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Abstract

**Purpose** – the Slovak educational reform caused many changes in the Slovak school system. In the article, the author analyzes the impact it had on the educational contents and technology in pre-college economic education as part of general education.

**Design/methodology/approach** – curriculum documents analysis, literature review, opinion survey (questionnaire), qualitative research (interview).

**Findings** – he reform resulted in more teaching time as well as more practical orientation of economic education in general education in primary and secondary schools. However, what is still missing in the contents of this branch of economic education is more space for entrepreneurship education that would help to develop entrepreneurial skills necessary for the students to become more economically independent after they leave school. Although the reform gave schools more freedom in creating their school educational programs, it did not provide them with extra funds to finance the necessary modernization of the educational technologies they use. The differences in the use of modern ICT between different schools are thus attributable to other factors, unrelated to the educational reform process.

**Research limitations/implications** – in the analysis of the contents of pre-college economic education, the author focused on the educational standards set by the state educational



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program, which must be respected by all schools in Slovakia. Although the reality of economic education in general education differs among schools (some schools created even several separated economic courses compulsory for all their students, others offer only a minimum required by the state educational program infused in a compulsory social studies course), it might also be interesting to analyze a sample of school educational programs for comparison and a more in-depth analysis.

**Originality/value** – the article presents the findings of the genuine research.

**Keywords:** economic education, general education, educational reform, educational contents, educational technology, educational program, curriculum, ICT.

Research type: research paper.

### 1. Introduction

In 2008, the new school act came into force in the Slovak Republic, which started the process of pre-college educational reform. In the article, it is analyzed how and to what extent it influenced the educational contents and technology in economic education in primary and secondary schools. The author focuses mainly on the scope and contents of economic education in general education. That is why especially the state educational program for grammar schools is analyzed, which represents the type of secondary schools, educational programs of which focus mainly on general education of their students. If the government of a state with a market-oriented economy is to seriously define the desirable characteristics of an economically independent citizen, economic literacy (especially financial literacy as its integral part) should not be avoided. In this respect, the government should implement its socio-economic policy in a close connection with its educational policy via state educational programs as powerful tools, which influence the scope, contents and quality of economic education in the whole country. In the second half of the article, it is analyzed whether and why the educational reform has or has not influenced the educational technology in economic education, directing the attention especially at the use of modern information and communication technologies in the educational process in pre-college economic courses.

# 2. The Effect of the Slovak Educational Reform on Curriculum Documents

In May 2008, the National Council of the Slovak Republic approved Act No. 245/2008 on Education (School Act) and on Amendments of Some Other Acts (hereinafter referred to as "the new school act"), main objective of which was to give primary and secondary schools more freedom in the process of creating their school educational programs. In the previous years, the educational content in primary and

secondary schools was strictly controlled by the Ministry of Education of the Slovak Republic and its subordinate institutions (mainly, the National Institute for Education and the State Institute of Vocational Education). The curriculum documents for each type of school used to be approved centrally by the ministry and all the schools had to educate their students in compliance with these detailed regulations. As a result, each school of a certain type provided the same subjects with almost the same educational contents for each grade's students. That meant no competition between schools, no need to look for better ways to educate students in a particular field of study.

The new school act introduced a two-level approach to creating curriculum documents. On the first level, the Ministry of Education, Science, Research and Sport of the Slovak Republic (hereinafter referred to as "the ministry") and its subordinate institutions approved the so-called state educational programs for each type of school, i.e. for a field of study or for a group of similar fields of study. They determine the compulsory contents of education by means of setting educational objectives, describing graduate profiles and main characteristics of each field of study. State educational programs also provide curriculum frameworks, which define content and performance standards of education as well as staff, material, technical and spatial requirements for educational process.

On the second level, schools themselves compile their own school educational programs, which have to be in accordance with the general requirements of the state educational program for the particular field of study. Thus, for five years now, Slovak teachers in every school have had the chance to create the educational programs for their students, to decide on the subjects (courses) involved in them as well as the structure of the educational content provided.

Further in the article, the author focuses on economic education in secondary schools in Slovakia and analyzes the changes it has undergone since the educational reform was put into effect. It might have been presumed that more freedom from the state control together with growing possibilities offered by the modern social technologies as for gathering and analyzing relevant information even from abroad as well as mutual communication and exchange of experience between different schools and teachers, etc., would bring the long-awaited changes in the scope and contents of economic education as part of general education in all types of primary and secondary schools.

A quick look into the history of economic education in secondary vocational schools that specialize in preparing students for the jobs of economists shows that this branch of economic education already underwent substantial changes a long time ago, in connection with the transition of the Slovak economy to a market economy after the Velvet Revolution in 1989, followed by the split of Czechoslovakia in 1993. As the requirements for economists in companies changed to a large extent after their transformation from state-owned to private enterprises, the ministry was forced to change the curriculum of this type of schools and adapt it to the newly-arisen requirements of the economic practice.

As economic literacy was not very important for common people in the system of planned economy, almost no attention was paid to economic education in general education of students in primary schools and non-economic secondary schools in the past. In the transition process from planned to market economy, there was no direct pressure from employers to make changes in this branch of economic education because it was even advantageous for them to know more about how market economy works than candidates looking for jobs did. Therefore, the situation that hardly any economic knowledge was taught in primary schools and non-economic secondary schools remained almost unchanged for many years, until the overall educational reform started, despite the ever-increasing call for a change in the public.

Although some authors (Laney, 1999; Becker *et al.*, 1990) argue that using convenient methods of instruction, including modern social technologies, can make economics knowledge quite understandable even to younger pupils in primary grades, it remains a fact proved by the findings of developmental psychology (Kačáni *et al.*, 2004) that abstract thinking and the ability to generalize, which are essential to really understand even most of the basic economics concepts, start to develop dramatically no sooner than during the period of puberty. Therefore, it is not suitable to start with serious education in economics any sooner than at the end of primary school. That is why in the rest of this article, the author focuses mostly on secondary schools.

# 3. Economic Education in General Education before and after the Educational Reform

In order to analyze the scope and contents of economic education as part of general education, it was decided to examine this type of economic education in primary schools and mostly in grammar schools, which represent the type of secondary schools, where general education is the key priority. For this purpose, the curriculum documents valid before the educational reform in Slovakia started were analyzed and compared to the findings of the analysis of state educational programs and school educational programs of several chosen schools of these types nowadays.

It is not at all easy to define what the term "economic education" should include or, in other words, what should be meant by an "economics course" in pre-college education (Walstad and Rebeck, 2000). However, when we talk about economic education as part of general education in this article, we always include all types of topics not only typical of basic economics courses (mostly theoretical aspects of microeconomics and macroeconomics), but also the so-called economics-related areas, such as consumer economics, personal finance, business economics, entrepreneurship, government and economics (economic policy questions) and the like.

It is a tradition in Slovakia that economic education in primary schools and grammar schools (i.e., pre-college economic education in general education) is infused in other subjects, usually as part of a social studies course, which also includes the basic topics from these other fields of study: psychology, sociology, law, civics and politics as well as introduction to philosophy. This approach is not only typical of Slovakia, but it is also common in many other countries. It could be argued that separate courses on economics

would mean not only more time for economics-related topics, but also more qualified teachers, higher-quality instructional materials used in classes, etc., so they would improve the quality of economic education in general education. This statement can be based on the conclusions Watts (2006) made after an extensive review of research on outcomes and effective program delivery in pre-college economic education:

- At both the primary and secondary levels, students of teachers, who know more about economics, spend more time teaching economics and who use good instructional materials, learn more economics.
- A formal secondary course in economics is the safest way to improve students' knowledge of economics, but it is far from clear that one course in economics is enough to consider students economically literate.

Having reviewed the findings of several studies that focused on related problems, Peterson (1999, p. 5) stated that most of the studies typically revealed that "students who receive economics instruction in an economics class perform better on standardized exams than those who receive no economics instruction at all or are exposed to economics as part of a social studies class".

These ideas can also be supported with the results of author's own research (Novák, 2005), which was carried out in Slovakia in 2005. In the opinion survey, the author asked questions dealing with the scope and contents of economic education in general education in secondary schools (the author focused on grammar schools because they represent the type of secondary school, where economic education is always part of general education). There were four main groups of respondents from or related to several chosen grammar schools: economics and social studies teachers, non-economics teachers, last-grade students and their parents. All these groups of respondents were in favor of the idea that economic education in grammar schools was insufficient, and even more, the structure of the topics taught should be changed greatly, with less emphasis on the then-prevailing theoretical economics issues and more time devoted to economics knowledge relevant for solving everyday-life problems. Though the opinions varied somewhat among these four groups of respondents (with economics teachers and students' parents being the most in support of separated economics courses with more practical orientation of their educational contents, and, logically, non-economics teachers - defending the scope of their own subjects – being the most in support of economic education remaining part of social studies courses), the majority of respondents in each of the groups claimed that the scope of economic education at that time was insufficient and deserved more teaching time (either in the form of separated economics courses or infused in social studies courses).

According to all the groups of respondents, the most preferred alternative of the scope of economic education in general education in secondary schools was at least three hours of compulsory economic education per week in total for the entire study (e.g., one hour per week in the second or third grade and two hours in the third or fourth grade), which might be the ideal solution for developing economic literacy of students, but probably impossible to implement, taking into consideration the fact that the curriculum

was already overcrowded, so that solution would require decrease in the scope of some other subjects.

In the past, being part of compulsory education in a certain type of school meant that the ministry included the educational contents in the approved curriculum documents for that type of school. It is quite obvious that if something should become part of everybody's general education, it ought to be taught in every type of school and it ought not to be subject to students' choices. However, while nobody objects to certain topics in the Slovak language, mathematics or science courses, etc., being included in every school's curriculum (because it is expected of every secondary school graduate to be able to communicate in Slovak fluently, to count, to understand why water freezes in winter, why we can slip on ice, why day changes to night and vice versa every 24 hours, etc.), it is not always so with basic economics knowledge. Even though there are some studies that question the effectiveness of economics-related courses being mandated and thus made compulsory for all students in certain types of schools (Belfield and Levin, 2004; Tennyson and Nguyen, 2001), it is more of a question of common sense than serious scientific research whether the knowledge that, without any dispute, should be part of everybody's general education should or should not be included in the curriculum of primary or secondary schools that represent the levels of a country's school system, which should affect every citizen of the country.

Talking about compulsory education in Slovakia nowadays (i.e., after the educational reform), the only way to analyze its contents is to review the educational standards approved for each type of school (field of study) by the ministry because only these standards define the mutual educational contents for all schools of a certain type and thus have to be reflected somewhere in the educational contents exposed to their students according to their school educational programs. The rest of the educational contents included in each school's curriculum may differ from school to school, depending upon the school's autonomous decisions, so what might be compulsory in one school can be optional or even not included at all in another school's educational program.

Besides the scope of economic education as part of general education in secondary schools, the survey also dealt with its educational contents. There are so many economics-related problems in people's everyday lives that it is a difficult task to choose the economics knowledge that is the most helpful to most people at a certain point in their lives, and thus, should become part of the educational contents of economics or social studies courses in all secondary schools. The contents of economic education as part of general education in secondary schools, as suggested in the results of the survey, should include these topics (Novák, 2005):

- basic economic concepts and laws;
- market and market mechanism, market competition (with a focus on consumer goods and services markets);
- household economics, family budget, personal finance;
- legal aspects of business;
- the essence of an enterprise and entrepreneurship, legal forms of businesses in Slovakia;

- setting-up a business, registration and other obligations of businesses and employers;
- the fundamental principles of business economics;
- human resources management, introduction to the world of work;
- marketing basic concepts and tools;
- basic functions of company management;
- · national economy and its sectors, division of labor;
- performance of the national economy and its measurement;
- inflation basic types and consequences;
- unemployment as an economic and social phenomenon;
- taxation the tax system of the Slovak Republic;
- banking the role of money and banks in market economy;
- insurance life versus non-life insurance, health and social insurance;
- the role of the state in the economy economic policy, its main objectives and tools;
- international trade, international economic relations and economic integration;
- · ecological aspects of economic activities.

It is vital to add that if these topics are included in general education courses, they ought not to be presented to students in detail. For each of them, teachers should carefully choose only the basic knowledge and make sure that their students understand how this knowledge can help to improve their lives after they leave school. The emphasis ought to be put on the practical application of the basic knowledge in each of these areas, not on a detailed theoretical explanation of as many related topics as possible. Many inspirational ideas on how to improve economic literacy courses through dropping or limiting unnecessary theoretical topics and adding practice assignments can be found, for instance, in Hansen *et al.*, 2002. It is also important for teachers to switch from the traditional lecturing approach in the educational process to some of the approaches that bring the presented theoretical knowledge closer to the problems that their students face in their everyday lives, e.g., through history and case studies, and other methods of instruction that teach the students how to apply the theories they learned to real world issues (Knoedler and Underwood, 2003).

Having compared the findings of the survey to the curriculum documents valid at the time of the survey (i.e. before the educational reform), it was found out that in accordance with the theoretical assumptions, there was no economic education included in any of the subjects in primary schools, except for the last (9<sup>th</sup>) grade. There, some basic economic knowledge could be identified related to the main principles of market economy and its functions as well as to the consumer behavior and household economics infused in a social studies course together with the presentation of ecological aspects of economic activities. That might be considered as sufficient provided that there was more economic education found in secondary schools' curricula. But, having analyzed mainly the curriculum documents valid for grammar schools at that time, it had to be concluded that the scope of economic education in that type of secondary schools was absolutely insufficient (only two months with a 45-minute lesson a week were allocated for economic education within a social studies course) with the educational contents focusing mainly on macroeconomic and theoretical questions, with almost no practical use in students' everyday life.

Compared to the situation before the reform, the state educational program and its educational standards nowadays guarantee approximately three times as much teaching time within the social studies course at grammar schools for economic education as they did before the reform. Even more positively can be rated the findings of a detailed analysis of the educational content and performance standards valid nowadays, according to which most of the former theoretical topics have been removed from the educational contents and replaced by topics with direct possibilities of practical application in everyday life (Novák, 2010).

To speak in more detail, grammar school graduates in Slovakia ought to be acquainted with the basic economic questions and possible approaches to their solution. They should understand the principles of market economy and the nature of the processes of demand and supply resulting in the determination of prices both in consumer goods and services markets and production factors markets. They should also comprehend the roles of both employers and employees in the labor market in the national as well as international context, with a special focus on the issue of unemployment and its economic and social consequences. They ought to be prepared to take an active part in the world of work as employees and understand the functions of money in today's world as well as be able to explain the functions of financial institutions (bank and insurance companies) in market economies. The students should also understand how taxes affect people's lives and how they help the state to implement its policies (Šlosár and Novák, 2012).

Also, an important part of pre-college economic education is teaching financial literacy (Lusardi *et a*l., 2010). In Slovakia, it is dealt with in detail in the National standard for financial literacy (version 1.0), which was approved by the Ministry of Education of the Slovak Republic in 2008. However, that document only defines the related content and performance standards for both primary and secondary education, but leaves it up to the schools to include them in any subjects of their choice in their school educational programs.

To conclude with, what is still missing most in the educational content standards valid for the Slovak grammar schools is entrepreneurship education that would show the students the other option they could choose to make their living, besides becoming employees of the companies making business in their surroundings (Novák, 2009). What is more, it is very important to develop entrepreneurial skills of the students with a view to making them more capable of contributing to the development of creative economy through business innovation, which has become an important phenomenon in the corporate economy. Neglecting innovation as an economic activity in general economics courses prevents students from understanding key aspects of the behavior of the modern economy, such as competition based on innovation, not on prices, as well as the welfare implications of profit-seeking innovation (Pol, 2012).

# 4. Modern ICT and the Slovak Educational Reform in Economic Education

In this part of the article, the author focuses on modern information and communication technologies (ICT) used for educational purposes in pre-college economic education and tries to answer the question whether the educational reform in Slovakia has brought about changes in its use in schools.

There is no doubt that the use of modern technologies in educational process can help to enhance its quality and results. Economic education is no exception in this respect and the use of modern ICT in economic education can be more than recommended for a number of reasons. It could be even said that the profession of economists itself has been profoundly altered by the introduction of modern ICT, especially if economic analysis is concerned. The way in which economists process data, formulate theories and reach conclusions shifted dramatically, as new technologies became available. The internet and the world wide web have made data collection in many cases simplified to just a few minutes of downloading, as government agencies, statistical offices and other institutions make many of their data sets available for downloads, and even professional economists and analysts put some of the results of their research on the web, so they can be used for further scientific as well as educational purposes. The stress should also be put on the growing importance of modern social technologies that students use in their everyday lives for up-to-date, online information exchange, such as social networks, chat tools, etc., though the meaning of the term "social technologies" is too narrowed in this context (Tamošiūnaitė and Skaržauskaitė, 2012).

As the use and application of modern ICT have become critical to the economics profession itself, it ought not to be avoided by those, who teach economics. There are two main reasons why teachers of economic subjects should incorporate the use of modern ICT in the educational process. First, economics is a data-rich social science and as such, even pre-college students should work with relevant data because current, real world data make pre-college economics instruction much more authentic. Second, research tells us that educational technology can have a significant positive effect on student achievement in all subject areas, that it makes instruction more student-centered, and that it stimulates increased student-teacher interaction (Robinson and Davis, 1999).

It is inevitable that teaching practices in economic subjects move beyond the chalkand-talk preaching mode that characterized the 20th century style of economics teaching. Students now expect to be engaged in the learning process and appear unwilling to sit passively during lectures. Of course, the speed, with which teachers of economic subjects embrace new approaches to teaching, depends to some extent on the reward structures for doing so (Becker, 2000). Various studies indicate that the implementation of modern ICT in the school environment is affected by several parameters (Condie and Munro, 2007; Underwood *et al.*, 2010). For example, the attitudes of school principals to ICT adoption influence the extent and quality of technological applications' usage (Pelgrum, 2001). In fact, two schools with almost the same infrastructure, similar structure of teachers and students can have very different results, depending upon the school principal's opinion of the importance and possibilities of ICT usage in educational process. Therefore, it is especially important at the school level for the principal to have a vision of what is possible through the use of ICT and to be able to work with others to achieve that vision (Solar *et al.*, 2013).

## 4.1 The Description of the Main Objectives, Methods and Target Groups of the Research

In the research, the author analyzed the changes in the use of modern educational technologies in pre-college economic education in Slovakia over the past five years, since the Slovak educational reform started in 2008. The main objective of the research was to find out how the situation has changed during this period and to define the main reasons for the changes, i.e., to determine to what extent the changes were related to the reform and to what extent they were affected by other factors.

As the focus of the research was on the causes and nature of any changes in the analyzed area, a qualitative research approach was chosen, namely the method of controlled interview with teachers from five selected secondary schools. Interview was chosen as a method of qualitative research, because the author was interested how and why the teachers use modern technologies in economic education as well as in what ways and to what extent they think the use of ICT has influenced the quality of the educational process in their schools in recent years, in relation to the educational reform and its implementation in their schools, and vice versa.

All the schools chosen for the research were from the Bratislava region and all of them specialized in economic education (three of them provided their educational programs in the field of study called "business academy", one in the field of study called "trade and business" and one in the field of study called "hotel academy"). The selection of the region was motivated by the fact that it is the richest and most developed region of Slovakia, which is closely related to a wider use of modern ICT in people's everyday lives, and thus, also in the lives of the teachers and students from the selected secondary schools. It was supposed that it should automatically put more pressure on the schools and their teachers to introduce modern information and communication technologies in the educational process. Therefore, it could be assumed that ICT usage in these schools ought to be more widespread than in the schools from other regions of Slovakia. Consequently, the teachers from these schools ought to have more experience with ICT usage in economic education, so more in-depth information about how and why they use them in their work could be gathered.

For that purpose, interviews with nine teachers of economic subjects in the selected schools were conducted. All of them were teachers of economics with at least five years of teaching experience in secondary schools. In most cases, the length of their teaching experience ranged from ten to twenty years of teaching. The youngest respondent was 30 years old and the oldest one was 47. That means that the author chose to interview teachers with sufficient practical teaching experience to be able to compare different approaches to teaching economics (with or without ICT usage) from their own experience, still not being very old, which might lead to the attitude of rejecting the use of ICT and other

modern educational technologies in class simply because of their unwillingness to learn new ways of teaching several months or years before their retirement.

#### 4.2 The Most Important Findings of the Research

Based on the author's experience and comparison of the five schools that were analyzed, it can be concluded that the school principals' attitudes towards ICT and their determination to equip the schools and their classrooms with modern technologies can result in huge differences as for the ICT infrastructure at the teachers and students' disposal even between schools of the same type located in the same region. The saying "Where there is a will, there is a way" proved to be true when the ICT equipment of the five schools of almost the same type, teachers of which were interviewed, were compared. Taking into consideration they were all public schools with the same system of funding (i.e., with comparable chances of raising additional funds for financing the purchase of modern ICT equipment), a very similar number of teachers and students, even with quite similar school educational programs and study plans their students could enroll, it was really striking to find out that one of these schools had a data-projector and access to the internet in each classroom, with all the teachers having a notebook at their disposal to be able to take with them to any classroom anytime they needed, with six special classrooms in the school equipped with interactive whiteboards at every teacher's disposal depending on the educational objectives and needs for particular lessons (and, as the teachers from that school said in interviews, they almost had to fight with each other for the right to use them as those classrooms were exploited fully all day long).

On the contrary, there was another one of the five schools, which had only one special classroom equipped with an interactive whiteboard, a PC and a data-projector (which was barely used, as the teachers from that school all claimed in the interviews), no internet access nor data-projectors in other classrooms (not even simple overhead projectors), no notebooks for the teachers, so if a teacher in that school wanted to use an ordinary MS PowerPoint presentation in class, they would have to borrow a common data-projector together with a notebook from the teachers' room and before the lesson they would have to make all the necessary installation in the classroom.

The remaining three of the analyzed schools could be ranked somewhere in-between those two extreme examples, as for the disposable ICT equipment and its usage in schools. However, the most important finding as for the reasons for the great differences between those two, otherwise quite comparable, schools, was that in the first school with the most modern ICT at all the teachers' disposal, the school principal thought it was very important to use modern technologies in educational process and he himself was a leader in their usage during his own lessons, so the teachers naturally followed his example. In addition, all the interviewed teachers stated that if it was not for him and his great enthusiasm to use modern ICT in educational process, they would definitely not start using ICT in class to such an extent, and they all confirmed that the ICT infrastructure in the school was solely thanks to the principal's never-ending attempts to find new sponsors and other sources of additional funds (such as project financing, etc.) to finance the modernization of the school's equipment. The principal of the other school, with almost no ICT usage in its educational process, was described by the teachers in the interviews as quite opposite in this respect. He did not even have a PC in his own office and the teachers from that school stated they could see no point in trying to bring modern technologies into their classes, as it was not at all rewarded in their school.

Another important area that was focused on in the interviews was to what extent the teachers thought it was important to use modern ICT in instruction if the overall objective was to maximize the efficiency of educational process in terms of educational objectives achievement by students. All the teachers agreed that the key factor of success in teaching and learning is not the technology used, but the involvement and motivation of both subjects in educational process (i.e., both the teacher and the students). Most of the respondents expressed themselves clearly in favor of ICT usage, but at the same time, they emphasized that the use of ICT should depend on the topic of the lesson as well as on the disposable teaching time. They also stressed that using modern technologies in instruction should lead to increase in motivation of the students, but it should not distract their attention during the lesson, e.g., using a presentation with hypertext links to related internet pages, interesting pictures, illustrative schemes, tables, special effects, etc., the teacher always ought to beware of the fact that the important thing, on which the students should focus their attention most of the time, is the educational content itself and not the ICT special effects as such.

It can be generalized that the teachers said it was more important to alternate the traditional type of lessons (the so-called chalk-and-talk approach) with active types of lessons (using methods of instruction, such as class discussions, role playing, case studies, didactic games, solving-problem teaching, etc.) than to incorporate modern ICT in the educational process at all costs. Some topics or methods of instruction might even contradict the use of modern technologies.

In the second part of the interviews, the teachers were inquired about whether and how the educational reform influenced the use of ICT in economic education in their schools. From their replies, it can be concluded that there are other factors that have a much greater influence on ICT usage in educational process than the reform. The situation has not changed substantially in any of the schools over the past five years and the changes that occurred probably had nothing to do with the implementation of the educational reform, which – in the teachers' view – had an impact mainly on the educational contents, giving the schools more freedom to choose what they want to teach their students. The reform has not provided the schools with more funds to finance the modernization of the educational technologies they use or more motivation to use modern ICT in educational process.

### 5. Conclusions and Suggestions

Pre-college economic education in Slovakia has developed greatly over the past two decades. As for its educational contents, the main factor that brought about substantial changes to economic education was the transition process of the Slovak economy. The

requirements for the people working in the positions of economists in private enterprises were in many ways completely different from those in the state-owned companies before the revolution in 1989. The privatization process, therefore, caused huge changes in economic education in secondary vocational schools that specialize in economic education for the jobs of economists.

In other types of schools on pre-college level, economic education was traditionally part of general education. Even though its importance for people's everyday lives is obviously much bigger in market economy than it was in the system of planned economy in the past, its scope and contents did not change much until the educational reform in primary and secondary schools started in 2008. The reform introduced several changes in the scope and contents of this branch of economic education (more teaching time as well as more practical orientation of the topics included in the educational contents). Still, those changes cannot be considered sufficient.

There are probably more reasons why economic education in general education is not more widespread in Slovakia, despite the fact that survey data suggest that adults think economics is important in pre-college curriculum. However, it seems that the study of economics tends to be delayed until the last possible moment in schooling with the least possible teaching time, if it is included at all, in other countries, too. Perhaps, Schug and Lee (2012) were right when they argued that if voters took seriously basic economic concepts, such as scarcity, opportunity cost and incentives, and applied them to public issues, it would make life more difficult for politicians, who prefer a world, in which people think they can get something for nothing. As it is for politicians to approve the educational standards for primary and secondary schools, that might really be the reason why economic education is not more widespread in pre-college general education.

Besides the educational contents, it was also inquired if the educational reform influenced the methods of instruction with a focus on educational technology used in economic education. Even though modern technology could be considered as one of the best tools at a teacher's disposal, it can be concluded that there are other factors that determined the use of ICT in economic education to a much greater extent than the reform itself. It seems that one of the most important factors is the attitude of the pedagogical staff members (especially the principal) towards modern ICT and their motivation to incorporate them in the educational process in their schools.

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### SLOVAKIJOS ŠVIETIMO REFORMOS POVEIKIS ŠVIETIMO TURINIUI IR TECHNOLOGIJOMS IKIUNIVERSITETINIAME EKONOMIKOS DALYKO MOKYME

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Santrauka. Pagrindinis švietimo reformos Slovakijoje tikslas buvo priderinti mokymo procesą pradinėse ir vidurinėse mokyklose prie specifinių moksleivių poreikių, kad mokyklos galėtų mokymo proceso turinį ir technologijas organizuoti priklausomai nuo specifinių regiono poreikių ir specializacijos. Ikiuniversitetinis ekonomikos dalyko mokymas yra svarbus tautos ekonominio raštingumo įtvirtinimui, valstybė turi garantuoti, kad visų mokyklų moksleiviai įgytų bent pagrindines ekonomikos žinias, reikalingas kasdieniame gyvenime. Šiame straipsnyje pateikta švietimų programų, kurios privalomos visose pagrindinio lavinimo mokyklose Slovakijoje, analizė. Šios programos nustato edukacinį kontekstą ir veiklos rodiklius pagrindinio lavinimo mokykloms, teikiančioms bendrąjį išsilavinimą. Buvo lyginama anksčiau atliktos mokymo turinio dokumentų analizės rezultatai su empirinio tyrimo (apklausos) rezultatais ir buvo analizuojamas poveikis, kurį reforma padarė ekonominio švietimo (kaip bendrojo išsilavinimo dalies) edukaciniam kontekstui. Buvo nustatyta, kad reforma turėjo poveikį ekonomikos dalyko mokymo apimčiai laike ir aukštesniam praktinio orientavimo lygiui ikiuniversitetiniame ekonominiame švietime, kas vertinama kaip teigiamas pokytis. Vis dėlto tokio tipo švietime vis dar pasigendama verslumo lavinimo, kuris padėtų plėtoti įgūdžius, leisiančius moksleiviams tapti ekonomiškai nepriklausomais po mokyklos bagimo.

Reforma suteikė daugiau laisvės mokykloms formuojant mokymo turinį, bet nesuteikė didesnių finansinių pajėgumų, kad būtų galima modernizuoti taikomas edukacines technologijas. Modernių technologijų taikymo diferenciacija tarp mokyklų yra vertinama kaip įvairių, su mokymo procesu nesusijusių, veiksnių pasekmė. Kaip vienas svarbiausių veiksnių išskiriamas mokytojų požiūris (ypač direktoriaus) į informacines ir komunikacines technologijas bei motyvacija įtraukti šias technologijas į mokymo procesą savo mokykloje.

**Raktiniai žodžiai:** ekonominis švietimas, švietimo reforma, edukacinis kontekstas, mokymo technologijos, valstybinė švietimo programa, mokyklos mokymo programa, mokymo turinys, bendrasis išsilavinimas, informacinės ir komunikacinės technologijos.