#### Subject of the project:

Education of the XXI century innovative methods of teaching mathematics and science in the face of new challenges of technology and the changing needs of the labor market

#### Goal of the project:

The overall objective of the project is to develop and implement school practice innovative teaching methods thanks to which learning mathematics, physics, biology, chemistry and geography will not only be difficult duty, but it will be fun and exciting adventure. To further strengthen the motivation to learn science will process implementation efforts of students to consciously choose a profession

### The project schedule

- All project activities are indicated in the Schedule, which is an integral part of the application form
- The schedule covers 24 months (M1-M24)
   M1-September 2015 ... M24- August 2017
- The schedule includes 3 types of activities
- red colour Project meeting (working) teachers

**green colour** – students trips **yellow colour** – Project management = all other activities + monitoring The main project activities

I. Project meetings (working) teachers

2. Pupils mobility

 The tasks that each school will implement at home, in the time between trips

 4. Activities related to the monitoring of the project - reports Ad. 1 Meetings Project (working) teachers

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The meetings are marked with symbols M1-M5 in the Schedule – red colour
M1 - Poland, September (October) 2015
M2 - Italy, in February 2016
M3 - France, in September 2016
M4 - Turkey, February 2017
M5 - Cyprus, June, 2017

### Ad. 2 Puppils trips

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 Meetings are indicated by symbols C1-C5 in the Schedule- colour green

C1 - Turkey, November (December) In 2015
C2 - Cyprus, in March 2016
C3 - Poland, in June 2016
C4 - Italy, in November 2016

• C5 - France, April 2017

- Project duration: 2 years = 4 semesters
- 1 year 2015/2016:
   I semester: September 2015 January 2016
   II semester: February 2016 June 2016
- 2 years 2016/2017: Ill semester: September 2016 - January 2017 IV semester: February 2017 - June 2017
- Tasks to be performed are divided into 4 semesters

 Tasks to be performed are described in the draft pp. 33-34

Tasks are marked with symbols A4-A14 in the Schedule are marked in yellow

 Each of these tasks will be carried out by 4 semesters

Task 1

A4 - Practical interdisciplinary classes for students

Time schedule - 90 min The specificity of schedule - experience, experimentation, design and construction of prototypes, using knowledge from different science The number of classes - 3 classes each semester = 12 classes throughout the project The end product - brochure

"interdisciplinary curriculum science" - will develop a Polish school

Task 1

A4 - Practical interdisciplinary classes for students

cont.

 Lesson plans for each semester will develop another school:

 I semester - the school Poland
 Second semester - Italian school
 III semester - Turkish school
 IV semester - the school Cyprus
 The scenarios should be developed in English and send it to other schools in the first month of each semester

#### Task 2.

### A5 – "Scientists-travellers"

Practical work in the field of science implemented under the planned lesson
Each school will develop their own lesson plans according to their own ideas and opportunities
Number of classes: one classes each semester = 4 classes throughout the project
The final product - brochure "Scientists travellers", will be developed by Italian school

#### Task 3.

### A6 – "Scientists-professionals"

 Practical classes at the public institutions (eg The Bank, tax office, etc) Implemented within the scheduled lesson
 Each school will develop their own lesson plans according to their own ideas and opportunities
 Number of classes: one classes each semester = 4 classes throughout the project
 The final product-brochure "scientists-professionals", will be developed by French school

#### Task 4.

### A7 – "Scientists-filmmakers"

 The students of each school will make instructional exercise videos like "Do It Yourself" demonstrating practical use of knowledge in everyday life Number of films - 1film per semester = 4 videos throughout the project The final product-disc DVD, will be developed by Turkish school

#### Task 5.

### A8 – Implementing "European set of tasks"

- A set of will include tasks in mathematics, physics, chemistry, geography, and biology-related skills and information needed in carrying out of specific occupations
  - Each school will prepare the 3 tasks in each subject (task + solution)
  - The final product-brochure "I solve and work -European set of tasks", will be developed by school
  - Cyprus

#### Task 6.

A9 – School competition "The importance of mathematics, physics, biology, chemistry, geography and science in carrying out the profession"

Each school will carry out competition
 Form of work - a multimedia presentation
 The winning works will be presented at a meeting of students in Turkey

Task 7. A10 – Competition with a range of city "Invention of the future"

 In each partner school, students from local schools with parallel stage of education will take part in a competition The winning students will present the work at a meeting in Poland

Task 8. A11 – International Competition "Personality in the world of science"

Form of work - a multimedia presentation
 I school stage - winning work will take part in the second stage
 II Stage International during a meeting in Italy

Task 9. A12 – International Competition " Knowledge of science "

 The competition will be prepared by French school The contest will be carried out during the last meeting of students in France

Task 10. A13 – "Didactic game"

 The students of each school will carry out one educational game (eg "Dominoes, cards, etc) The students will present the game during the last meeting in France

### Task 11.

### A14 – Professional activities for students

- Each school will implement professional ativities by their own concept and possibilities (eg Workshops for students to determine their own interests and professional predispositions, consultation with local employers, visits to workplaces, "Forum professions", participation in the Exhibition of Occupations, a meeting with a representative of the profession, etc. ..) In each semester should organize at least one professional task
  - Each action should be documented and presented at a meeting of students

#### ATTENTION!!!

Each action should be documented using for example-a scenario of classes-note presentations multimedia-video-contest rules and its summary
 All school activities will be presented and discussed at the working meetings and exchanges of students
 Documentation of performance shall be the material for the development of the final products.
 All final products are described the Project p. 24

# Ad. 4 Activities related to the monitoring of the project - reports,

Monitoring is a very important part of the project and must be implemented accurately and systematically Monitoring results are subject the control of the National Agency in individual countries For activities related to the monitoring responsibility of the Higher Education Coordinators School coordinators send the monitoring results of the Project Co-ordinator - Polish school, which made collective statements

Detailed monitoring process is described in a separate presentation <sup>(C)</sup>)