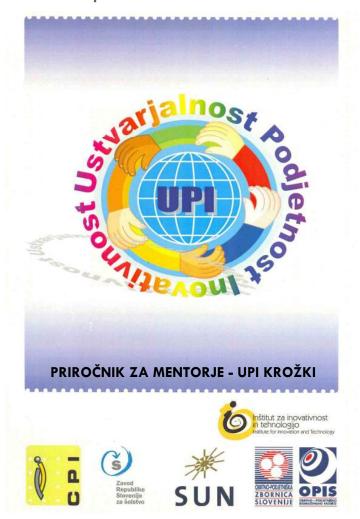
# PROMOTING CREATIVE, INNOVATIVE AND ENTREPRENEURIAL THINKING IN PUPILS IN PRIMARY SCHOOL — UPI PROJECT

Institute for Innovation and Technology, Korona plus d.o.o.



# PROMOTING CREATIVE, INNOVATIVE AND ENTREPRENEURIAL THINKING IN PUPILS IN PRIMARY SCHOOL -

# "UPI" project

(Description of the project from the field of Youth - Primary Schools)

The purpose of the UPI project is to encourage creative, innovative and entrepreneurial thinking in pupils in Primary school through workshops, case studies, visits to the entrepreneurs, local community, artists, and preparation of their products. Within the project we also performed a research on innovation potential of the pupils in primary school.

### Background of the project

The fact is that creativity decreases with age. This is supported by psychologists, which recognize that the largely responsible for this situation are upbringing, education and the environment. One of the key points is therefore the school system, upon which it depends, whether it encourages the development of innate creative potential or not. Are young people only reproducing gained knowledge or are they able to combine it creatively and create added value? In these processes teachers play a decisive role. And new questions arise. Is teacher



trained/motivated enough to be able sufficiently exploit the possibilities and methods of creative thinking? Are young people guided to ask questions and to find alternative, creative solutions? Do teachers promote and guide young people all the way to the realization of their ideas?

Institute for Innovation and Technology with partners was involved in an interesting project "UPI", which aims were to do find some answer to above questions. The UPI project - promoting creative, innovative and entrepreneurial thinking in pupils in primary school was supported by Public Agency of the Republic of Slovenia for Entrepreneurship and Foreign Investments – JAPTI and Ministry of the Economy (MG).

### Project aim and objectives

The purpose of the "UPI" project was to encourage creative, innovative and entrepreneurial thinking in pupils in Primary school.

The project consists of two steps of training activities: training for teachers/mentors and training for the pupils in primary school. In the first part, we conducted training for teachers/mentors. The second part, educated teachers/mentors, conducted trainings for Pupils in the form of extra-curricular activities in primary schools. Through workshops and practical examples teachers/mentors have presented the basic concepts related to creativity, innovation and entrepreneurship. They also carried out visits to the various stakeholders: successful parents, entrepreneurs, artists... As part of the workshops Pupils also work on their concrete project which they presented at the closing event of the UPI project.

Within the UPI project we also performed a comprehensive research on innovation potential of the pupils in Primary school (based on 4 dimensions) on the sample of almost 700 pupils. On the topic also the diploma thesis "Pupils Innovativeness in Elementary School" (Inovativnost učencev v osnovni šoli) was written: <a href="http://www.cek.ef.uni-lj.si/u\_diplome/mrgole4673.pdf">http://www.cek.ef.uni-lj.si/u\_diplome/mrgole4673.pdf</a>

As a result of the UPI project an international monograph "Youth, school and future challenges" (Mladi, šola in izzivi prihodnosti) was published and a sound scientific articles wre published. In cooperation with national education institutions a curricula programme: Creativity, innovation and entrepreneurship was prepared for accreditation.

### More detailed description of the "UPI" project



<u>I. Partners</u>: Chamber of Craft and Small Business of Slovenia – OZS (Slovenia), Institute of the Republic of Slovenia for Vocational Education and Training – CPI (Slovenia), Institute for Innovation and Technology - Korona plus d.o.o. (Slovenia), The National Education Institute of the Republic of Slovenia – ZRSŠ (Slovenia), SUN d.o.o. (Slovenia), Zweisprachige Bundeshandelsakademie Klagenfurt (Austria).

II. Project duration and geographical scope: Project duration was 26 months, lasting from October 2010 to November 2012. The project activities were carried out in Primary schools across Slovenia.

III. Budget: Project budget was 270.232,20EURO.

<u>IV. Target Group</u>: The project's primary target group were Pupils in Primary schools. Secondary target group were teachers/mentors in Primary School or other Training Institutions.

### V. Main steps:

- Preparation of materials: materials for teachers/mentors and materials for pupils in primary school
- Implementation of promotional activities for teachers/mentors
- Training sessions for teachers/mentors
- Implementation of promotional activities for pupils in primary school
- Implementation of course for pupils in primary school (workshops; case studies; visits to the entrepreneurs, local community, artists, etc.; preparation of their products; completing the questionnaire – a model for measuring the level of pupil's innovation)
- The closing event where pupils in primary school present their products

### VI. Handbook for teachers/mentors.

The Handbook for teachers/mentors was developed within UPI project as part of the Training programme. The purpose of the handbook was dual, namely, to assist the teachers/mentors in the training courses for mentors, as well as assistance in their work with Pupils. The handbook begins with brief introductory explanations regarding the implementation of the UPI methodology in each of the triad in primary schools and with the review of some of the techniques of idea creation. Short but important part of the handbook is intended for teachers who want to use creative teaching approaches and with their example demonstrate to students the importance of creativity and innovation.

This is followed by a central part of the handbook, which consists of concrete creative learning tasks for each triad to promote creative, innovation and entrepreneurial competencies in primary schools.



Complete handbook (in Slovene) is available at:

https://www.researchgate.net/publication/296976099 Prirocnik za mentorje

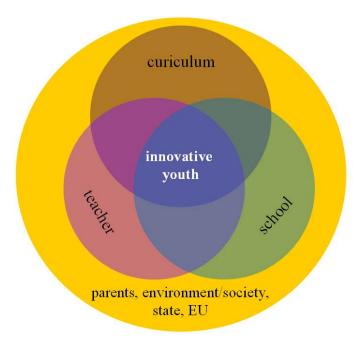


Figure 1: The concept of the "UPI" project

# Presentation of the Organization

### Institute for Innovation and Technology, Korona plus d.o.o.

Institute for Innovation and Technology is an innovatively oriented organisation from Slovenia with its mission closely linked to rising innovativeness in schools, economy and among the youth in Slovenia, which is an integral part of EU. The organisation operates in close cooperation with a wide network of specialists of various professional



profiles and collaborates with national and foreign organisations. The Institute has been developing the area of creativity, innovation-open innovation and technology transfer for over two decades. Professionally, morally and financially the projects and therefore the development of innovative young people in this period were supported by many national and also international institutions/projects. About 100 successful research, applied, technological and other national and EU projects have been carried out (Ministries, Public Agency for Technology of the Republic of Slovenia, Public Agency of the Republic of Slovenia for Entrepreneurship and Foreign Investments, Chamber of Commerce and Industry of Slovenia, the ESF- European Social Fund, Phare MOCCA, Leonardo da Vinci, FP7 etc.) numerous books and comics published, several award competitions, numerous conferences and exhibitions implemented at home and abroad, several cooperation with the economy established, tenths of widely recognised and expert papers... Owing to the uniqueness of their concept, the Institute was invited to present its concept at the United Nations' headquarters in Geneva as one of the best European concepts as well as at the Closing Conference of the European Year of Creativity and Innovation in Stockholm.

In addition, the Institute for Innovation and Technology has developed ten patents, numerous innovations, countless models and copyright works, many of which proved to be extremely marketable - nationally and internationally.

# Project Leader's short Biography

### prof. dr. Borut Likar, MBA

Likar is a full professor at the University of Primorska. His work encompasses management of creativity, R&D, technology, and innovation processes in the field of educational system and industry. He is the author of hundreds of scientific, expert and other publications, initiator of several international projects and the author of patents, models and copyright works - many proved to be extremely marketable. He is an innovator and a recipient of many international awards for his innovations and for scientific achievements. Among numerous lectures he has given, the talks at the United Nations' headquarters in Geneva and at the European Parliament in Brussels were met with a particularly wide response. Likar is also the amateur photographer, where he is particularly interested in creative and innovative approaches to photography. He also engages in writing aphorisms, which were published internationally.