

The Education System of the Czech Republic



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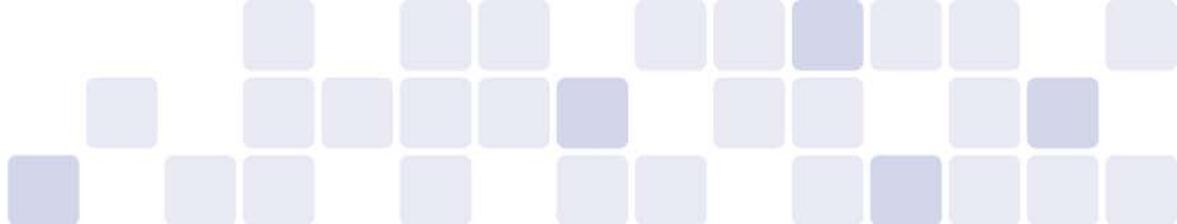
MINISTERSTVO ŠKOLSTVÍ,
MLÁDEŽE A TĚLOVÝCHOVY

About Institution

National Institute for Education,
Education Counselling Centre and
Centre for Continuing Education of
Teachers

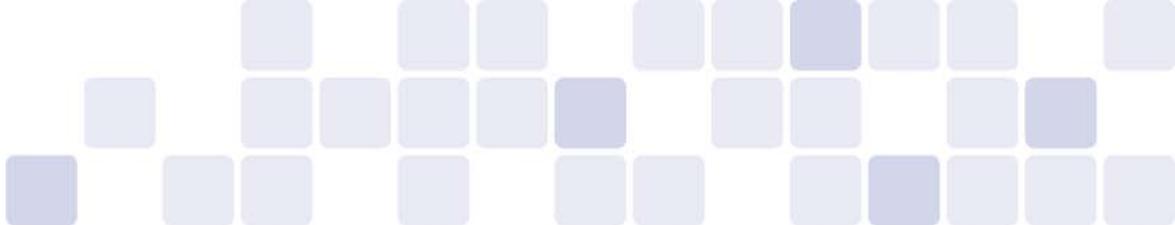


- **Department: The Research Institute of Education in Prague (RIE)**
- The Research Institute of Education in Prague (RIE) is a ministerial research institute of the Ministry of Education, Youth and Sports (MEYS) and is its directly managed establishment.
- RIE is responsible for curriculum development and curriculum reform.



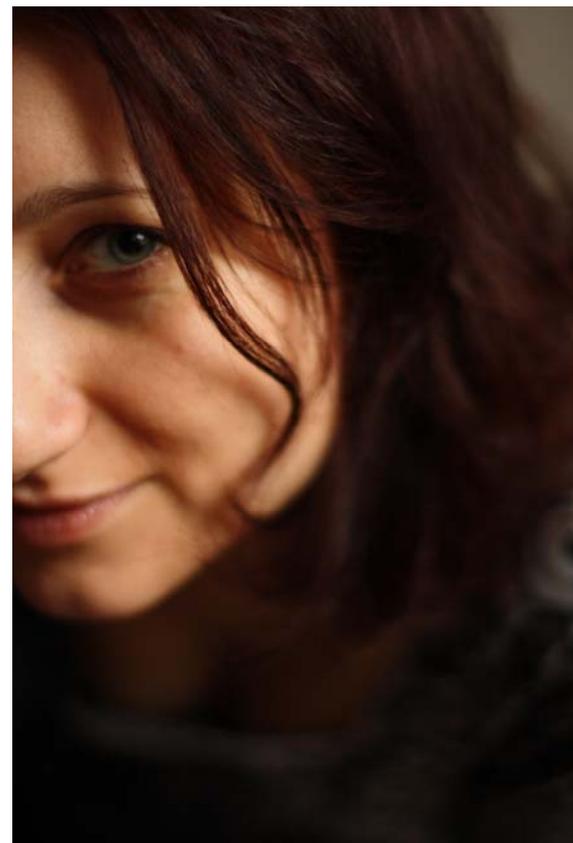
The current activities of the RIE

- Curriculum reform support – the creation, revision and innovation of curricular documents
- [Project outcomes](#)
- Pedagogical innovation in educational content – methodological support for teachers
- Special long-term assignments
- Government assignments and international activities (CIDREE, PLA)



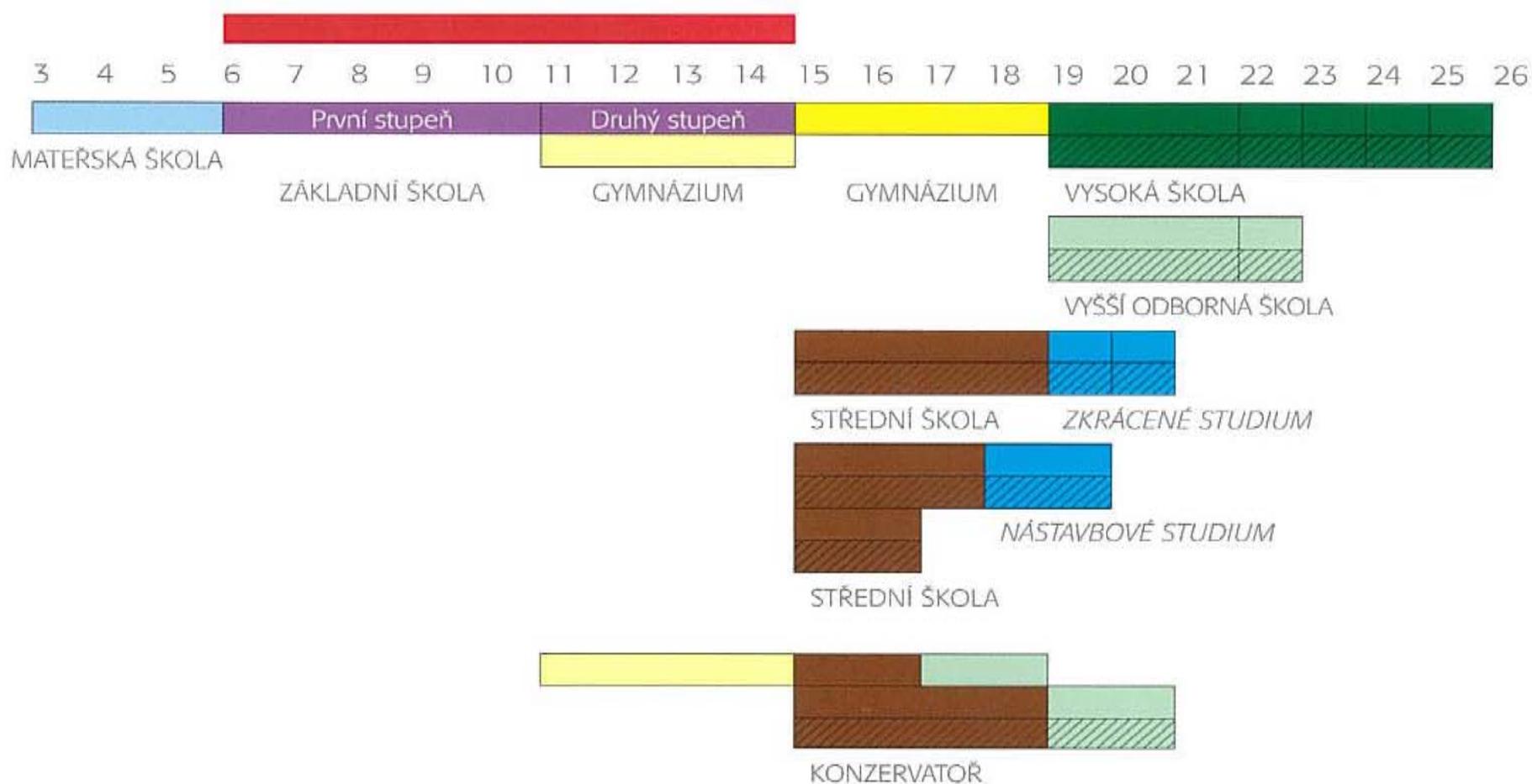
About me

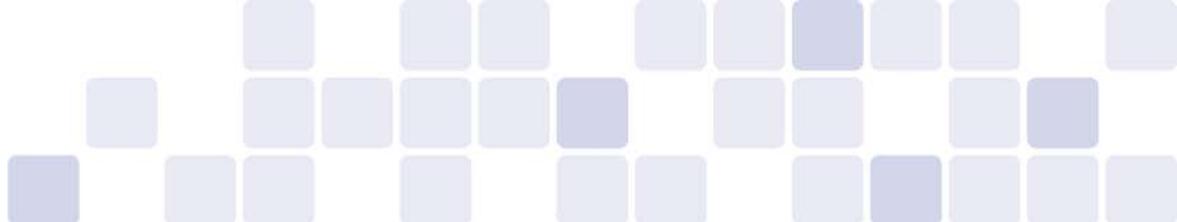
- Teacher of Mathematics and Biology in Secondary school (3 years)
- Researcher in RIE, Department: Conception of curriculum (5 years)
- **Main activities:**
 - Monitoring of curriculum reform
 - Action research on quality education
 - Support the development of literacy in education
 - Member of the international working group: Peer Learning Activities in Maths, Science and Technologies (PLA MST) under the European Commission





The Education System of The Czech republic





-  Pre-primary education - ISCED 0
-  Primary - Single structure – ISCED 1 + ISCED 2 (no institutional distinction between ISCED 1 and 2)
-  Lower secondary general – ISCED 2 (including pre-vocational)
-  Upper secondary general – ISCED 3
-  Upper secondary vocational – ISCED 3
-  Post-secondary non-tertiary – ISCED 4
-  Tertiary education – ISCED 5A
-  Tertiary education – ISCED 5B
-  Compulsory education
-  Part-time or combined school and workplace courses

Source: Eurydice, National summary sheet on the education system in the Czech Republic, Structures of education, vocational training and adult education systems in Europe.



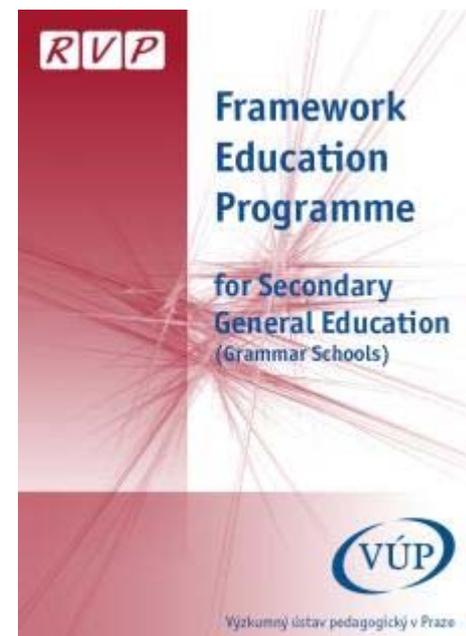
Curriculum reform in pre-primary, primary and secondary general education

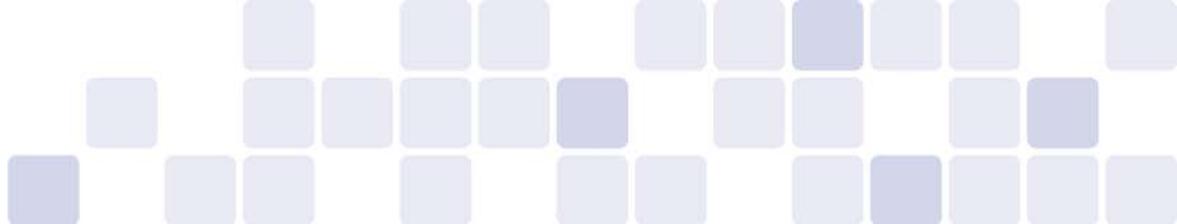
Two-level curriculum conception:

- **The state (national) level** - framework educational programmes (FEP) which define binding educational norms across various stages of education.
- **The school level** - school educational programmes (SEP) which form the basis for education at the individual schools.

New education strategy of curriculum reform:

- developing of the **key competencies**
- **learning in the context**
- using of gained **knowledge and skills** in **practical life**





ESF project: Methodology II

Resource: Internet platform - Methodological portal www.rvp.cz

Aims:

- Support for **implementing curriculum reform** in a school:
 - methodological support for teachers in developing school educational programs and their implementation into teaching
- Support for **improving the quality of the teaching profession**:
 - systematic support for teachers in teaching methodology and didactics,
 - development of a learning community where teachers can share their experiences with each other,
 - effective methods of the education for educators in lifelong learning.

Methodological portal www.rvp.cz

The portal has two levels for searching information:

- 1st by **modules**:
 - content section: **Digital teaching materials, Articles and Links**
 - part of the community: **Wiki, Forums, Blogs and Digifolio**
 - educational part: **E-learning**
- 2nd according to **types of education**:
 - Preschool Education, Elementary Education, Secondary Education, Special Education, Language Learning, Vocational Education, Basic Art Education



Actual numbers and statistics

- Articles 4 591
- DUM 6 885
- Links 1 499
- Pages on the wiki 3 363
- Entries to the discussions 16 833
- 1 029 posts in blogs
- Portfolio of 417 users
- Comments on posts 5 611
- **10 740 users**
- cca **8 000** unique visitors daily

Panel

22.2.2010 - 21.3.2010

Srovnání s obdobím: 28.9.2009 - 25.10.2009



The support for MST by Methodological portal www.rvp.cz

P Předškolní
vzdělávání

Z Základní
vzdělávání

U Zákl. umělecké
vzdělávání

S Speciální
vzdělávání

G Gymnaziální
vzdělávání

O Odborné
vzdělávání

J Jazykové
vzdělávání

Oxygen

Elementary Education » Man and Nature » 2nd level » Chemistry » Partide composition of substances and chemical elements

Material identifier 17 824	<p>Synopsis Presentation notes of oxygen as the most important element on Earth, its position in periodic table, occurrence, preparation and use. It places emphasis on cross-cutting themes, especially EGS and EV, interdisciplinary relations. I recommend that students work in groups. In the hour demonstration to be made both attempts preparation of oxygen and its proof. Individual tasks of the presentation students can check immediately.</p> <p>Author Mgr. Vlastimil Vanek (Author)</p> <p>Language Czech</p> <p>Expected output differentiation of chemical elements and chemical compounds and concepts used in proper context other materials for this expected output »</p> <p>Special educational needs - None -</p> <p>Keywords oxygen , occurrence, development and production of oxygen , use and importance oxygen , ozone , ozone layer , dangerous CFCs</p> <p>Type of learning material Presentations</p> <p>Kind of interactivity Combined</p> <p>Target Audience Pupil</p> <p>The degree and type of education basic education - second degree</p> <p>The typical age group 12-15 years</p> <p>Total size 5.37 megabytes</p>
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Statistics
Material published **25th 11th 2008** and has since **1471 ×** displayed.



Other materials

- Additional materials for this expected output
- Additional material by

Evaluation of materials
Guest team rvp.cz

★★★★☆

User Rating
★★★★☆
Average Rating: 2
Number of ratings: 1
Rate material only for registered users.

Statistics from
★★★★☆ nobody
★★★★☆ nobody
★★★★☆ nobody
★★★★☆ nobody
★★★★☆ 1 user
★★★★☆ nobody

▼ **How to cite**

Vanek, Vlastimil. Methodological portal, digital learning materials: "Oxygen" [online]. 25th 11th 2008th [Cit 17. 05th 2010]. ISSN 1802-4785. Available from WWW: <<http://dum.rvp.cz/materialy/kyslik.html>>.

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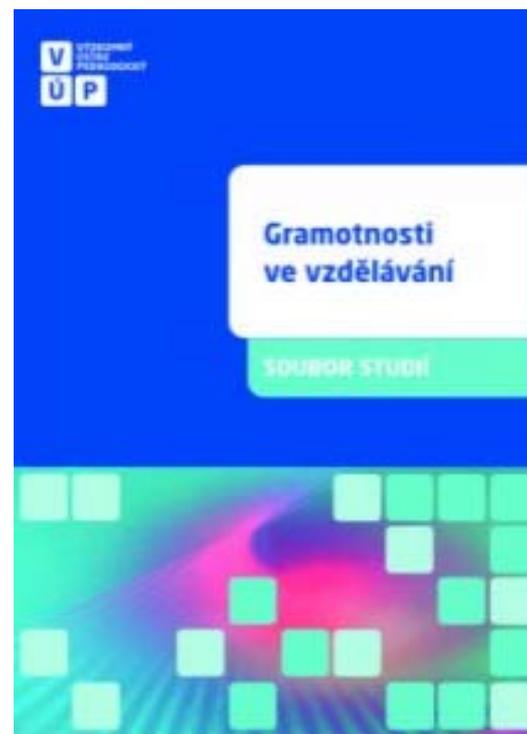
Project: Support of literacy

Support of:

- Reading literacy
- Mathematical literacy
- Science literacy
- Financial literacy
- ICT literacy

Work in teams with experts:

- from the **Ministry, Universities, institutions and education organizations**, the **Czech School Inspectorate, Center for Education Results, Institute for Information in Education and schools** at all levels of education.





Project: Support of literacy

Aims:

- **Curriculum level** – to define concepts, relationship to key elements of the curriculum and appropriately implement them in the curriculum.
- **Analytical level** – analyzing curriculum considering the concept of the literacy, analyzing data of international researches PISA, TIMSS, PIRLS
- **Methodological level** – to provide teachers with effective methodological support to develop the literacy of their students.

Products:

- **to publish manuals and methodological materials, to organize of seminars and conferences**

Peer Learning Activities in Maths, Science and Technologies (PLA MST)

- Produce "**clear and visible outputs**" that can be easily disseminated and that provide Member States with practical and useful tools for their policy work.
- Focus on two priorities: "It will focus on contributing to policies to improve attainment levels of **low-achievers** in basic skills, including numeracy and **stimulating greater interest** in maths, science and technology" (paragraph 19 of the mandate).



**EUROPEAN
COMMISSION**

Peer Learning Activities in Maths, Science and Technologies (PLA MST)

- **PLA meetings**

- Helsinki and Tallinn (26. 9. – 29. 9. 2011).
The PLA provide the participants with the opportunity to study concrete examples of policies that have been implemented in the host countries and their impact on students' attainments in MST.





Cooperation with DZS and European Schoolnet

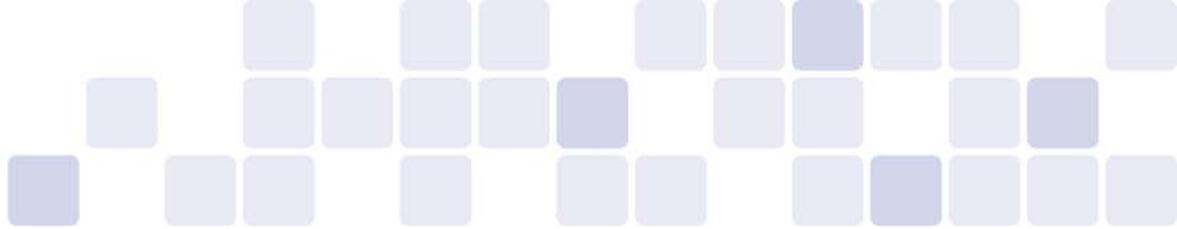
About institutions:

- **European Schoolnet** - network of 30 Ministries of Education in Europe and beyond, <http://europeanschoolnet.org>
- **DZS** - The Centre for International Services of the Czech Ministry of Education, Youth and Sports, <http://www.dzs.cz/>



Cooperation on:

- Project **SPICE** (2010 – 2011)
- Internet platform **SCIENTIX** (2010 – 2012)



Project SPICE (2010 – 2011)



Aims:

- To collect, analyze, validate and disseminate innovative pedagogical initiatives, in MST labelled as **Good Practices** (GP) especially those GP based on inquiry-based learning, mostly ICT-based GP
- Enhancing pupil motivation for science studies (at primary and secondary level)

Two levels:

1. Policy level --> Science education experts panel
2. Teachers level --> Science and maths teachers panel

Internet platform SCIENTIX <http://www.scientix.eu>

Print this page Search English (en)

SCIENTIX

The community for science education in Europe

Home

HOME

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- CONFERENCE
- ABOUT

LATEST MEMBER

ΘΕΟΧΑΡΗΣ
ΦΟΛΛΑΣ

WANT TO BE A MEMBER?
(999 MEMBERS)

LATEST UPDATES

NEWS: Happy World Teachers' Day!
On 5 October UNESCO celebrates World Teachers' Day and promotes international standards for the teaching profession, as it has every year... [Read more ...](#)

PROJECTS: TWIST: Towards Women In Science and Society
TWIST is raising awareness about the role and representation of women in science through programmes and activities in science centres and... [Read more ...](#)

TEACHING MATERIAL
How are drugs developed? - Take part in the research of a drug

REPORTS
TWIST. Guidelines for communication activities on women in science to be implemented by Science Centres and Museums.

TRAINING
Second Life in the classroom

TAGS

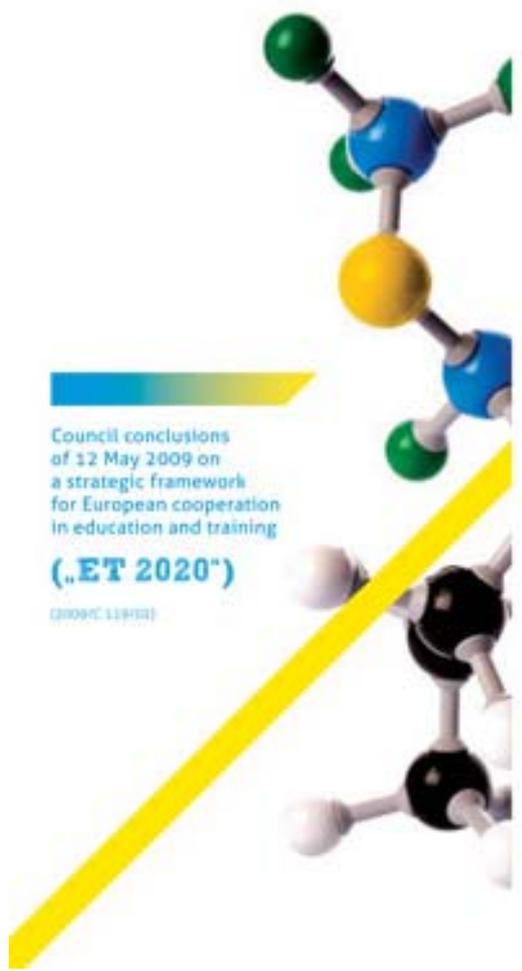
Climate Disease **Technology**
Chemistry Biotechnology Environment

TRANSLATION ON DEMAND

**SERVIZIO DI TRADUZIONE
SU RICHIESTA**

MEYS – current and future MST initiatives

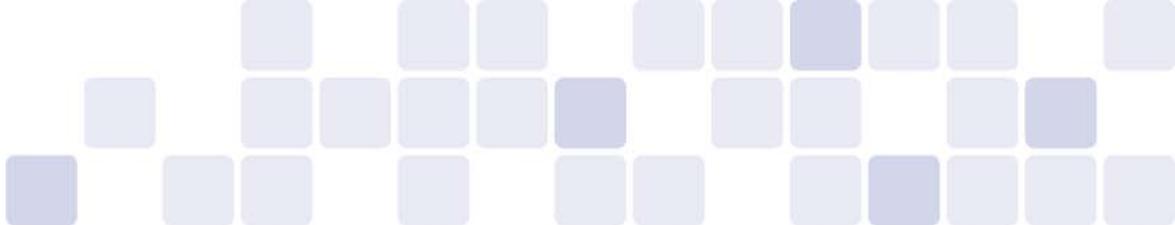
- **National priority:** raising pupils' motivation in studying MST subjects
- Based on **EU document Education and Training 2020 strategy** which underlines the importance of an efficient and equitable education of high duality for enhancing employability and allowing Europe to retain a strong global role.



Council conclusions
of 12 May 2009 on
a strategic framework
for European cooperation
in education and training

(„ET 2020“)

(2009/C 119/02)



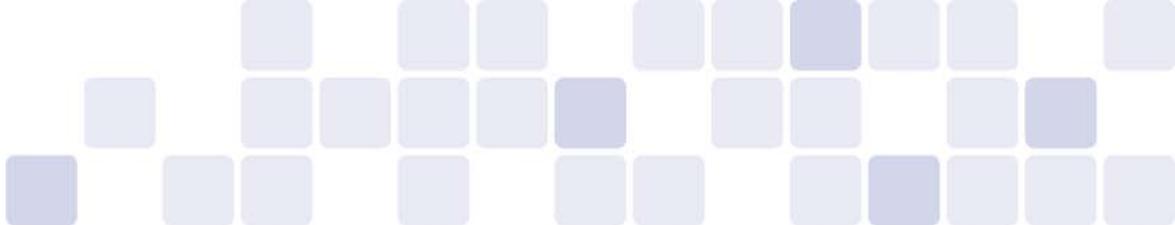
1. EU money to schools (2010-2012)

- Grant initiative (ESF funds)
- Currently aimed only at elementary schools (excluding elementary schools in the capital city).
- It supports various innovative curricular approaches in different areas of teaching including MST.
- Schools can apply for a grant directly to MEYS and the grant can be used f. ex. for equipment, teacher training or production of new learning materials.
- A similar grant scheme is being prepared for secondary schools and should be launched soon
- Websites about programme: <http://www.eupenizeskolam.cz/>



OP Vzdělávání
pro konkurenceschopnost

INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ



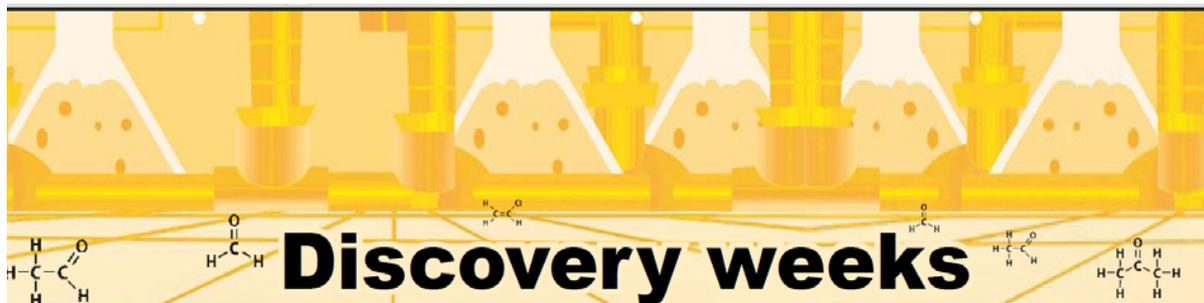
2. Support for Technology and Science Fields

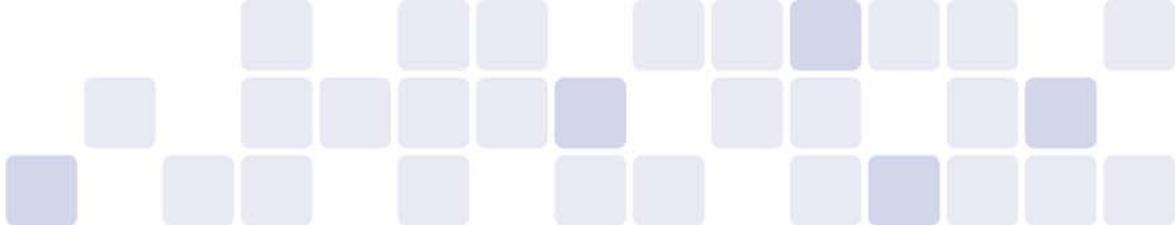
- The system of project activities is divided into three main pillars and it is focused on
 - professional support of teaching and popularization of science,
 - publicity and communication,
 - the training of future teachers.
- The envisaged outputs of the project include among other things a proposal for systemic support of technology and science fields, background materials, analyses and methodologies, conferences, seminars, workshops, popularization lectures and pilot activities in individual regions.
- New web: www.generacey.cz



3. Summer schools/courses of MST for pupils and MST teachers

- Initiatives of individual universities and other institutions.
- **Various institutions** – universities, Academy of Sciences of the Czech republic, NGOs etc - throughout the country organize summer schools or training courses for primary and secondary school pupils and teachers.
- The main aim of these activities is to enhance pupils' interest to study these subjects and to give MST teachers training on **inquiry-based teaching**. Some of the courses are aimed particularly at girls.





Some examples as cooperation with Universities:

- **Faculty of Mathematics and Physics, Charles University in Prague**
<http://ksvi.mff.cuni.cz/skola/> - summer schools for ICT teachers teaching at secondary schools
- **Faculty of Science, Palacký University Olomouc**
<http://kdf.mff.cuni.cz/veletrh/2011/en/> - Physics Teachers' Inventions Fair,
- **Faculty of Information Technology, Brno University of Technology**
<http://www.fit.vutbr.cz/holky/en/summerschool/index.html.en> (English) - IT summer school for girls
- **The Institute of Chemical Technology, Prague**
http://www.vscht.cz/homepage/tisk/stredni_skoly/ls (only in Czech) – summer school for chemistry teachers (secondary school teachers)
http://www.vscht.cz/homepage/tisk/stredni_skoly/POPUCH - project POPUCH popularizes chemistry for secondary schools pupils



Cooperation of School and Research

Academy of Sciences of the Czech Republic

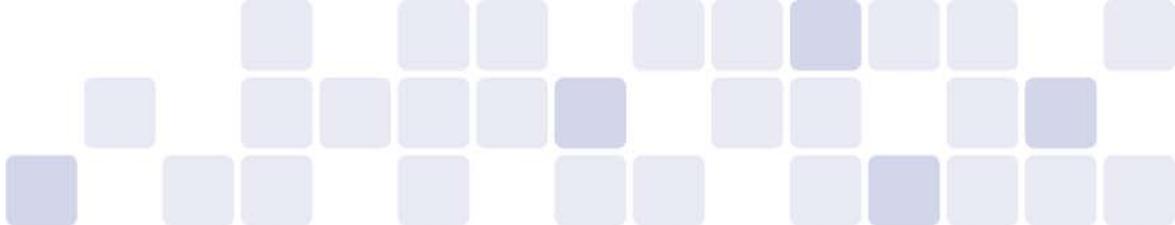
- **Project Open Science II** – the systematic integration of talented secondary-school students in scientific-research activities, this project includes also training courses for teachers

<http://otevrenaveda.avcr.cz/index-en.html>

(in English) -

<http://otevrenaveda.avcr.cz/educational-activities/> (in English)





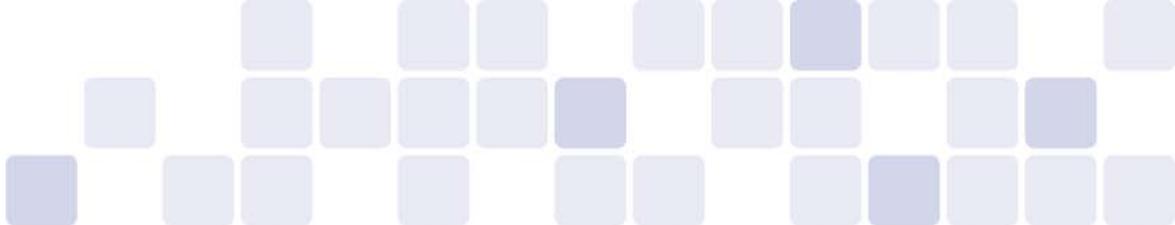
Some another examples

• Project 3V

- The aim of this project (run by NGO Tereza) is to make methodological materials for inquiry-based STEM teaching and learning + piloting of the used learning material in pilot schools <http://www.projekt3v.cz/informace-o-projektu.html> (in Czech)

• Project Heuréka

- A Czech project lasting for more than 12 years concentrated on physics education for age group 12-15, Heuréka puts together teachers from different types of schools, future teachers, people from universities and other people interested in physics education – seminars, conferences <http://kdf.mff.cuni.cz/heureka/en/>



4. Industry-school partnerships - Project "Science is the Future"

- The aim is to increase the attractiveness of science and technology for elementary and secondary school pupils through a cooperation of companies and schools and show pupils that a career in this field has a future. (Successful initiative of the Irish School of Business Partnership Schools Business - Business schools)
- The Czech project is at its beginning
 - 2 companies (Bayer and IBM) and 2 pilot schools. The projects is open to any other companies or schools that are interested to join it (one to one – 1 school : 1 company)
 - the project is aimed at primary schools (8th grade) and secondary schools (3rd grade)
 - the project has got 4 modules: working skills (excursion, cv workshops and science in practice), mentoring, part-time jobs for pupils, teacher training
- Project coordination: civic association AISIS.
- More info: <http://www.vedamabudoucnost.cz/index.php/home>



Thank you for your attention