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# A CHALLENGE FOR TEACHER TRAINING: ECONOMIC EDUCATION IN MIDDLE SCHOOL

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#### Abstract

This paper reports on challenges that teacher training departments of economic universities in Romania have to face nowadays, at time of changes in national school curriculum. As it is expected, economic education will be extended at national level as consequence of introducing economic education programs in middle schools, in addition to exiting programs at high school level. Among challenges that this process will generate we identified the need for teachers especially trained to teach economics at middle school level. The paper is structured in two parts. The first one is focused on the need for qualified teachers to effectively deliver economic education in Romanian middle schools and on the role of universities in supporting pre-university economic education. Information collected from students and teachers in respect with their competencies to teach middle school students are presented in order to advocate for new pre- and in-service teacher training programs focused on teaching middle school economics. The second part of the paper presents information regarding a program for middle school developed by Romanian Center for Economic Education - CREE that gives orientation on what economic education at middle school level could be and about the competences needed to be developed to middle school teachers. The important conclusion of this paper is that the change in economic education has to go together with a change in pre- and in-service teacher training and educational organizations such as schools, universities, or NGO-s can work together to successfully develop and implement new educational programs for middle school.

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Keywords: Economic education, economic education in middle school, teacher training, teacher training programs.

#### 1. Introduction

Starting with September 2017, in Romanian schools a new curriculum will be introduced (MENCS, 2016). The need for changes in school curriculum has been demonstrated by the students'



performances and results at national and international examinations. Romanian students' performances at PISA tests, for example, are at the bottom of the EU achievements (Hanushek, & Woessmann, 2012). Traditionally, Romanian schools provided a strong theoretical preparation to students (Enachescu 2011, but not so strong practical preparation. Students have to study mother, modern and classic languages, sciences, history, geography, civic culture, to take technology, sports and arts classes and, if parents agree, religion classes too (MENCS, 2016; ISE, 2016). They have a weekly schedule with 28-30 hours allocated to 12-14 subjects and classes more practical oriented such as technology occupy up to 7-10% of the instructional time. Students, parents and teachers too are regularly complaining of lack of practical preparation in compulsory education and asking for more practical oriented educational programs. In the same time, many teachers are complaining of an overloaded curriculum, respectively, too many knowledge and information to be deliver during one school year. In many teachers' and parents' opinion good students are students with strong knowledge. And, according with the students' grades, many of them are 'good' in this respect. But, when it comes to apply the knowledge in analyzing a real life situation or solving a real life problem, only few students are able to complete such tasks (Centrul National de Examinare si Evaluare PISA, 2014; Miclea, 2015). All these weaknesses in students' education conducted to ideas that a new curriculum is needed and this has to be more coherent with the declared goals and aims of education and key skills that has to be developed to students too, and, as consequence, more practical and real life oriented.

The new curriculum illustrates the efforts made by curriculum designers and educational decision makers responsible with changes in national core curriculum to balance among theoretical and practical subjects to be studied and to allocate instructional time to vary possible practical educational programs. One important result of these efforts is a new subject in the core curriculum for middle school called 'Economic and financial education' that is considered to be real life oriented and more focused on skills and competences needed for effective behaviors in real life. In the same time, the new curriculum for middle school values more innovative and interactive teaching that has been proved not only highly attractive, but also productive in terms learning outcomes.

### 2. Economic Education – a Subject for Middle School Students

Economic and financial education is part of 'social education' field that includes among other subjects intercultural education and education for democratic citizenship. Each of these subjects is designed to be studied in one year, 1 hour per week, that means a total of 35 hours per subject. Economic and financial education is a subject for 8<sup>th</sup> grade (13-14 years old) students.

In general, economic education in middle school is a not a new idea. In many countries, 11-14 years old students are taking economic education classes or activities and many educational experts, authors and curriculum developers worked to design and develop good curriculum, and students' and teachers' economic education materials for this age (Lopus & Owen, 1995; Day & Ballard, 1996; Suiter at al., 1996; McCorkle at al., 2005; Anderson & Meszaros at al., 2005; Meszaros at al., 2005; Schug and Western, 2005). Moreover, there are economic education programs for elementary schools that imply 6-10 years old students (Meszaros & Evans, 2010). Nowadays, research on economic education field comes with strong evidences that early education is crucial. Primary, secondary and tertiary education are

complementary: tertiary education is depending on what has been learned in primary and secondary school (Hanushek, & Woessmann, 2012) and later education is less effective when it is about basic skills mainly because involves more efforts and costs. This is why students should begin to learn as soon as possible what is needed for effective behaviors in real life, and in this case, economic concepts and economic way of thinking.

Two things we would like to emphasize at this point: (1) In Romanian schools, economics has been always a subject in high school. (2) After the 2004 and 2006 changes in the core curriculum for high school two new economic subjects were added: entrepreneurship education in 10<sup>th</sup> grade and applied economics in 12<sup>th</sup> grade in vocational schools only. In this conditions, economic and financial education seems to be a very new subject for almost all middle schools in Romania. There will be some exceptions represented by those schools in which economic education was included in the school based-curriculum as an optional course, since 2004 (Mandrut, 2010).

In order to effectively provide economic and financial education to students, schools will have four years to prepare themselves. The changes in core curriculum will be done consecutively year by year, starting with September 2017 when the new curriculum will be introduced at 5<sup>th</sup> grade. So we expect schools to have to deliver economic and financial education compulsory programs starting with 2020. A simply calculation give us an idea about the extent of the program and how much effort from schools and other responsible educational institutions is expected. In 2016, approx. 150,000 students graduated the 8<sup>th</sup> grade and have been enrolled to national examination (MENCS, 2016). If a class imply an average of 25 students that means approx. 6,000 classes or 6,000 hours (1 hour per class) of economic and financial education with qualified teachers and good materials such as students' and teachers' books.

#### 3. The Need for Qualified Teachers

In order to identify the extent of the need for qualified teachers to economic and financial education in middle school in May-August 2016 we have conducted a survey among students and teachers of economics and business enrolled at Bucharest University of Economic Studies.

One group of subjects were bachelor and master program students from schools of economics and business who have taken psycho-pedagogical courses at the Teacher Training Department (TTD) in order to gain teaching competences and be able teach. These are students major in economics or business that chosen a teaching career. They have to graduate the psycho-pedagogical module (Level 1 and Level 2) consisting in one or two-semester courses of psychology, pedagogy, didactics, class management, school management, educational projects management, communication, computer-assisted instruction (CAI) and to take part in observatory and teaching activities in schools under supervision of designated in-service teachers. At the end of the bachelor program, a student who graduated the psycho-pedagogical module Level 1 too has strong economic knowledge, and a good understanding of what is economic education in schools, what is expected from a teacher of economics or business subjects, is familiar with methods recommended in economics and business classes, and educational communication, classroom and conflict management techniques. And something very important, the student has the teaching experience gained during the practical stages in schools. At the end of a master program and psycho-pedagogical module Level 2 the student understands the difference between compulsory and non-compulsory education and is

prepared to teach upper secondary and university students too. In the survey we have conducted we had 46 subjects from this group of students. 29 of them were enrolled in bachelor programs/psychopedagogical module Level 1 and 17 in master programs/ psychopedagogical module Level 2. All of them completed the same questionnaire.

In the second group of subjects were teachers of economics and business subjects from high schools. Some of them have worked together with TTD during the last 10 years as students' tutors in practical activities in schools. Others were teachers enrolled at TTD courses. TTD provides courses for in-service teachers who are interested to up-date their knowledge and teaching competences or want to be better prepared for exams that allow them to promote or to get new professional degrees. In July 2016, a group of 20 teachers attended TTD courses. They all completed the survey.

Our hypothesis was that TTD students and present teachers of economics and business are not prepared to teach middle school classes/ 13-14 years old students. They will have difficulties to manage class activities, to make economic content accessible to students and to design attractive lessons. They will consider economic and financial education more a content-oriented subject and less a way of thinking-oriented subject.

The instrument we used to collect data was a questionnaire with 10 questions. There were questions asked for (a) factual data such as schooling, gender, teaching experience and professional degrees; (b) opinion regarding (b1) appropriateness/usefulness/necessity of economic and financial education in middle school/to 13-14 years old students; (b2) economic concepts/content that should be thought in middle school/to 13-14 years old students; (c) subjects' self-evaluation of their capacity to teach middle school classes/13-14 years old students; (d) suggestions regarding courses, workshops, class activities, or programs that should be developed and delivered by TTD to properly prepare students and teachers to teach in middle school classes/13-14 years old students too.

Students and teachers that attended courses received a printed copy of the questionnaire each and were asked to fil it. 68 questionnaires were completed in this way. 23 teachers received the questionnaire and sent responses by email.

In our students' and teachers' opinion economic and financial education is not only an appropriate subject, but a necessarily one for middle school students. We expected this positive opinion from students and teachers with a deep understanding of importance of economic and financial education and especially for young people that need to be prepare to act effectively as consumers, producers, savers or investors and to understand economic facts and trends that influence their life. More than this, we expect teachers to admit that economic and financial education in middle school will allow students to have a better understanding of economic and business issues and topic they have to study in high school. Only one respondent have expressed doubts in this respect. The reason he invocated is that students have already an overloaded schedule, many subjects to prepare for and they don't need any more new disciplines/topic to study.

Students enrolled in TTD programs do not feel that they could teach middle school 1(3-14 years old) pupils. They are not sure what are the adequate economic concepts to be thought in middle school and do not know students' or teachers' materials or other kind of instructional resources for economic education in middle school. They couldn't indicate methods they would think may work with middle school students.

Teachers recognize that they have no or little experience in teaching younger students, but assume that they will be able to adapt themselves to challenges of teaching 8th grade students if they would attend training programs, focused mainly on methods of teaching. They also think that basic economic concepts and microeconomics concepts such as money, market, consumer, producer, cost, price, competition could be thought in middle school if they would have adequate educational materials and asked for students' and teachers' materials or other kind of instructional resources for economic education in middle school. Among difficulties teachers are expecting to face teaching middle school students are: communication problems, lack of educational materials, relationships with parents, students behaviors.

Data analysis indicated no influence at this moment of gender, schooling or professional degrees on teachers' capacity to teach middle school students. As we mentioned above, all teachers of economics are teaching in high schools and all students that are preparing to become teachers of economics are expecting to be high school or university teachers and professors. They have no experience in teaching younger students and, most probably, never thought to do this. We identified a positive relationship between pre-university and university education in terms of topic and content: university courses, especially TTD's courses are designed to meet the need of pre-university education. As long as in pre-university educational system was demand for high school teachers of economics only, TTD has not prepared students to teach in middle school, has not developed programs, courses, class activities focused on younger students.

In TTD programs, economic education in primary and middle school was more an issue to be illustrate than a teaching subject to prepare for. We expect that in next years this situation to be changed and as economic and financial education in middle school will concentrate more and more efforts and resources from institutions responsible with pre- and in-service teacher training, more programs designed to prepare middle school teachers of economic education will be developed and schooling and training will be among first factors with influence on teachers' capacity to teach younger students. We expect gender to have a later influence too as long as the number of female TTD students is high.

## 4. Innovative Methods and Strategies – the Key Ingredient of a Good Economic Education Teacher

One important finding in this survey is that in order to be able to provide effective economic and financial education in middle school, TTD students and in-service teachers of economics need more training focused on methods and especially on active-learning methods and strategies. Methods-oriented courses, workshops or class activities need to be innovative and quality-learning outcomes oriented. The new school curriculum requests changes in initial and continuous teacher training programs starting from the established goals and results. One important goal of every teacher training program should be to have interactive and innovative teaching implemented into classroom.

Present teacher training programs are focused on interactive teaching only at level of presentation and explanation. Pedagogy or didactics courses include lectures on teaching methods and usually advocates for interactive methods and provides a lot of information on this topic to students. TTDs' students and in-service teachers could have good knowledge in respect with interactive methods of teaching but this does not necessarily conduct to regular use of these methods into classroom. In the process of becoming a teacher or a better teacher, students and in-service teachers have to move from the

bottom level of learning (knowledge) to higher levels that imply application, evaluation, and creation (Anderson & Krathwohl, 2001).

The learning process should not be stopped after the first steps; it has to continue up to the highest possible outcomes. In initial and continuous teachers training programs for students and in-service teachers, interactive methods and strategies have to be presented and demonstrated by professors or instructors that are conducting such programs and practiced by students and teachers in class activities or workshops. Being trained in this respect and truly believing in the efficiency of interactive methods of teaching, teachers will apply these methods in classrooms and, eventually, will create their own activities and methods; they will innovate the teaching. As consequence of meeting the goal of teaching interactive, the number of teachers that will regularly teach based on interactive methods and strategies will increase, more attractive lessons will be conducted and students will perform better. Teacher training programs should encourage and promote education for teaching and learning too.

In universities, understanding and encouraging students to learn means to provide quality academic presentations and quality information, excellent teaching as consequence of knowing and applying pedagogic techniques, and to have the capacity to bridge the gap between teacher's and students' understanding. Nowadays more and more professors in universities and schools of economics behave in this respect and replace the lecture-based instruction with an active student-centered one. By doing this, they create circumstances for real participation of students in teaching and learning economics (McGoldrick, 2010) and, in the same time, rebuilt the teachers' behavior.

Innovative teaching methods and strategies imply a mix of educational actions: design (better interactive strategies, exercises as support for strategies), implement (design specific activities for the classroom starting from previous chosen strategy), and communicate. Innovative teaching request teachers to have the capacity to design and implement interactive strategies in class activities. Best practices should be disseminated into professional community. Teachers with good experience and results in designing and implementing interactive methods of teaching should write and communicate them to the others. Innovative teaching should become the regular behavior of teachers (Staiculescu, & Paduraru, 2012), first in universities and departments, center, and other existing entities for teacher training and, as a spreading-effect, in all kind of schools and educational organizations.

Innovative teaching is strongly promoted in academic environment (Salemi and Walstad, 2010) in order to become an outcome of teacher training programs. Professors themselves are trained to understand the value of interactive methods of teaching and to be more confident in using them. In the case of university professors and instructors, training means exchanging experiences, participating in teachers' meetings, practicing cooperative learning, role play, classroom experiment, interpretive discussion, formative assessment, content-rich problem solving, and similar interactive learning activities in special organized workshops.

Interactive teaching seems to be the appropriate strategy for teachers of economic and financial education to use in middle school classrooms in order to make economic concepts and analysis understandable for 13-14 years old students and conduct them step by step, to an economic way of thinking.

### 5. CREE Program: Economics for Middle School

CREE is the acronym of Romanian Center for Economic Education, a Romanian association of teachers active on economic education field since 2001. CREE advocated in favor of introducing economic education in schools as soon as possible starting at least with the elementary and middle school too. In 2002, CREE developed an economic education program for middle school in partnership with the Center for Economic Education of California State University of Hayward, USA. A curriculum for middle school has been developed (CREE, 2002). This includes basic economic concepts direct related to everyday life, to the way in which people are acting as consumers and producers: productive resources, scarcity, opportunity cost, economic incentives and rewards, consumer and producer, cost, profit, productivity, specialization and division of labor, market and price, competition, savings and investment, economic role of government, public goods, taxes, governmental expenditure, human capital, money, unemployment, inflation, international trade. A teacher book and a student activities book have been developed and published. To teach economic concepts, attractive lessons have been selected based on criteria such as students' involvement and diversity of activities. In 2003, a 6 days seminar for middle school teachers was conducted. Since 2003-2004 school year, the middle school program on economic education was delivered by teachers in schools as an optional course. In 2004, the Romanian Ministry of Education approved the economic education curriculum for middle school and recommended it nationally.

#### 6. Conclusions

Extending economic and financial education at national level, as result of making this a subject included in compulsory/core curriculum generates an important need for qualified teachers. Universities have to prepare these teachers and to develop teacher training programs more focused on methods of teaching and interaction with young students and best practices on economic education in middle school. CREE can be a valuable partner for teacher training providers in their efforts to train teachers and improve the quality of teaching.

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