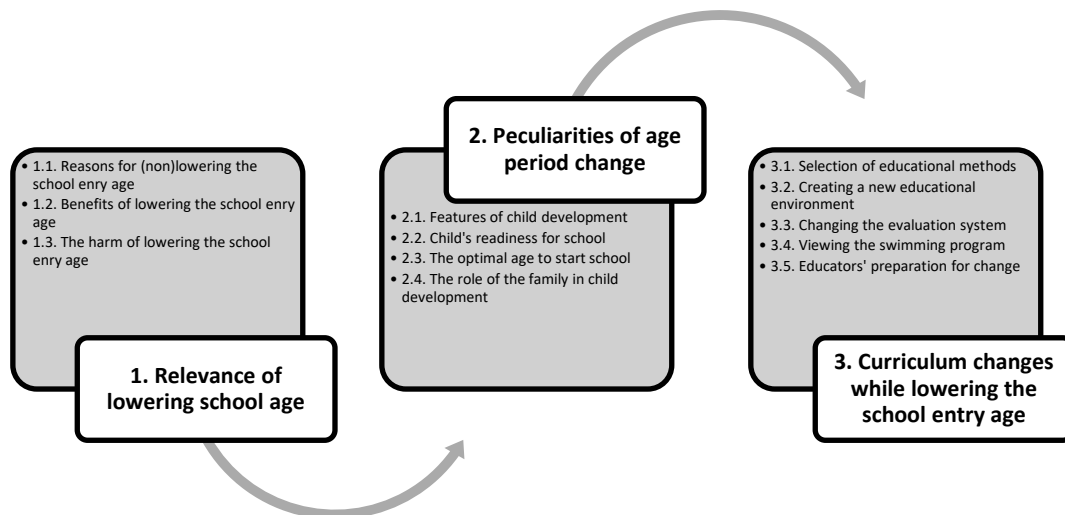


Figure 2 *Thematic map of group discussion (made by authors)*

A possible negative consequence of early education has also become apparent: when a younger child enters school, learning difficulties and psychological problems may arise. The greatest attention should be paid to the child's maturity and preparation for school. Research participants emphasize the peculiarities of the age group, highlight the differences between seven-year-old and six-year-old first-graders. Younger children find it more difficult to learn and concentrate, they get tired faster when doing tasks, fine motor skills are more difficult to master; adaptation of a six-year-old entering the first grade is more difficult than a seven-year-old.

It also became clear that the content of education should be adjusted when education is accelerated. To ensure quality of education, educational programs must be reviewed and adapted, educational methods and tools has to be properly selected, educational environments must be changed, and they must be adapted to a certain age. It is emphasized that the evaluation should be clear, according to the individual progress of the child. Research participants agree that it is important to prepare and continuously upgrade the qualifications of the teacher, focused on children's knowledge and the peculiarities of the age stages.

Conclusions and discussion

The participants of both studies, who are in favor of early education, claim that it would be beneficial for children experiencing social exclusion, as it helps to reduce social problems. They also claim that early education would be beneficial for all children because they would begin to grow systematically and consistently, integrate into the environment faster, and social abilities, general abilities, communication, cooperation, and language skills would begin to be strengthened earlier. Many educators and experts who participated in the study state that the benefit of early education is increasing child achievements in senior classes and in life. The results of international research data PISA (2016), PIRLS (2017) are emphasized, from which longer participation in qualified institutional education is one of the strongest early education factors influencing better student achievements at the age of 15. Experts also talk about Eurydice data, which show that in many countries compulsory education starts at the age of 6, and in Lithuania - at the age of 7. It is considered important to pay attention to the experiences and trends of early education in other countries, especially the nearest neighboring countries (Latvia, Germany, Poland, Czech Republic, Slovenia, Croatia, etc.). Interview participants say that children are old enough when they finish school, that they could finish it being younger, and therefore they would enter the labor market earlier. And the pedagogues who participated in the discussion see the benefits for themselves, that if the children are of the same age, it will be easier for the teachers to differentiate the activities and facilitate their work with the class.

Educational experts and pedagogues who participated in the study, who are against early education, emphasize that a child who starts going to school later learns and feels better there. They emphasize that the most important thing should not be the starting school age of the child, but his/her maturity for school. Scientific literature (Herbst & Strawinski, 2016; Valantinas, 2011) also states that an earlier start of education would be particularly beneficial for children from poor families due to early pedagogical support. They highlight the fact that the learning achievements of students in older classes are better, and the vocabulary is richer; children experience fewer difficulties in communication, have fewer cognitive development disorders. A child who started school earlier would be able to finish it earlier and enter the labor market, which would have a positive effect on the pension system. International research reports (OECD, 2017a, b; UNICEF, 2019) state that early education has a positive effect on the further social and emotional development of all children, especially those growing up in conditions of social risk and social exclusion; the earlier a child begins to be educated in a purposeful way, the better his/her achievements in higher classes.

After reviewing the results obtained from all research stages, it became clear that all the participants of the research agree that while lowering the school entry

age, educational programs must be reviewed and adapted, educational methods and tools must be selected appropriately, the educational environment has to be changed and evaluated according to the individual needs of the child progress. If the educational content is not adapted to the child's age, learning disorders may be misdiagnosed, and the child may experience various psychological and learning difficulties. The IBE (UNESCO, 2013) indicates that in order to promote learning effectively, the curriculum, teaching/learning methods and structures need to be constantly adjusted in response to changes in science, technology, culture, economy and social discourse.

The participants of the interviews emphasize that the work of updating educational programs is underway today: new educational programs will be digital, information technologies will play an important role, achievement levels will be more clearly defined, and a new threshold level will be introduced. Though updating the educational content, the experts stick to the general competence concept of 2008, the content of competence itself is developed and clarified. The aim is to reveal the connections between subject content and competences, to illustrate how competences are developed through subject content. The website "School 2030" (in Lithuania) presents 6 descriptions of competences: communication; cultural; creativity; cognition; citizenship; social; emotional and healthy lifestyle competencies. An important note is that the programs are designed for current firstformers, the majority of which are 7 years old. If a decision was made to start learning from the age of 6, then the educational programs would not correspond to that age. Thus, before making decisions related to early education, the preparation of all of Lithuania is important, so it is necessary to continue discussions with the educational community, pedagogues, parents, municipal education specialists. It is necessary to take into account their expectations and needs, conduct scientific research, analyze the experiences of other countries and then make reasonable decisions.

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