Entrepreneurial competencies in Elementary Schools

Perica Bartulović, dipl. kateheta, Osnovna škola Prečko, Dekanići 6, Zagreb, tel: 099 5138 239,
e-mail: perica.bartulovic@zrinski.org
Davorin Novosel, prof. politehnike, Osnovna škola Prečko, Dekanići 6, Zagreb, tel: +385913883043,
e-mail: davorin.novosel@zrinski.org

Summary

Entrepreneurial competencies are key elements for the development of any national economy. Almost every European country has those competencies in the national curriculum for all ages as its important aims, goals and objectives (from preschool through elementary school to high school and university). Croatian National Curriculum Framework emphasizes entrepreneurship as a cross-curricular topic. Its goals, objectives and outcomes are acquiring knowledge, skills and aspects necessary for planning and organizing entrepreneurial activities, development of communication skills and responsibility for self and others, overcoming difficulties and acquiring economic literacy.

Introduction of Entrepreneurship as a Cross-curricular Theme in Primary Schools has been implemented in the Elementary school Precko, Zagreb, in order to develop the curriculum for entrepreneurial learning and development of student’s entrepreneurial competencies. University College of Economics, Entrepreneurship and Management „Nikola Subic Zrinski“, Zagreb, conducted Workshops and In-service Training for teachers. They were introduced to the basic economic concepts. All teachers conducted entrepreneurial workshops with students from the 5th to the 8th class year with the objective of producing a particular product. All involved students at the workshops are introduced to the basic concepts of: entrepreneurship, raw materials, profitable risk taking, loss and profit, creating new values, calculation of production costs and value-added tax (VAT). Students found practical work and use of motor skills very challenging. School presented final result of workshops to the general public, the media and the parents with the public presentation. Students tried their skills in the public presentation of their products, presenting what they have produced in the workshops and business concepts they adopted.

Key words: entrepreneurial competencies, school curriculum, a cross-curricular topic, economic concepts

Introduction

The National Curriculum Framework for pre-school education and General Compulsory Elementary and secondary education has given a formal framework for curricular development and implementation of educational programs and cross-curricular topics in the field of entrepreneurship. The main goal of entrepreneurial competencies of students is the development of personality characteristics and knowledge, skills and attitudes necessary for the operation of the individual as a successful entrepreneurial person. By introducing entrepreneurship as a cross-curricular themes in elementary school develops entrepreneurial competence in all subjects in order to develop enterprising and innovative people trained to detect conditions in which your ideas can be turned into work in different situations (Nacionalni okvirni kurikulum, MZOŠ, 2011).
The “excellence to entrepreneurship - Entrepreneurship as a cross-curricular theme in elementary school,” funded by the Ministry of Science, Education and Sports, was aimed at raising entrepreneurial competence in gifted children in all primary schools and all school subjects.

2. Curricular basis for Entrepreneurial Learning

National Curriculum Framework defined the planning and realization of cross-curricular and interdisciplinary topics that contribute to reciprocal linking educational areas and subjects into a harmonious whole. They develop different core competencies of students. It also specifies that the curricular topics mandatory in all teaching subjects of this and all holders of educational activities at the school are required to achieve them (Nacionalni okvirni kurikulum, MZOŠ, 2011; Vlada Republike Hrvatske, Strategija učenja za poduzetništvo, 2010).

Possibility of introducing entrepreneurship as a cross-curricular topic in the school curriculum (Begović, Stanković, Tkalec, 2010):

- Installation in individual subjects
- Additional classes (organized for gifted students)
- Extracurricular activities (eg. Within students’ cooperative)
- School Projects

The project was adopted following the concept of entrepreneurship:

KNOWLEDGE
- Students will understand economic concepts: raw materials, prices, production, advertising, logo, slogan, corporate sector, profits, earnings, investment
- Students will understand the functioning of markets
- To interpret the resulting product price calculation of income and expenses
- Interpret profit
- To interpret the importance of advertising
- Interpret business dress-code and its importance in the business world
- Calculate the cost of products and value-added tax
- Design presentation in a foreign language
- Develop a web report and photograph

SKILLS
- Students will be able to publicly perform and present their product
- Communicate within the team, taking into account the diversity of opinions
- To gain entrepreneurial projects as active forms of learning

ATTITUDES
- Students will develop a positive attitude towards entrepreneurship
- Develop a positive attitude towards the native language
- Overcoming the fear of public speaking
- To gain knowledge self initiative, adaptability
3. Entrepreneurship as a cross-curricular theme in subject teaching

Students in grades 5\textsuperscript{th} to 8\textsuperscript{th} is divided into two subgroups. The first covers the fifth and sixth grade, and the other seventh and eighth grades. Therefore defined educational outcomes are deepened and wider for those classes.

Students in grades 5\textsuperscript{th} to 8\textsuperscript{th}, when it comes to their mental and physical development, belong to the generally accepted division of the period preadolescence or early or mid adolescence. The period of adolescence is considered to be the most turbulent period in the development of each individual, and the young person is confronted with numerous of difficulties that must be overcome to grow as unique person.

The objective of this area is to enable students to communicate in various situations, present themselves and develop self-confidence and self-esteem (Pernar, Frančišković, 2008).

Educational process in grades 5\textsuperscript{th} to 8\textsuperscript{th} is organized and implemented through the following educational and educational areas.

\textit{Language and communication area}

The objective of this area is to enable students to communicate in various situations and present themselves and thus develop self-confidence and self-esteem.

Croatian language - the students develop self-confidence, self-awareness and the will to achieve their goals in professional and personal life, and they produced a memento of the Croatian language for 5\textsuperscript{th} and 6\textsuperscript{th} grade.

German language - the students have acquired the linguistic competence, adopted the basic economic concepts in German, overcame a fear of public speaking, and produce an advertising brochure about Croatia.

English language - students have prepared an advertising campaign in English for an air freshener.

\textit{Mathematical area}

5\textsuperscript{th} grade students have produced math cards. They developed self-awareness and self-confidence as a basis for all other aspects of entrepreneurship, and a willingness to take initiative and risk, critical thinking and creativity.

\textit{Social sciences and a humanistic area}

History class and geography eighth-grade produced tourist village plan Precko in three versions: plasticized map, CD, the article for the school’s website.

On religious education class students in the sixth grade discussed, debated, and presented and build attitudes about the Christian view of work and service, gifted talents, honesty in working with others and for others, God’s call to a man to work and co-create. They worked through group work based on the parable of the talents (Matthew 25.14-30).

\textit{Natural Sciences (Physics, Chemistry and Biology)}

In the physics class seventh grade students produced catapult and adopted the basic economic terms: raw materials, procurement, production and produces, market, pricing, income, expenses, profits, advertising, logo, slogan.
On the biology class, seventh grade students have gained entrepreneurial skills (basic economic concepts), skills (publicly present their work and the product), attitude (positive attitude towards entrepreneurship and production) through the production of Good Cookies.

In chemistry class eighth grade students, have recognized the market’s need for Air freshener and noticed its use as a disinfectant and its application in aroma therapy.

**Technical and IT area**

Technical Education - students produced plasticized labels for Air freshener.

**Arts**

Art education - students created a slogan and logo advertising campaign for a product Air refresher.

**Physical and health area**

On physical education class students were introduced with the exercises that can be performed in the workplace in the prevention of neck pain and back pain.

4. Evaluation and self-evaluation

The introduction of entrepreneurship as a cross-curricular theme emphasizes students’ knowledge, skills and attitudes in the foreground and using the modern approach to teaching prepares them for the labor market reality (Domović, Baranović, Štibrić, 2007). Grading scale is aligned with the goals in each cycle, and each subject. The degree of realization of teaching contents acquired and developed skills and formed and built attitudes are assessed during the lesson, work assignments and worksheets. Every student for themselves and the teacher for each student fill up the evaluation sheet for final review (Matijević, 2008).

The advantage of this type of test is that the students at any time have access to the level of their achievements using checklist which also has a feedback section for improvements.

Day of entrepreneurship in school was the final test of market and the market needs when the student’s offered products to customers, their parents and other guests.

Such verification of work and products successfully connected theory and practice acquiring knowledge and skills required for the manufacture of products.

5. Results of the project

Students who participated in the project activities have extremely positive statements about introducing entrepreneurship as a cross-curricular theme in regular classes. For them, learning has become an interesting and had a sense of usefulness by direct personal action in the realization of tasks. It was observed that the students, even after school, discussed and worked in team on the realization of the tasks. On their own initiative they look for answers and solutions beyond the prescribed textbooks, which made them successful and satisfied. They also expressed the hope that all classes will be designed in same way as they were during this project.
Some of teachers and part professional services were initially reserved. But, after attending a workshop that was significantly reduced. They discussed about of the cause and method of implementation of enterprise content as a cross-curricular themes in regular classes. After developing its own methodological scenario (project documentation) and its implementation at the lesson, the initial resistance has been replaced by a willingness to resume activities. Crosscurricularity, manifested in the design of joint projects that bring together several thematic courses, classes and dynamism, contributes more active mutual cooperation of teachers. During the project, teachers increased interest in the topics that are shown from an entrepreneurial perspective. Consequently, there is a need to develop a unified curriculum for entrepreneurship in elementary school and permanent education of teachers. Creating conditions for the exchange of methodological scenario would allow teachers and schools faster and more complete integration of entrepreneurial contents in regular classes and extracurricular school activities.

6. Conclusion

Since entrepreneurship is one of the most important competencies in every person’s life, it is important to start entrepreneurial education from the earliest grades of elementary school (Institut za društvena istraživanja, 2007). The project attempted to enable gifted children to grow their natural gifts and talents, directed to self-realization for their own and the general welfare. We tried to motivate them to strengthen their knowledge and skills in acquiring new experience, devoted attention and innovation, toward profiling their interests. To them, these experiences can be useful to choose their first occupation and engage in active economic life. With early entrepreneurial education, their potentials can become agents of sustainable development and competitiveness, in function the growth of the national economy.

References

1. Begović, V., Stanković, D., Tkalec, Z., Strategije učenja i poučavanja za razvoj poduzetničke kompetencije u neformalnom obrazovanju, Zagreb, V.Š. N.Š. Zrinski
3. EU komisija, (2004). Ključne kompetencije za cjeloživotno učenje, Zagreb, Uprava za obrazovanje i kulturu