LET'S BE INNOVATIVE! Development of Creativity, Innovation and Entrepreneurship for Primary School Teachers

InnoTeach project

14/10/2018

The InnoTeach Model – IO6

Erasmus+

InnoTeach project KA2-SE-33/16

This project has been funded with support from the European Commission.
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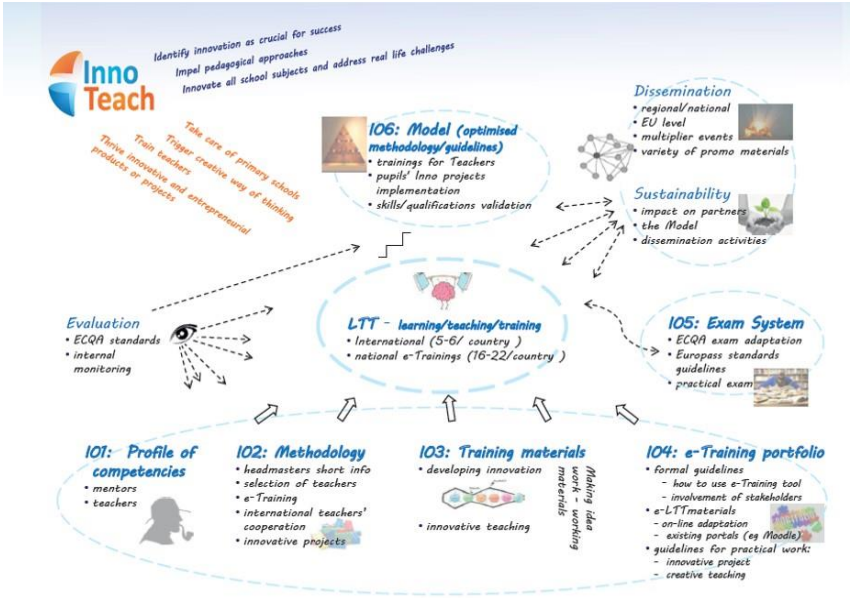
Table of Content

1 LET'S START

1.1 Info on project

To be innovative or non-innovative is no longer a question. The only question is why these topics have not been included in the school system for at least a decade ago. And of course, how to make up for a backlog.

With the InnoTeach Project (Erasmus +, Strategic Partnerships) we successfully addressed this topic. InnoTeach is a European project (Slovenia, Austria and Hungary), in which we developed original and current approaches, while transferring best practices of innovation from industry to education.



Project duration: September 2016 – August 2018.
Trajanje projekta: september 2016 – avgust 2018.

1.2 Why to participate - benefits for participants

The project's main target group were teachers for the 2nd and 3rd triad in primary schools (pupils aged 9-14). Also other teachers can participate. The project's indirect target group were pupils.

Benefits:

1. Participants will get knowledge, skills and practical experience on the following topics
   - Development of Innovation

The development of innovation comprises the whole transfer process, starting from the identification of opportunities, research work, and presentation to stakeholders to achieve their acceptance for implementation and the implementation of the innovation. This will again lead to feedback and this again will be an input for further innovation.

   - Innovative teaching

Family, schools, companies are a major factor in forming a creative potential. One of the main factors of developing creativity and innovation potential of pupils are schools the school environment.

The Innovative Teacher will be familiarised with: Innovative Teacher with appropriate knowledge, personal characteristics and competencies, Innovative Teaching Methods, Innovative Teaching resources, Re-use of Open Learning Content, The Role of World Wide Web in Innovation, Practice Oriented Teaching, Self-Reflection / Self Evaluation Ability, Multidisciplinary and Interdisciplinary Approach, Cooperation with Stakeholders.

- Making innovation work

Making innovation work requires the management and effective implementation of innovation. This requires leadership, applying a problem solving process, using social skills and business networking, and successfully implementing and entrepreneurial mind-set. In addition, innovation implementation is supported by different national, EU programs. International cooperation is a factor that can help multiplying innovation on a world wide scale.

To have a free access to the skills set you can go to ECQA (European Certification and Qualification Association), register at ECQA and have the skills browsing function for free available.

https://www.ecqa.org/index.php?id=22

- ➔ REGISTER
- ➔ Select the Profession: InnoTeach
- ➔ Scroll down and NEXT
- ➔ Select exam body: Korona for Slovenia, IT Study for Hungary, ISCN GmbH for Austria
- ➔ If you do not find your country represented, select an existing exam body
- ➔ I am a new user and would like to create an account (in case you have no ECQA account so far)
- ➔ I am a new user and would like to create an account. (in case you registered at ECQA for a job role already)
- ➔ Fill in your details and click FINISH.
- ➔ Then you come to your free Life Long Learning Account where you can browse the skills set. The same account will be used if you go for certification.

Training will base on

- Explanation icl. examples and videos
- Conversation/discussion/debate
- Case studies
- Role play
- Different presentation
- Solving exercises

2. **Solutions based on real life innovative projects**. They will base on concrete challenges form school or local environment. Such project can represent a practical value for schools, teacher or local environment.

For a more detailed description pls. see additional materials within this text - Innovative projects form all 3 countries and http://innoteach.itstudy.hu/

3. **Cooperation with local stakeholders** (companies, organisations, researchers, entrepreneurs etc.) will be developed.

For a more detailed description pls. see additional materials within this text - Innovative projects form all 3 countries and http://innoteach.itstudy.hu/

4. Certificates for teachers, who can get:

- ECQA exams (presented later)
- Europass or other types of certificates (depend on country)
- Certificate - confirmation of participation within InnoTeach training programme

Additional useful document addressing the following topics are available**:**

- Methodology for informing and involving headmasters/ management of primary schools
- Guidelines for selection of teachers - c2
- Methodology for e-training - c2

For a more detailed description pls. see additional materials:

InnoTeach Methodology – IO2 - for IO6

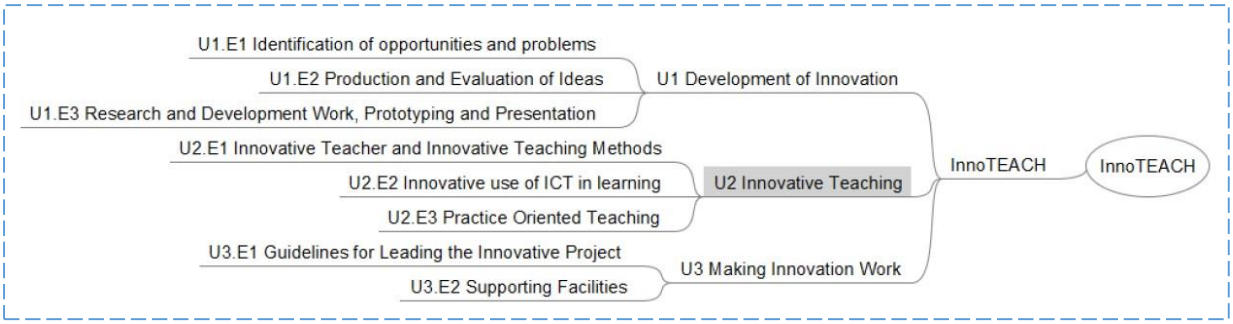
file: InnoTeach_IO2_Methodology_V7-for IO6.docxoTeach Methodology – IO2

1.3 Info on project results and teachers' best projects

The research and development of new and improved services, systems, and products is an important driver for the European market. Innovation necessitates people who can cooperate in innovation teams, generate innovative and new ideas, boost creative environments supporting the creation of innovation and innovation processes that support the entire chain from idea creation to their implementation. Ideas and innovation are closely correlated with entrepreneurship, considered keys to a wealthy and sustainable economy. The InnoTeach project empowers the innovation mind-set in the European Union by way of establishing learning environments in schools which fertilize the grounds for young people to apply innovation principles in problem solving and at the same time learn about entrepreneurship concepts. These can be used everywhere; in all school subjects, in daily situations in school and in real life challenges.

How does InnoTeach work?

Firstly, the **profile of competencies**, which teachers needed to gain, was defined. With the goal of the validation and recognition of competencies our exam system has been based on the Europass guidelines and ECQA standards.



A comprehensive training methodology was prepared. We strongly believe that a teacher, who has practical

experience on concrete innovative work, can become the best mentor to pupils. Therefore, the InnoTeach training programme addressed three pillars, three main skills units: U1 Development of Innovation, U2 Innovative Teaching, and U3 Making Innovation Work. U stands for Skills Unit (pls. see the picture).

Based on the prepared concept and training materials, we carried out an **international joint staff training event** in Budapest. 17 trained teachers became mentors to their colleagues from school. For them, and also for the forthcoming generations, **e-Training portfolio** was prepared. Not only short power point presentations, but also additional explanatory sequences, examples, videos, useful links as well as other supporting materials and many concrete "homework" were prepared. We developed an up-to-date blended learning platform; e-learning environment (Moodle), which is supported by internationally trained mentors. The result is a highly motivating and efficient learning environment. Due to hard working participants and dynamic programme the training resulted in teachers' concrete, inspiring and innovative projects, which are presented herein.

Within InnoTeach an international Exam System focused on **validation and recognition of skills** and competences was developed in line with the ECQA (European Certification and Qualification Association) exam methodology. With the aforementioned certificate, we set very high standards for all project activities and presented an additional motivation factor and reference. In addition, teachers-mentors received also the Europass certificate.

International conferences

The main project achievements and results were presented at 3 national multipliers events (Ljubljana-Slovenia, Graz-Austria and Gödöllő-Hungary) and at the international conference in Krems-Austria. The presence of two mayors (Ljubljana's and Grosuplje's Mayor), secondary and university level representatives, researchers, economy and policy makers additionally confirm our thesis that the InnoTeach idea and achievements are an integral part of inter(national)innovation ecosystem. Within our events, there were also representatives of eminent institutions, such as Joaneum, Grenoble INP, Jozef Stefan Institute and participants from France, Germany, Australia, Finland, Kazakhstan, the Check Republic, Italy, Hungary, Austria and Slovenia.

AUSTRIA - Innovative projects

Exercises for Optimising Concentration Levels of Students - a tool for teachers which enables them to enhance the pupils' ability to concentrate.

Facebook page for WIN branch of ORG Schulschwestern - to make the activities and projects of the new school branch WIN visible to parents, the school community and the wider public (which includes potential new pupils).

Social Room for Teachers - to facilitate communication, socialising and relaxation among teachers, who thus have an innovatively-designed retreat and a better infrastructure for problem- and conflict-solving communication.

HUNGARY - Innovative projects

Let's Have Fun Together – so as to break away from daily routines in an innovative way teachers want to organise a project day where pupils, teachers and parents can work together, exchange information, and ask for help if needed. It improves socialisation and innovation ecosystem.

Career Orientation Day at Hevesy School - Professionals Market - stalls will be set up in the school yard and classrooms displaying different professions. The idea is to strengthen the link between the pupils, school management, parental community, local environment.

Tura Tour - a full day competition entailing knowledge on the city, skill tasks located at several stations of the town, ending with a joint picnic and a party.

Skywalker Bee – an innovative board game to help pupils to learn the constellations.

Read and Write - to encourage students to read more either in their mother tongue or in a foreign language and write their own stories, thus increasing "classical" literacy which declines in the ICT era.

National Holiday - in a New Way - classical National Holiday performance at the Cultural Centre with a twist, i.e. innovative presentation of handicraft activities at 4 locations, historical games at 1 location, singing and song learning at 1 location.

SLOVENIA - Innovative projects

Good Mood Readers - a project aiming at increase pupils' reading motivation by designing and implementing a stimulating reading environment in cooperation with the local community, resulting in increasing a joy of reading and thereby strengthen literacy.

School Garden as a Peace Oasis - to improve the school garden with some innovative solutions: portable beds for vegetables, herbs and flowers, a gutter with plastic bottles for collecting rainwater, benches made out of pallets, etc.

Silent Clouds Incorporated - to change the cafeteria into a place with less noise and a cosy atmosphere where pupils can socialize and enjoy the food.

Active Breaks - the closing product entails a newly/better organised school breaks; hence, pupils may spend their free time on school playground or take part in different relaxing activities in different locations situated on school corridors and get ready for next school hour.

Innovative Learning Path – Treasure Hunt in Ljubljana - the project offers an alternative and innovative learning experience during which the participants get to know the capital city of Slovenia and various typical Slovenian products, while interacting with the citizens as well as business owners.

Reduction of Noise Levels during Breaks - a number of projects aimed at reducing unpleasant and harmful noise levels during the school brakes.

First Lego League - the project entails applying newly gained knowledge on project management, problem- and project-based learning, and prototyping to the concrete innovative projects focusing on water – how to find, transport, use or dispose it.

Therefore, mentors started to create a new generation of innovative citizens and pupils. How was it done? One of the final achievements of the InnoTeach Project at the base Project's level are numerous and versatile, starting with the application of different methods and techniques and valuable interaction with the real-life environment – teaching process innovations, improvements for school and its local environment, e.g. innovations in schools garden; development of tourist destinations, cooperation with elderly people's home, local flower shop, local entrepreneurs, and suchlike; socialisation and closer cooperation of pupils/teachers and parents, entrepreneurial challenges, and suchlike.

It should also be mentioned that the projects are **"real-life" cases**, which required cooperation of various experts. Therefore, many teachers were cooperating in a single project, e.g. ICT, maths, biology and ethics teacher, teacher for pupils with special needs and a student from the field of electro-technical sciences. In many projects, various stakeholders actively participated, e.g. kindergarten, elderly people's home, municipality, parents of pupils involved, etc.

Moreover, the Project contributed to the application of various motivational elements, thus encouraging pupils to co-create a learning process.

At the schools' level, a critical mass of teachers was reached and innovative culture in schools was enhanced by way of applying multidisciplinary approaches. At the end of the Project teachers joined and now interact in various international networks and they obtained the actual non-formal education ECQA and Europass, while pupils boast with concrete innovative projects. The entire course of the Project and its final results received a very good media response.

In addition, InnoTeach addressed at least 3 of top 10 skills for businesses to thrive in the Fourth Industrial Revolution, identified by World Economic Forum (WEF 2016), i.e. Complex problem solving, Critical thinking and Creativity.

Down to a well-prepared project, highly motivated participants, concrete and state-of-the-art outputs, we strongly believe, the project represents an excellent base for further implementation within national elementary school environment; hence, we also believe that InnoTeach has a great potential to be transferred to other countries as well as to other educational levels. And what is more, our children can eagerly expect highly-motivated teachers, well-equipped with the competences for the 21th century.

Project: http://innoteach.itstudy.hu/ Publication: InnoTEACH – Applying Principles of Innovation in School

PROJECT BASICS

English title: LET'S BE INNOVATIVE! Development of Creativity, Innovation and Entrepreneurship for Primary School Teachers
Acronym: InnoTeach
Project no°: 2016-1-SI01-KA201-021641
Programme: Erasmus+ Strategic Partnership

Web: http://innoteach.itstudy.hu/

Partners: **SI, AT, HU**

- Institute for Innovation and Technology (Korona plus), Slovenia, info@innovation.si (Project leader)
- Osnovna šola Trnovo, Slovenia
- Osnovna šola Louisa Adamiča Grosuplje, Slovenia
- I.S.C.N. GesmbH, Austria
- ORG Grazer Schulschwestern, Austria
- iTStudy Hungary Számítástechnikai Oktató-és Kutatóközpont KÕ, Hungary
- Turai Hevesy György Általános Iskola, Hungary
- Kerepesi Széchenyi István Általános Iskola es

2 HOW CAN WE…

2.1 Introduction

Final outcomes of InnoTecah project help all European primary school teachers to develop the 21st century skills of their students by reusing InnoTeach competence framework, learning content and methodology. InnoTeach training materials are published under Creative Common Licence freely available in four European languages, English, German, Hungarian and Slovenian.

The e-Training portfolio – e-learning platform – was piloted by more than 50 teachers from three countries with the guidance of internationally trained mentors in blended learning form.

2.2 Innoteach e-Training portfolio

2.2.1 Innoteach e-learning platform

Innoteach e-Training portfolio is an e-environment including training materials for learning-teaching activities. The training materials were implemented in the open source Moodle (**M**odular **O**bject-**O**riented **D**ynamic **L**earning **E**nvironment) platform, which enables:

- structured work with the participants, divided into topics;
- include all course materials that can be tailored for online activities;
- facilitate communication and collaboration between mentors from schools and participants (the other participating teachers).

InnoTeach Consortium selected Moodle because it supports cooperation and collaborative content creation, and it integrates tools for establishing the elements of constructive pedagogy; it is a so called web2.0 aware platform. Moodle Learning Management System lets the trainers/mentors to create, upload, share digital learning content, graded assignments, quizzes, discussion forums, etc. with an easy to learn user interface.[1]

InnoTeach developers put two basic concepts into the centre of the methodology:

- innovation isn't imaginable without teamwork, so the collaboration of teachers is crucial;
- a practice-oriented approach has to apply all over the course.

Collaboration was facilitated by the mentors, and by the practice-oriented assignments ("find out, plan, design, solve, etc.") what could be completed only working together in teams.

The methodology worked very well during the pilots as confirmed by the feedbacks of the teachers. One of the most frequently referred positive effect of the course was: "the intensity of the collaboration among the teaching staff was significantly improved during InnoTeach course …"

[1] The innovator of the system is Martin Dougiamas, an Australian educator and computer scientist. His aim was to develop an open source application to support a social constructionist model of teaching and learning within Internet-based communities. Link to the Moodle community: https://moodle.org

In Moodle (http://educatio.itstudy.hu/) five different online courses were created for five groups of teachers:

(1) English version a common basis for the national versions,
(2) National versions: 1 Austrian, 2 Slovenian and 2 Hungarian courses for the teachers of the five schools.

The structure of the national versions is the same, each of them includes the same learning materials, learning guides and other online tools supporting learning/teaching processes.

However, the mentors could add extra learning contents, readings, share video tutorials and other digital supporting materials according to the special need of the group they were responsible for. We discussed in the mentor training how important to reuse Open Educational Resources now-a-days, so the mentors were encouraged to integrate OERs into the learning materials themselves.

Examples:

Video shared by the mentor in the Hungarian course

Video shared by the mentor in the Slovenian course

In every school the mentors organised face-to-face trainings as well really appreciated by the participants who had never taken part in e-learning course before. However, the number of the face-to-face lessons was not predefined, the mentors could decide it in a common agreement with their group depending on their preliminary knowledge.

2.2.2 Structure of the courses

After entering online platform, the horizontal navigation bar helps the participants to reach the learning content, the discussion forums and further course components.

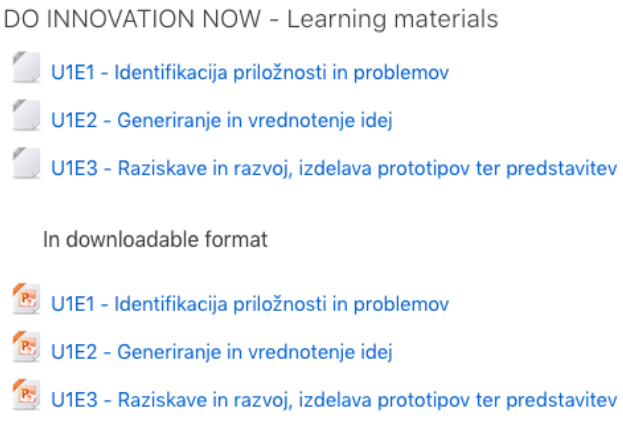
In the first block the participants found learning guide (how to navigate in Moodle), and a common forum where they could ask for help when facing difficulties entering Moodle at the first time.

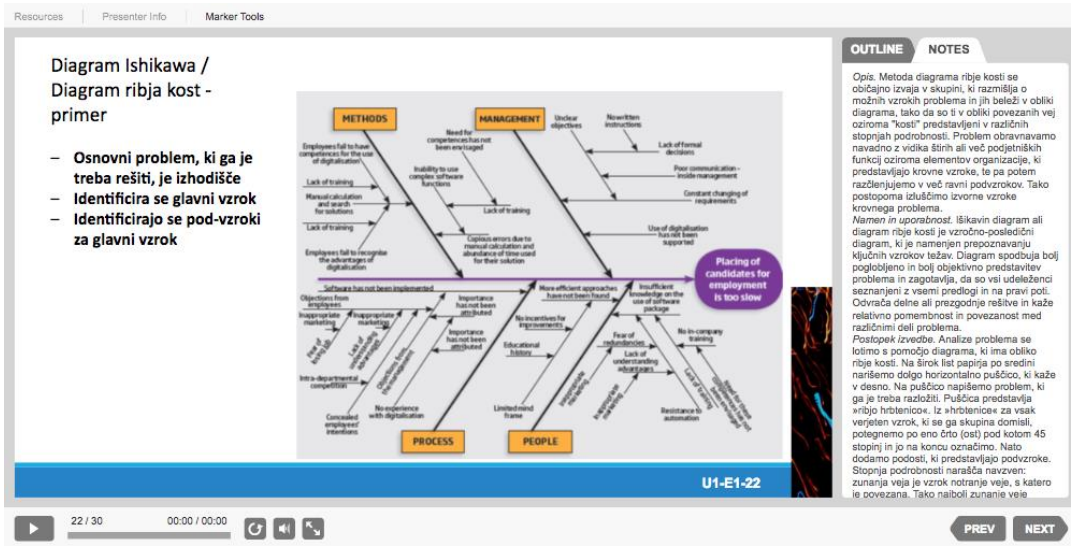
2.2.3 Learning content

Each course is built up from three modules, what is represented on the navigation bar in Moodle.

The learning content were published in two different formats:

In the first block the participants could read the learning materials online in HTML5 format, in which not only the slides but also a longer description/explanation could be read. This way of the implementation supports the self-learning, what is very important for making an e-learning course really effective.

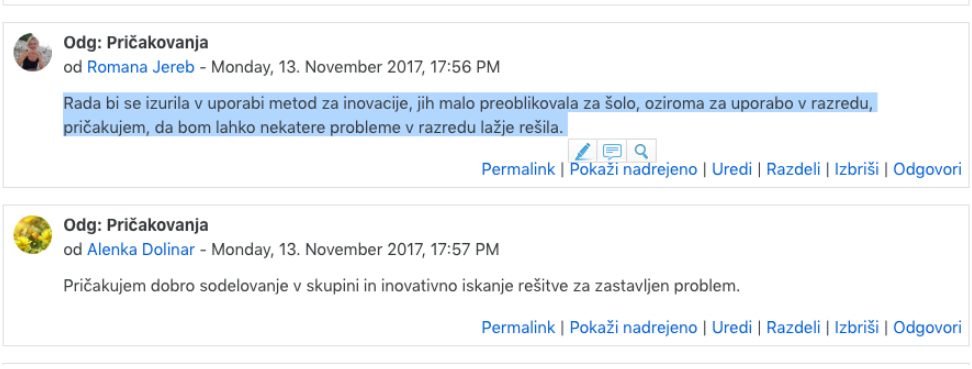




In the other block all units and learning elements were available in PowerPoint PPTX format for download and continue the learning offline without internet connection.

2.2.4 Forum

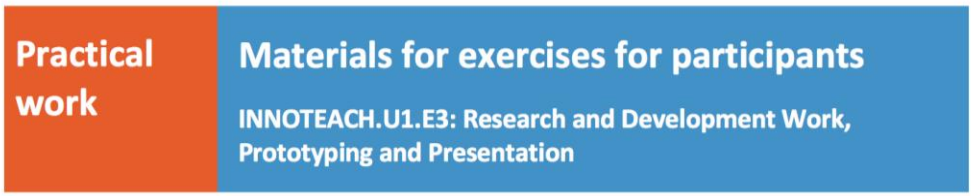
There were intensive communications and collaboration in each pilot among the participants on the discussion forums. The teachers could here not only receive answer on their problems managing the virtual learning environment, but they could also join to interesting professional debates related to the topics they just learnt.

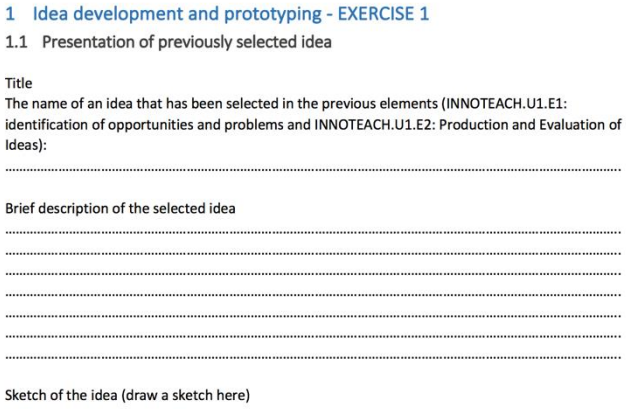


2.2.5 Assignments

After completing the units, the participants have to solve several assignments as evidences for their learning outcomes and performance. The exercises were available for them on the platform, and the submissions could be checked and graded by the mentors online as well.

Examples





1 Idea development and prototyping - EXERCISE 1

1.1 Presentation of previously selected idea

Title

The name of an idea that has been selected in the previous elements (INNOTEACH.U1.E1: identification of opportunities and problems and INNOTEACH.U1.E2: Production and Evaluation of Ideas):

.....

Brief description of the selected idea

.....

.....

.....

.....

.....

.....

.....

Sketch of the idea (draw a sketch here)

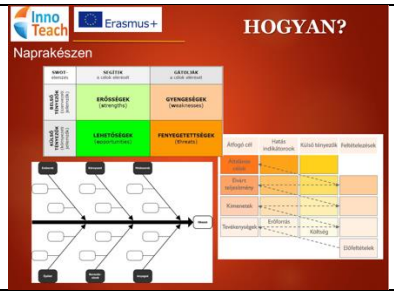
Innovative projects with pupils

According to the feedbacks of the teachers one of the most important achievements of InnoTeach course was strengthening the intensity and effectiveness of the collaboration and communication among the teaching staff of the school. What else is this, as the evidence of the success of the project?

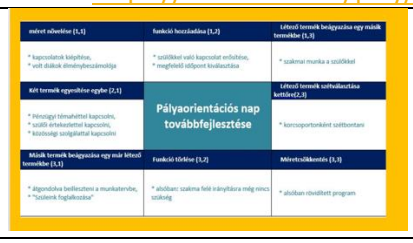
The projects presented by the teachers after the course clearly demonstrates that the Consortium managed to reach the most important learning outcome:

Innoteach improved significantly the skills of the teaching staff for planning, organising and establishing innovative projects with the pupils in a collaboration with all relevant stakeholders like parents, representatives of local businesses and even policy makers.

How to plan? How to do?



Video: https://animoto.com/play/75vM1c9ut5Rfwr8lkSzA4w



Happy minutes …	Video: https://www.youtube.com/watch?v=DTTHBYvIm5g

2.3 Guidelines for leading the Innovative project

The participants of the pilots (almost 80 teachers directly involved) demonstrated the knowledge, skills and competences gained during the course by 16 innovative projects developed in cooperation with hundreds of pupils in a proactive cooperation with stakeholders.

Any European primary school, European teachers has to contact the project coordinator if they want to use the intellectual outcomes of the project and InnoTeach learning content:

Korona plus d.o.o., Inštitut za inovativnost in tehnologijo, Slovenija
E-mail: info@innovation.si

How does InnoTeach methodology work?

In the next section we give a summary of the experiences of the teaching staff from the Hungarian Hevesy György Primary School how they manage to establish a great innovative project by using the tools and methods they learnt in a collaborative work during the pilot.

Who are they?
A team of 12 teachers (English foreign language teachers, Biology teacher, History teacher, Special need education teacher, PE teacher, IT teacher) of the school.

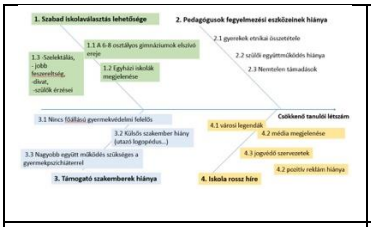
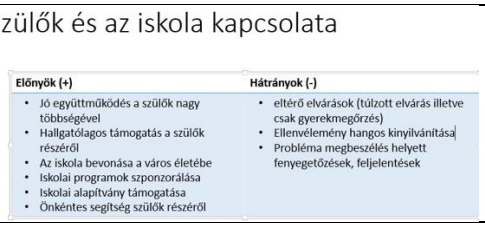
The training was organized in blended form with 20 hours online learning and 7 (1,5 hours) face to face lessons. The mentors paid special attention to group work in order to facilitate cooperation among the teachers. The participants accessed the training content, they could submit their assignments and join to the online discussion on the Innoteach Moodle platform.
They started to learn the 1st module: INNOTEACH.U1: Development of Innovation:

While solving the exercises of Unit 1 they identified the main challenges of the school; they analysed the present state and put the questions to answer:

1. The parents are not involved in school's life? How to change this situation?
2. They organised in every year an event with the pupils to motivate them to know their local

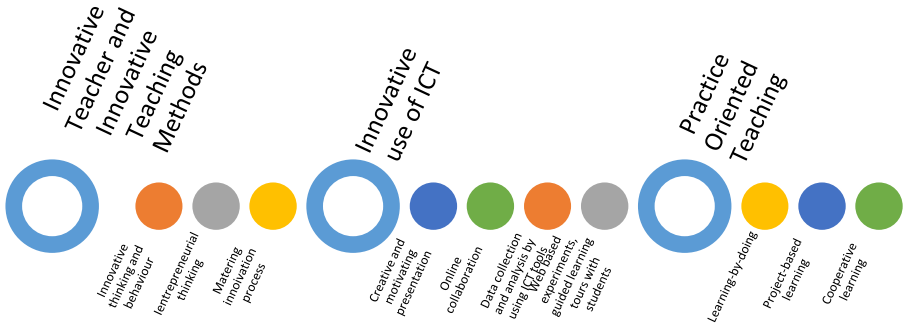
environment by organising a tour around the city. During the last years the events were too boring for the pupils. How to innovate “Tura Tour” by involving relevant stakeholders?

3. The number of students are decreasing. How to make the school more attractive?

		
Ishikawa diagram	QaDIM (Quick and Dirty Method)	Swot analysis

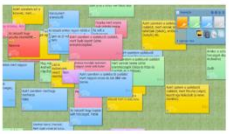
In this phase they used Ishikawa diagram, Qadim method, SWOT analysis in a collaboration in order to understand the causes behind the problems. They went on planning an innovative solution…

They started to learn innovative ICT tools while working with InnoTeach Unit 2: INNOVATIVE TEACHING.



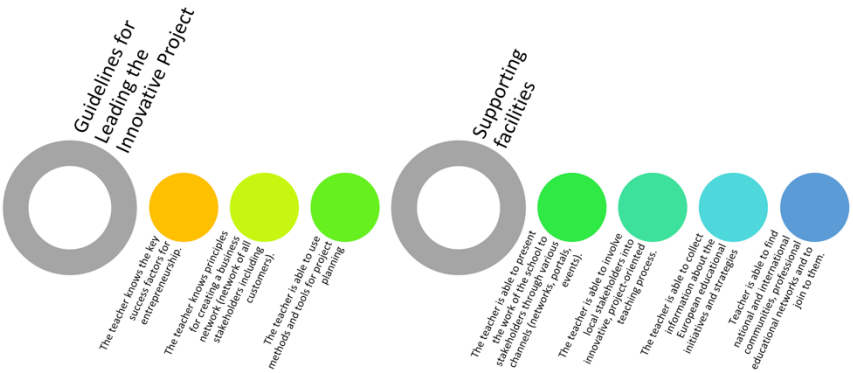
During the training, teachers got to know useful ICT applications, tools, and now these are used in several classrooms.

Unit 2: ICT tools in education
Linoit.com, Kahoot, Cube creator, Learningapps, Bubble us, Animoto, Blue bot.



2.4 Information on supporting facilities

How the teachers used the learning material of InnoTeach.Unit 3: MAKING INNOVATION WORK?



Based on their project plan, and by using the ICT tools they learnt in Unit 2, they started to organise their innovative project by involving several stakeholders, focusing on the basic idea of Unit 3:

"Making innovation work requires the management and effective implementation of innovation."

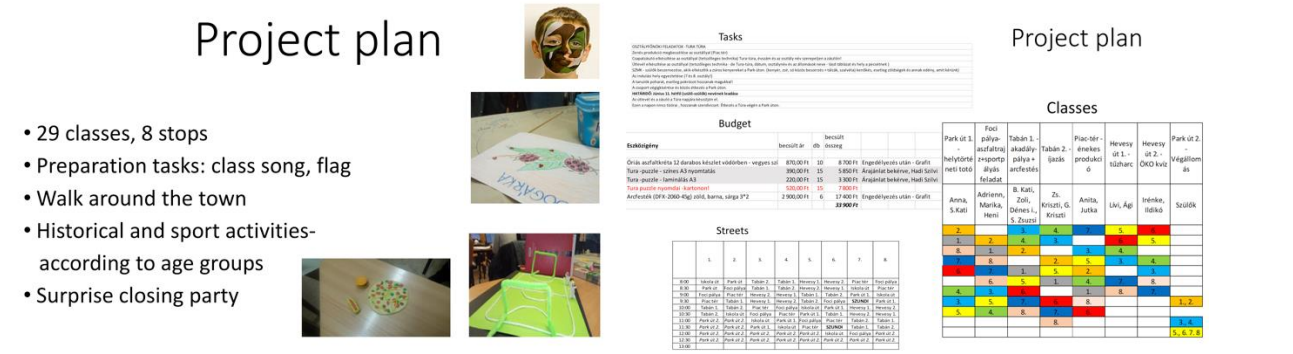
The decision …

"A chair could be built up: if it has 3 legs: teacher, student, parent. According to our teachers, involving parents in school activities could build a better relationship between the students, teachers and parents."

They organized family afternoon where the children could learn and play with their parents with the help of ICT tools. The first occasion was in April, when parents learned the usage of Kahoot application.

They learnt, how easy to use online video editors. After collecting their idea, they created a promotional video (with the application Animoto, which they learnt during the training), in order to present the plan to the whole teacher staff and convince them to support this theme day. Fortunately they liked it!

All the teachers worked together on the plan of the innovative project!

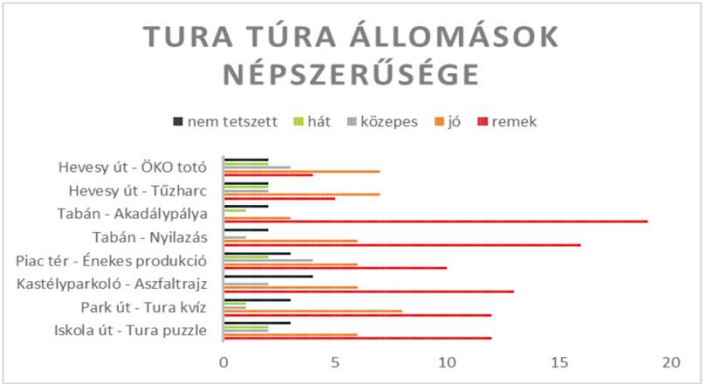


They involved 500 students! „*Therefore we had to made a detailed plan, how the classes go from one game place to the other, in order to not to meet on the same place, in the same time. Besides we were preparing the budget plan for those tools which are necessary for this day*."

Tura Tour in pictures

For analysing the results an online questionnaire waited the participants (students, teachers, headmasters, parents) in order to get a feedback about the event, asking them which place was the most popular. Obstacle course with commando face painting was the winner. It is a good feedback for planning the theme day next year.

Feedback from the participants



As the teachers learnt how to share videos on the Youtube, they could publish the event for a quite wider audience!

Innoteach team:

Turai wanderers, 6 teachers, head of school, parental community, head of local cultural center, teaching staff

They involved:

580 students, 45 teachers, 15 local stakeholders (parents, policy makers)

https://www.youtube.com/watch?v=T6xqwyoSX3o

Experiences	Results, plans for the future
• Intensive team work, never worked before • Several solution for one problem by the team members • Developing creative thinking in the team • Exchange of experiences among teachers • Developing relationships with local stakeholders	• ICT tools-Family afternoon • Cooperation • Supporting of project-based teaching • Better relationship with parents • Hikers of Tura

Final conclusion: InnoTeach has started a process, our school has a creative team!

3 DO INNOVATION NOW IN EUROPE

3.1 InnoTEACH – How to Do - Europe Wide Impact

The ECQA (European Certification and Qualification Association) established standard procedures to maintain and certify skills Europe wide which have been developed either by Erasmus+ programs or by industry.

Job Role Committee. This is an international board of experts who maintain the skills set on an annual basis. Also the job role committee updates the exam procedure, which is in InnoTEACH case the set f mandatory exercises to perform as an evidence.

A job role committee for InnoTEACH with the three representatives of Slovenia, Hungary, and Austria who coached the schools in InnoTEACH will be formed. This job role committee will be extended by further national representatives in the next years.

See https://www.ecqa.org/index.php?id=441 .

Exam Body. An exam body receives ECQA accounts for exam bodies and assessors and assesses the uploaded evidences of teachers, and can generate ECQA certificates for teachers.

Exam bodies for InnoTEACH will be formed. In the beginning the three representatives of Slovenia, Hungary, and Austria who coached the schools in InnoTEACH will be invited. This exam body committee will be extended by further national representatives in the next years.

Training Material Committee. ECQA certifies training material and trainers but is not a training body. Therefore the training committee is formed ny the owners of the training material of InnoTEACH who maintain the material the next years.

Schools / Learners. Learners / schools contact a job role committee member (the JRC is promoted by ECQA Europe wide) and can get access to training online or training onsite for the teachers. Teachers of schools can follow the exam rules of ECQA (see exam guide in IO5) to receive a certificate.

Standard Regulations, Law and Procedures: ECQA has standard agreements for job role committee membership, for exam body agreements, for exam procedures and for generating certificates Europe wide. See https://www.ecqa.org/index.php?id=221 .

While the recognition at national Hungarian and Austrian level is helpful for these two countries, the ECQA job role committee concept allows to build a Europe wide impact beside a national impact.

3.2 InnoTEACH – How to Do – Get in Contact and Service Model

3.2.1 InnoTEACH – How to Do – Service Model for Training

According to the Erasmus+ the access to materials developed in Erasmus+ is free of cost. However, a training material without guidance and training is not helpful and especially in case of exercise, guidance is needed. Also, the provision of an ECQA certificate which is recognised in industry is also not free of cost, since it produces cost to produce,, send, and maintain the certification infrastructure.

Representatives of schools access the ECQA job role information Europe wide (See https://www.ecqa.org/index.php?id=441). Schools connect to a job role committee member who then invites schools for

1. In-house training
2. Online training
3. Blended Learning

Case 1.)

In case of in-house training the job role committee member appoints trainers and agrees a service price to cover the training effort. A one week training effort will be offered at 4000 EUR fixed price and includes the training of up to 15 teachers in the school.

Case 2.)

In case of online training the job role committee member connects to IT Study (organising the e-training) who then arrange trainers who do coaching in online sessions. Due to the fact that trainers are available only at online discussion times the price is less, it is planned to be approx.. 3000 EUR for a group of max. 15 teachers online.

Case 3.)

In case of blended learning the job role committee member appoints trainers and agrees a service price to cover the training effort. A one week training effort will be offered at 5000 EUR fixed price and includes the training of up to 15 teachers in the school. The school teachers will use the learning portal with the Moodle facilities and discussion areas. 1500 EUR of the 5000 EUR shall be provided as a fee for the usage of the infrastructure.

3.2.2 InnoTEACH – How to Do – Service Model for ECQA Certification

Exam bodies inside the ECQA system assess the uploaded the evidences and rate them and generate and send certificates. This effort is charged to the school for the teachers.

ECQA has a minimum price of 150 EUR per certificate, from which ECQA gets 75 (to maintain services) and the exam body gets 75. If the exam body charges a higher price e.g. 300 EUR, then ECQA gets as a minimum 30% of the fee (in this case 90 EUR) for the service maintenance of the exam portals, while the exam body keeps 210 EUR.

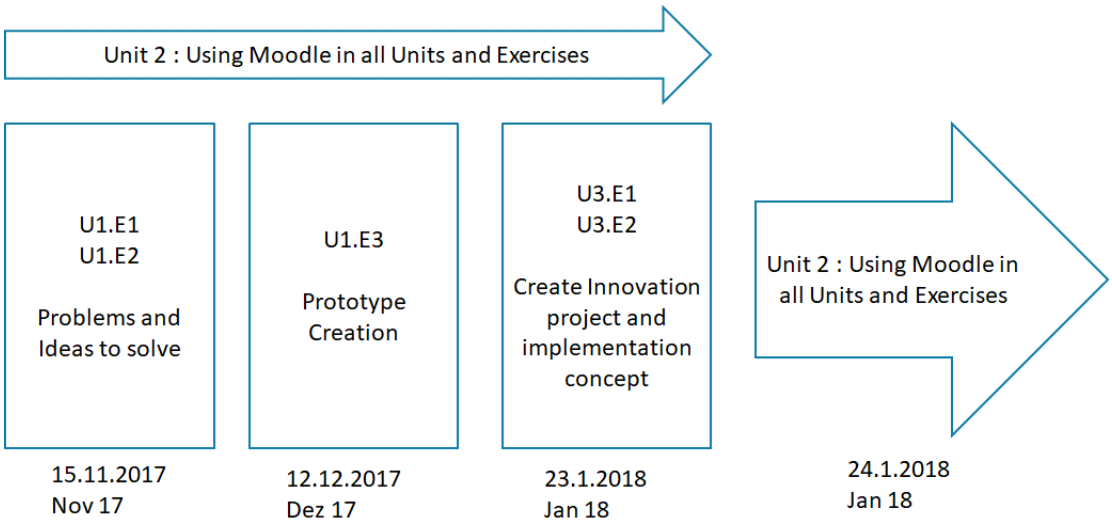
ECQA exam and certification procedures are described in the exam system guide in IO5.

3.3 InnoTEACH – How to Do – Example Training Scenario When Implementing

This is an example of a blended course (Case 3.) The training consisted of a mix of onsite modules, exercises for teachers, and preparing and sharing materials in an online teaching environment.

1. Onsite modules : For each element of the skills set of InnoTEACH teachers or mentors there is a set of slides which can be presented. This was packaged by each unit of the skills set (as a group of elements).
2. Exercises: Teachers performed exercises (the course includes mandatory exercises) and shared the results in the online training. This was uploaded as assignemnts and in an discussion area to continue discussions.
3. Online training: Teachers could access all training materials online and use the online discussion forum and functions of Moodle to exchange materials.
4. Moderation: The trainer moderated the discussions of the exercise results. This discussion was the highest value and led to a lot of new ideas and improvements of the proposed innovations and prototypes.
5. Certificate: Teachers registered with the ECQA system and uploaded their exercise results as a proof of competence. Based on that the certificate was created.

The below picture shows this training strategy.



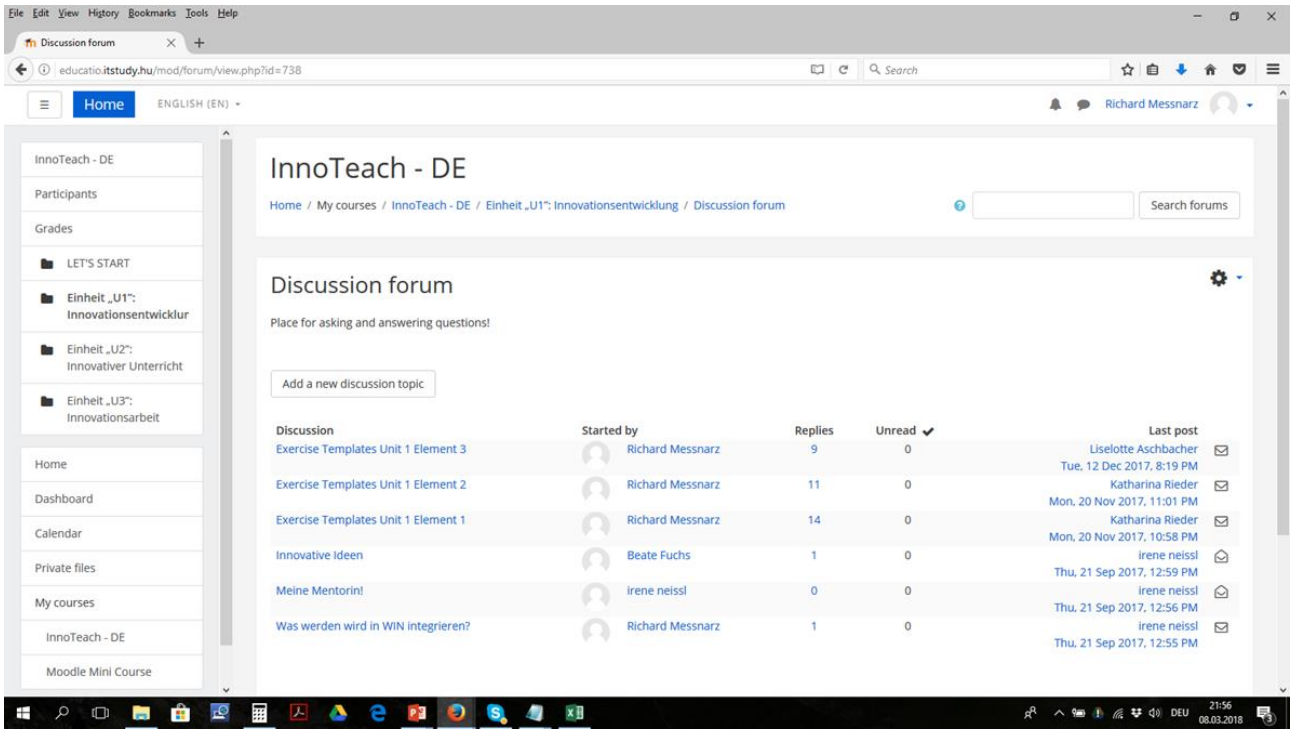
We formed in the Austrian school training 3 Innovation Teams as a result of the problem analysis phase:

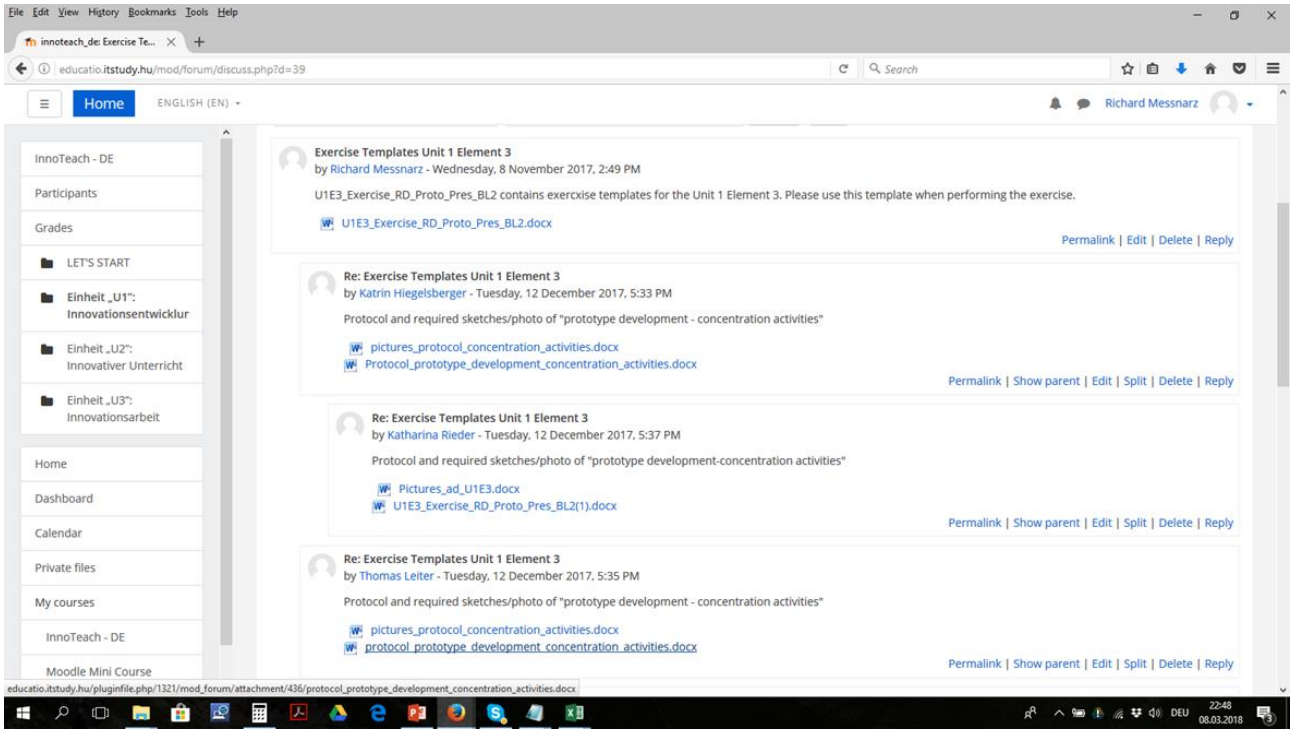
- Group Media
  - Developing a facebook web site and concept for the new school programs

- Group Social Room
  - Develop a concept for a social room for teachers

- Group Learning Support Tools
    - Develop concepts to help students to concentrate

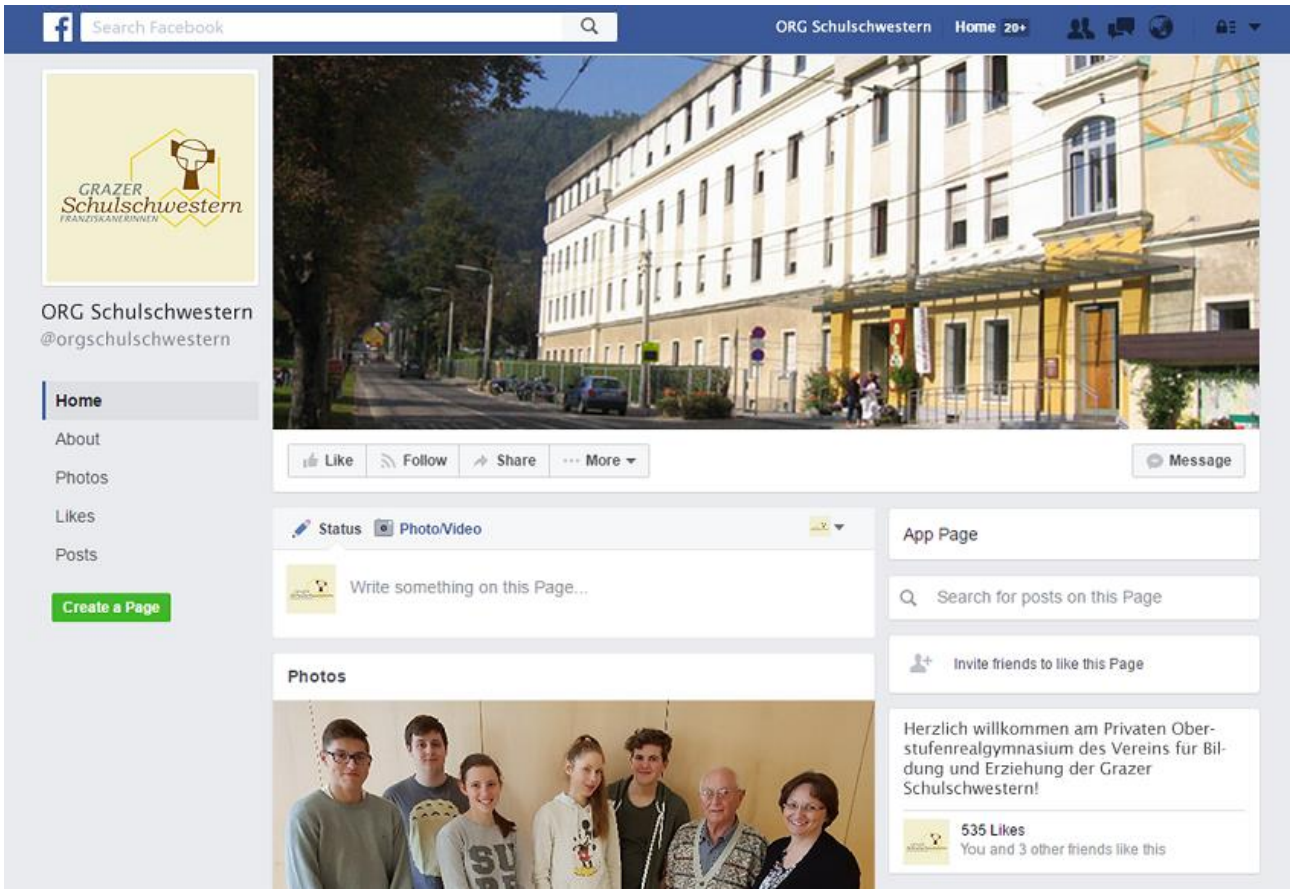
Exercise results were shared in the online environment of InnoTEACH and discussed, see below.





And Prototypes of the innovative idea were developed, presented and discussed, applying the exercise and guidance materials of InnoTEACH.

Picture: Teacher Social Room Presentation



Picture: Teacher Facebook for InnoTEACH teaching – Media Group

And also innovation mission statements were developed by each team.

4 VALIDATION TOOLS SUSTAINABILITY

4.1 ECQA exam system

4.1.1 Certification Method / Approach and Job Role Definition

The European Certification and Qualification Association (www.ecqa.org) was established in a set of EU projects starting from 2005. The project dissemination of ECQA (DEUCERT) won the LLP best practice award in 2014.

ECQA standardised European skills set definitions for job roles.

Definition "Job Role":

- **Job Role** based qualifications are short courses taking from 1 week up to ½ a year
- Goal: re-qualify people in industry (access from the workplace) to sustain their value for the company and remain employed
  - Job Roles are described in form of **Skills Sets** (similar to the skill cards in the Department of Trade and Industry in the UK)
    - Skill Sets are mapped onto **Training**, **Exercises** and **Tests**.

→ **Example:**

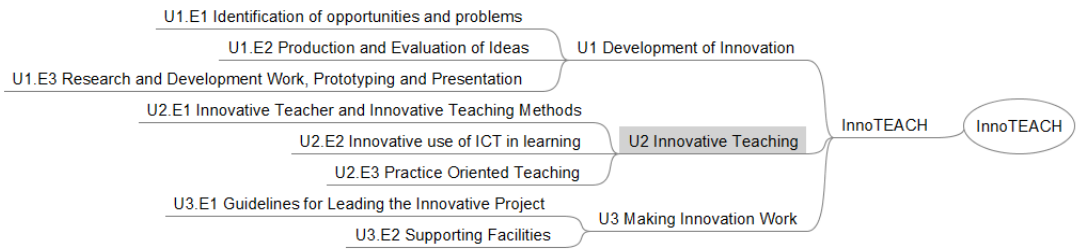
- → FH Joanneum lectures ECQA Functional Safety Manager (AQUA) and the same job role is trained in industry.
- → TU-Graz lectures ECQA Automotive Quality Engineer integrated (AQUA) and the same job role is trained in industry.

In this project a job role to re-qualify teachers to become innovative teachers has been developed:

- **ECQA Certified InnoTeach Teacher**
- **ECQA Certified InnoTeach Mentor**

4.1.2 Europe Wide Comparable Skils Set Based on ECQA Skills Definition Template

The InnoTEACH skills set structure is outlined in the Fig. below. There are three main skills units: U1 Development of Innovation, U2 Innovative Teaching, and U3 Making Innovation Work. U stands for Skills Unit.



The skills unit U1 Development of Innovation contains the following learning elements (specific skills areas):

- U1.E1 Identification of Opportunities and Problems
- U1.E2 Production and Evaluation of Ideas
- U1.E3 Research and Development Work, Prototyping, and Presentation

The skills unit U2 Innovative Teaching contains the following learning elements (specific skills areas):

- U2.E1 Innovative Teacher and Innovative Teaching Methods
- U2.E2 Innovative Use of ICT in Learning
- U2.E3 Practice Oriented Teaching

The skills unit U3 Making Innovation Work contains the following learning elements (specific skills areas):

- U3.E1 Guidelines for Leading the Innovative Project
- U3.E2 Supporting Facilities

For each learning element performance criteria are defined which relate to task based learning. For each performance criteria the teachers must be able to demonstrate skills to perform a task correctly applying the criteria. In InnoTeach 2 skills sets are developed, one for teachers and a second one for mentors of teachers.

The Fig. below shows the sample performance criteria table for the skills element “U1.E1 Identification of Opportunities and Problems” for the teachers:

U1.E1 Identification of Opportunities and Problems (for teachers)

Innovation starts with identifying an opportunity to change an existing process, product, service and in most cases it starts with identifying a problem to solve. Identified problems and opportunities often need to be analysed to identify root causes for the problems. This relates to methods such as:

- Sources of innovations
- Innovation Cube
- Ishikava diagram
- Quadim method

The performance criteria for this element are:

INNOTEACH.U1.E1.PC1	The teachers is able to use methods and tools to identify problems and opportunities.
INNOTEACH.U1.E1.PC2	The teacher knows the principles of decomposing the problem and identify real roots of the problem.

The Fig. below shows the sample performance criteria table for the skills element "U1.E1 Identification of Opportunities and Problems" **for the mentors**: **U1.E1 Identification of Opportunities and Problems (for mentors).** Innovation starts with identifying an opportunity to change an existing process, product, service and in most cases it starts with identifying a problem to solve. Identified problems and opportunities often need to be analysed to identify root causes for the problems. This relates to methods such as:

- Sources of innovations
- Innovation Cube
- Ishikava diagram
- Quadim method

The role of the mentor is to coach teachers in applying this element of knowledge in the classroom.

The performance criteria for this element are:

INNOTEACH.U1.E1.PC1	The mentor is able to use & coach teachers in using methods and tools to identify problems and opportunities.
INNOTEACH.U1.E1.PC2	The mentor is able to use & coach teachers to know the principles of decomposing the problem and identify real roots of the problem

4.1.3 Teacher Certification – Evidence Based Assessment

ECQA (European Certification and Qualification Association) offers standardised Europe wide quality and exam procedures, and two types of exams can be configured:

1. Multiple Choice
2. Evidence based accreditation of learning.

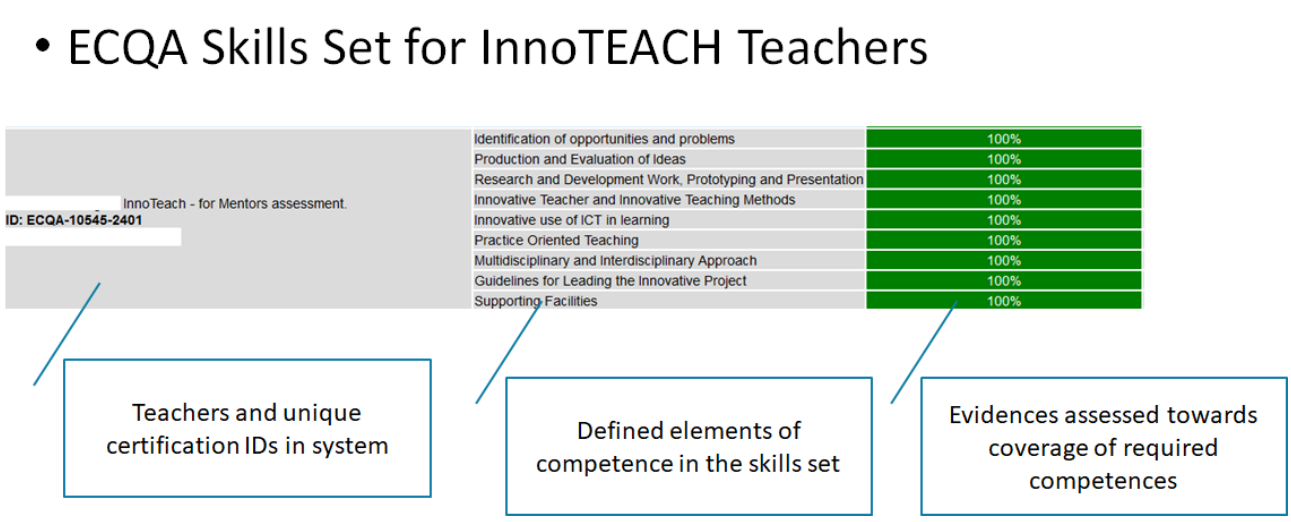
The certificate is issued based in a Europe wide standardised skills set and learning outcomes

In InnoTEACH the teachers decided for the following type of exam procedure in ECQA:

1. Teachers perform a set of mandatory exercises
2. Teachers upload exercises as evidences
3. Assessors log in and rate the exercises
4. A minimum rating of good on a scale of poor – fair – good – excellent of competence elements leads to certification

4.1.4 European Skills Profile

Each skills element of the skills card receives a separate rating leading to a skills profile (see the Fig. below).



4.1.5 European Certificate Showing the Competence Elements

Once the ECQA system was used to rate the skils elements of a peson, a certificate is generated in PDF. The certificate is showing which competence elements (skillselements) have been passed. In the backside the certificate is listing the structure of the skills set.

In the next 2 pictures you can see a sample certificate.

Certificate

of Innovation Competencies for School Teachers

ECQA-10798-2513

[redacted]

has passed the

ECQA Certified Innovation School Teacher

examination for the following accredited units
and learning elements

UNITS	ELEMENTS
U1	E1 E2 E3
U2	E1 E2 E3 E4
U3	E1 E2

Krems, 24th April 2018
Date

Prof. (FH) Mag. Michael Reiner
President of ECQA

ECQA
European Certification & Qualification Association

LEGEND

U1 Development of Innovation

- U1.E1 Identification of Opportunities and Problems
- U1.E2 Production and Evaluation of Ideas
- U1.E3 Research and Development Work, Prototyping and Presentation

U2 Innovative Teaching

- U2.E1 Innovative Teacher and Innovative Teaching Methods
- U2.E2 Innovative Use of ICT in Learning
- U2.E3 Practice Oriented Teaching
- U2.E4 Multidisciplinary and Interdisciplinary Approach

U3 Making Innovation Work

- U3.E1 Guidelines for Leading the Innovative Project
- U3.E2 Supporting Facilities

4.2 Europass

4.2.1 Definition of Europass mobility

Europass Mobility is a standard document in use throughout Europe which formally records details of the skills and competences acquired by an individual – of whatever age, educational level and occupational status – during a period of mobility in another European country (European Union/EFTA/EEA and candidate countries).

4.2.2 Responsibility of partner organisations (sending and host partners

Europass Mobility involves a partnership between the organisation sending the holder of the Europass Mobility (sending partner) and the organisation hosting the holder of the Europass Mobility abroad (host partner). Both organisations agree in writing on the purposes or contents, objectives, duration, methods and monitoring of the Europass Mobility experience. The Europass Mobility is completed by both of them.

4.2.3 Procedure for issuing a Europass mobility document (role of the host partner)

(a) Fills in Table 5.a 'Description of skills and competences acquired during the Europass Mobility experience' (e.g. in the case of job placement or experience in non-formal settings);

(b) stamps and/or signs the Europass Mobility;

(c) sends back the completed Europass Mobility to the sending partner.

4.2.4 Choice of languages

The Europass Mobility is completed in one or more language(s) agreed between sending and host partners and the person concerned. Table 5.a is filled in by the host partner, normally in the language of the host country. Citizens awarded a Europass Mobility document are entitled to ask for a translation of the whole document in one of the languages of the sending and host partners or a third, widely spoken language. Where a third language is requested, the responsibility for translation rests with the sending partner.

4.2.5 Support

For more information on the Europass Mobility initiative, consult http://europass.cedefop.europa.eu or national Europass Centre in your country.

Here is an example for the InnoTeach project/competencies.

europass

EUROPASS MOBILITY

1. THIS EUROPASS MOBILITY DOCUMENT IS AWARDED TO		
Surname(s)	First name(s)	Photograph
(*) Teachers' surname	(*) Teachers' name	***PLEASE SEND PICTURE AS A SEPARATE DOCUMENT IN
Address (house number, street name, postcode, city, country)		

Home address – personal address (as it is written in your CV)

JPG FORMAT

Date of birth

?? ?? ??
dd mm yyyy

Nationality

??

NB: Headings marked with an asterisk are mandatory.

2. THIS EUROPASS MOBILITY DOCUMENT IS ISSUED BY

Name of the issuing organisation

(*) Select option from the drop down menu (in Austria and Hungary you have an online form)

Europass Mobility number

(*) (contact Europass national contact point)

Issuing date

(*) 07 07 2017
dd mm yyyy

NB: Headings marked with an asterisk are mandatory.

Explanatory note

Europass Mobility is a standard European document, which records details the contents and the results - in terms of skills and competences or of academic achievements - of a period that a person of whatever age, educational level and occupational status has spent in another European country (UE/EFTA/EEA and candidate countries) for learning purposes.

The Europass Mobility was established by the decision No 2241/2004/EC of the European Parliament and of the Council of 15 December 2004 on a single Community framework for the transparency of qualifications and competences (Europass).

For more information on Europass, including on the Europass curriculum vitae and the Europass language Passport: http://europass.cedefop.eu.int

3. THE PARTNER ORGANISATIONS OF THE EUROPASS MOBILITY EXPERIENCE ARE

SENDING PARTNER (organisation initiating the mobility experience in the country of origin)

Name, type (if relevant faculty/department) and address

(*) Each teacher writes the name of the school he/she is coming from, the school's address, city, country

(*)

Surname(s) and first name(s) of reference person/mentor (if relevant of ECTS departmental coordinator)

Title/position

(*) It is best to write here the name of the headmaster	Headmaster
Phone ???	E-mail ???

HOST PARTNER (organisation receiving the holder of the Europass Mobility document in the host country)

Name, type (if relevant faculty/department) and address (*) iTStudy Hungary Kft., Testvérvárosok útja 28., Gödöllő, Hungary	(*)
Surname(s) and first name(s) of reference person/mentor (if relevant of ECTS departmental coordinator) (*) Mrs. Mária Hartyányi	Title/position The director
Phone +3628430695	E-mail maria.hartyanyi@itstudy.hu

NB: This table is not valid without the stamps of the two partner organisations and/or the signatures of the two reference persons/mentors.

Headings marked with an asterisk are mandatory.

4. DESCRIPTION OF THE EUROPASS MOBILITY EXPERIENCE

Objective of the Europass Mobility experience

(*) promote international cooperation; trigger different way of thinking and show that innovation is crucial for success; develop knowledge&skills related to the creativity, innovation and entrepreneurship; develop personal competences necessary for successful implementation of ideas; encourage development of innovations regarding classroom activities and improvements at school, at home; acquire experience in developing&implementing of new solutions and in cooperation with stakeholders

Initiative during which the Europass Mobility experience is completed, if applicable

InnoTeach project - Joint international trainings for teachers from participating schools (Short-term joint staff training events)

Qualification (certificate, diploma or degree) to which the education or training leads, if any

Further training for teachers in primary schools

Community or mobility programme involved, if any

Erasmus+, KA2, Strategic Partnerships for school education, AGREEMENT NUMBER: 16-201-021641, Case Number: KA2-SE-33/16, Project Number: 2016-1-SI01-KA201-021641

Duration of the Europass Mobility experience

		dd	mm	yyyy
(*)	From	03	07	2017
(*)	To	07	07	2017

NB: Headings marked with an asterisk are mandatory.

5.A DESCRIPTION OF SKILLS AND COMPETENCES ACQUIRED DURING THE EUROPASS MOBILITY EXPERIENCE

Activities/tasks carried out

(*) Joint trainings will be implemented by three partners (Each partner will cover one third of the training) in the InnoTeach project:

- I.S.C.N. GesmbH, Graz, Austria
- iTStudy Hungary Kft., Gödöllő, Hungary
- Korona plus d.o.o., Institut za inovativnost in tehnologijo, Ljubljana, Slovenia

Learning / teaching methods:

- Explanation
- Conversation/discussion/debate
- Case studies
- Role play
- Solving exercises

Job-related skills and competences acquired

INNOTEACH.U1.E1: identification of opportunities and problems (ISCN)

- INNOTEACH.U1.E1.PC1: The mentor is able to use & coach teachers in using methods and tools to identify problems and opportunities.
- INNOTEACH.U1.E1.PC2: The mentor is able to use & coach teachers to know the principles of decomposing the problem and identify real roots of the problem

INNOTEACH.U1.E2: Production and Evaluation of Ideas (ISCN)

- INNOTEACH.U1.E2.PC1: The mentor is able to use & coach teachers in using methods for idea creation.
- INNOTEACH.U1.E2.PC2: The mentor is able to use & coach teachers to know the principles of ideas evaluation.

INNOTEACH.U1.E3: Research and Development Work, Prototyping and Presentation (Korona plus)

- INNOTEACH.U1.E3.PC1: The mentor understands & is able to coach teachers to understand the importance of Research and Development Work
- INNOTEACH.U1.E3.PC2: The mentor understands & is able to coach teachers to understand various forms of R&D and the use of it in the classroom
- INNOTEACH.U1.E3.PC3: The mentor understands & is able to coach teachers to understand the importance of prototyping and get competencies for its application
- INNOTEACH.U1.E3.PC4: The mentor is able to use & coach teachers how present their work / project to other teachers, pupils, stakeholders, etc.

INNOTEACH.U2.E1: Innovative Teacher and Innovative Teaching Methods (Korona plus)

- INNOTEACH.U2.E1.PC1 The mentor understands & is able to coach teachers to understand and develop Innovative/entrepreneurial thinking and behaviour
- INNOTEACH.U2.E1.PC2 The mentor understands & is able to coach teachers to understand and connect innovation approach with concrete schools subjects
- INNOTEACH.U2.E1.PC3 The mentor understands & is able to coach teachers to understand and use methods for Innovative/entrepreneurial competencies development
- INNOTEACH.U2.E1.PC4 The mentor understands & is able to coach teachers to understand and use various methods and forms/tools of creative and innovative teachin

INNOTEACH.U2.E2: Innovative use of ICT in learning (iTStudy)

- INNOTEACH.U2.E2.PC1: The mentor is able to use & coach the teachers to list and describe the main categories of educational ICT tools and to evaluate their pedagogical values.
- INNOTEACH.U2.E2.PC2: The mentor is able to use & coach the teachers to find and select free ICT tools and open educational resources (OERs) for supporting innovative pedagogical methods (like project-based learning).
- INNOTEACH.U2.E2.PC3: The mentor is able to use & coach the teachers to create basic digital teaching materials and share them with learners and other teachers on the Internet.
- INNOTEACH.U2.E2.PC4: The mentor is able to use & coach the teachers to select and use web 2.0 tools, social networks for collaborative teaching and to navigate and collaborate in Learning Management System (LMS).
- INNOTEACH.U2.E2.PC5: The mentor is able to use & coach teachers to use ICT tools for continuous improvement of quality of his/her teaching by collecting and analysing feedbacks from stakeholders as a part of PDCA (Plan-Do-Control-Act).

INNOTEACH.U2.E3: Practice Oriented Teaching (iTStudy)

- INNOTEACH.U2.E3.PC1: The mentor is able to use & coach the teachers to apply practice-oriented teaching methods like project-based, problem-based method, inquire-based learning.
- INNOTEACH.U2.E3.PC2: The mentor is able to use & coach the teachers to identify the skills and competences he/she want to developed during an innovative project work, to select relevant working form and ICT tools to achieve these pedagogical aims.
- INNOTEACH.U2.E3.PC3: The mentor is able to use & coach the teachers to select and use ICT tools for supporting the stages of the project process (innovating, planning, implementation, monitoring and evaluation)
- INNOTEACH.U2.E3.PC4: The mentor is able to use & coach the teachers to develop strategy and to use appropriate tools for assessing the individual and group performance in collaborative projects.

INNOTEACH.U2.E4: Multidisciplinary and Interdisciplinary Approach (Korona plus)

- INNOTEACH.U2.E4.PC1 The mentor is able to use & coach teachers to understand diversity and the need related to concrete challenges.
- INNOTEACH.U2.E4.PC2 The mentor is able to use & coach teachers in defining/using the different complementary roles needed in a classroom/team to empower innovation within projects.
- INNOTEACH.U2.E4.PC3 The mentor is able to use & coach teachers in using the principles and methods of diversity and how to use this within in the classroom and within an innovation process the teaching process.
- INNOTEACH.U2.E4.PC4 The mentor understands & is able to coach teachers to understand the importance of integration of stakeholders into Innovative teaching and innovative process

INNOTEACH.U3.E1: Guidelines for Leading the Innovative Project (ISCN)

- INNOTEACH.U3.E1.PC1: The mentor is able to use & coach teachers to know the key success factors for entrepreneurship.
- INNOTEACH.U3.E1.PC2: The mentor is able to use & coach teachers to know principles for creating a business network (network of all stakeholders including customers).
- INNOTEACH.U3.E1.PC3: The mentor is able to use & coach teachers to use methods and tools for project planning.

INNOTEACH.U3.E2: Supporting Facilities (iTStudy)

- INNOTEACH.U3.E2.PC1: The mentor is able to use & coach teachers to present the work of the school to stakeholders through various channels (networks, portals, events).
- INNOTEACH.U3.E2.PC2: The mentor is able to use & coach teachers to involve local stakeholders into innovative, project-oriented teaching process and to use effective tools for communication and collaboration tools with them.
- INNOTEACH.U3.E2.PC3: The mentor is able to use & coach teachers to collect information about the European educational initiatives and strategies (like European and Training - ET 2020) and the related opportunities for students, teachers and schools.
- INNOTEACH.U3.E2.PC4: The mentor is able to use & coach teachers to find national and international communities, professional educational networks and to join to them.

Job-related skills and competences acquired

Language skills and competences acquired (if not included under 'Job-related skills and competences')

English language

Computer skills and competences acquired (if not included under 'Job-related skills and competences')

Using the online learning management system Moodle

Organisational skills and competences acquired (if not included under 'Job-related skills and competences')

/

Social skills and competences acquired (if not included under 'Job-related skills and competences')

/

Other skills and competences acquired

/

Date	Mentors	Holder
(*) 12 (dd) 06 (mm) 2017 (yyyy)	(*) Prof. dr. Borut Likar, MBA Dr Richard Messnarz Mrs. Mária Hartyányi	(*) First and last name of the teacher

NB: This table is not valid without the signatures of the reference person/mentor and of the holder of the Europass Mobility.

Headings marked with an asterisk are mandatory.

The form is filled in by the sending and the receiving organisation and by the person travelling.

4.3 Hungarian certificates

The Hungarian partner, iTStudy Hungary Educational and Research Centre applied for accreditation for the Human Resource Ministry in order to add Innoteach course to the official list of the accredited further training programs of teachers.

EMBERI ERŐFORRÁSOK
MINISZTÉRIUMA
KÖZNEVELÉSÉRT FELELŐS HELYETTES ÁLLAMTITKÁR

Iktatószám: 575-148/2017/KOZNEVIG

Hiv. szám: -
Ügyintéző: Tátrai Anikó
tel: + 36-1-7954-021
Melléklet: 1 db

Hartyányi Mária
iTStudy Hungary Számítástechnikai Oktató- és Kutatóközpont Kft.

Gödöllő
Testvérvárosok útja 28.
2100

Tárgy: Alapítási engedély

HATÁROZAT

Az iTStudy Hungary Számítástechnikai Oktató- és Kutatóközpont Kft. (2100 Gödöllő, Testvérvárosok útja 28.) által benyújtott A/8793/2017 számon nyilvántartásba vett, „Innovatív tanár, kreatív osztályterem" című pedagógus-továbbképzési program jóváhagyása iránti kérelmének

helyt adok.

Ennek megfelelően az „Innovatív tanár, kreatív osztályterem" című továbbképzési programot jóváhagyom, továbbá a program alkalmazásához szükséges alapítási engedélyt a mellékelt hitelesített alapítási kérelemben foglaltaknak megfelelően megadom.

The Accreditation Committee accepted the submitted program, so the teachers who completed online Innoteach course, received the official certificate and 30 credits approved by the Hungarian Further Training System of Teachers.

The basic information about the course is available on the website of the system http://pedakkred.oh.gov.hu/PedAkkred/Catalogue/CatalogueDetails.aspx?Id=6360, and iTStudy has the permission to deliver the course in all over the country for primary school teachers.

4.4 Sustainability aspects

As to the Validation tools sustainability, we prepared guidelines for implementation of mentioned validation tools (ECQA exam, Europass; Hungarian certificates) in practice after the project.

4.4.1 Europass

Europass is a form, which can be used also in future. The only limitation is that training should be performed in another country. Project partners can basically do that, but it is related to additional organisational aspects and costs. Therefore, we expect to use this mechanism within further projects, if we succeed to transfer the project in other countries.

4.4.2 Hungarian certificates

Also the HU certification system and activities performed represents a sustainability element which can be implemented.

4.4.3 ECQA system

Related to ECQA we formed a so called job role committee which represents in ECQA the skills sets and organises the exams. We placed Korona and ITStudy and ISCN as the exam bodies in ECQA if school teachers want to be certified in SLO, HU, AT. This makes the project sustainable. If project is transferred to other countries, the ECQA can be used as explained in the next paragraph.

Also it allows that a InnoTeach partnership can prepare further proposals/projects where the same job role committee adds more countries. We already started activities related to submission of the proposal in Finland, Czech, add Germany.

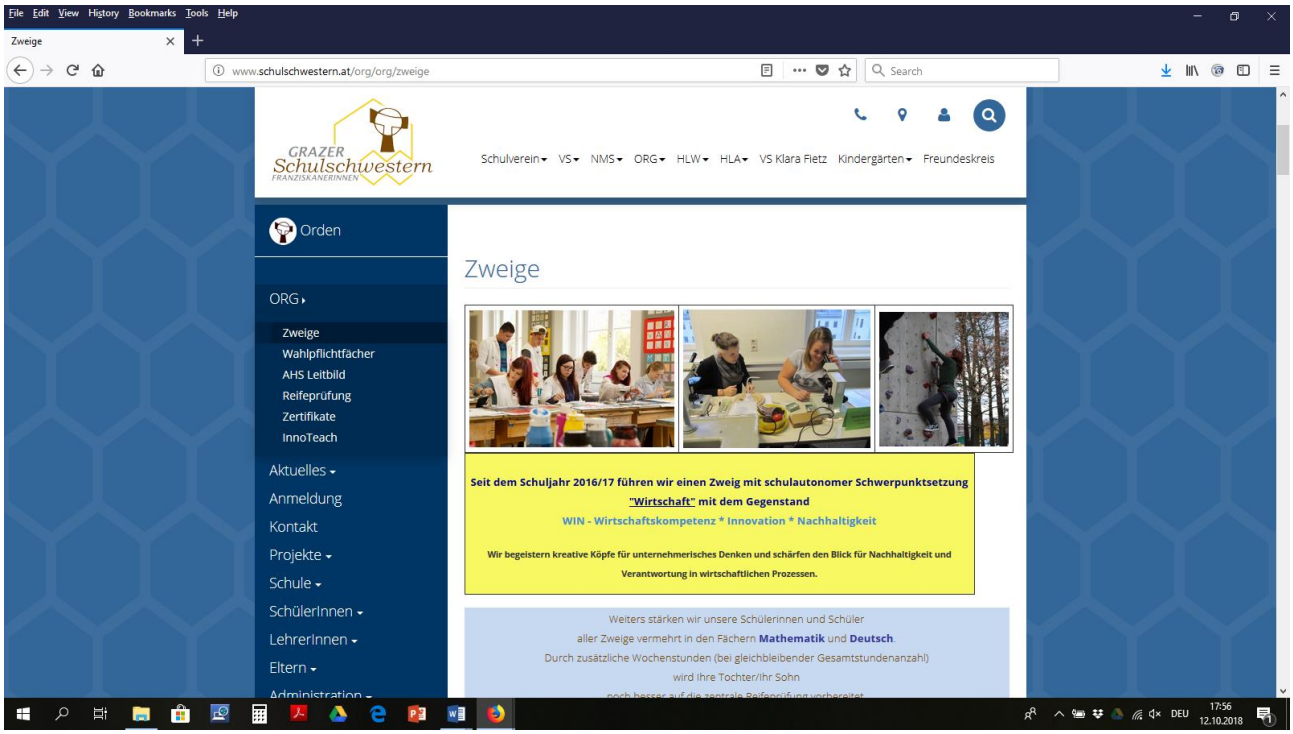
The long term plan is to spread the project incl. ECQA system across Europe.

4.4.4 WIN Program – Accepted New School Program in Austria

In Austria the school authorities accepted the InnoTEACH concept as a new school branch. Students in the school have additional hours in the teaching plan focusing on innovation and developing an innovation project in the school.

The ORG Schulschwestern trained 15 teachers in InnoTEACH and use the new materials in the WIN (Wirtschaftlichkeit – Innovation – Nachhaltigkeit) program in the school.

In 2016/17 two school classes started, and in 2017/18 a further school class started in this branch.



The school class which started 2016/17 presented one of the results of the innovation projects. Students used input from chemistry, biology and commerce to come up with a bath soap with extra nice flavour and they sold many hundred of the soaps. The innovation project included packaging the product and sales planning as well.

The below pictures shows the distribution of that product as a result of an innovation project in the school to the teachers at the final InnoTEACH conference in Krems.

The students will have such a guidance for 4 years in school and also receive a complementary ECQA certificate with the school leaving certificate.