



Project title:

INNOMATH - Innovative enriching education processes for Mathematically Gifted Students in Europe.

Reference number: 2019-1-DE03-KA201- 059604

Implementation period: September 2019 – August 2021

QUALITY ASSURANCE STRATEGY & STATEMENT

AIMS AND OBJECTIVES OF THE PROJECT

This project aims to support teachers by developing an Electronic Guidebook through which they can be guided in their teaching and support to "gifted" students with a role of facilitators. The project intends to develop new methodologies for supporting gifted pupils in mathematics of age 10-18, which can be used inside and outside any school environment. It will also make learning more attractive and enjoyable for all pupils and will strengthen students' skills for creative thinking. The methods could be used for other subjects of the education curricula. In this context the objectives of the Project are:

1. Electronic Guidebook of Methods and Tools for teacher facilitators including among others two chapters, one an analysis report of good practices and methods used to support gifted/talented pupils in schools and another on the Mathematics meets industry in School – Knowledge to innovation through practice.
2. The INNOMATH course for teacher facilitators : Supporting Mathematically Gifted Students

THE MAIN TARGET GROUPS OF THIS PROJECT

These are

- School teachers teaching pupils of age 10-18
- Gifted/Talented students in Mathematics
- Educational Researchers and Academics
- Applied Sciences Industry and Enterprises
- Policy makers at national and European level as well as some national Ministry authorities
- Educational Journalists

QUALITY ASSURANCE STRATEGY

METHODOLOGY

The methodology to be followed for ensuring quality is the following:

Step 1 - General Plan Design Quality: Achieving quality requires careful planning. Therefore, the first step is designed to achieve the objectives of quality. The objective of this step is to ensure that all Standards and Guidelines required for the design, administration, resources and project control, are sufficiently determined and understood by all partners.

Step 2 - Define Quality Assurance Framework: The objective of this step is to ensure that the Standards and Guidelines, which were determined in the Design Quality Management, are realistic and correspond to the specific conditions of the project; the activities of the quality control are performed normally and without irregularities and that the analysis of errors and defects will provide the basis for improving the quality of the projects' deliverables.

Step 3 - Perform Quality Control Activities: The purpose of this step is to identify defects so as to be able to correct them. This control is under the collective responsibility of the consortium partners and shall be performed during the whole project, not solely on the completion of a deliverable, so as to check the completeness, consistency and the fulfilment of the objectives.

Step 4 - Perform corrective/preventive actions: The defects and discrepancies identified by quality control must be corrected. For this purpose and to maximize the relevance of the proposed plan on the standards set in place, the Coordinator will proceed with a detailed analysis of the critical points of the proposed methodological approach as regards to the overall Management and Quality Assurance of the project.

QUALITY ASSURANCE COMMITTEE

In order to ensure the quality of the project the consortium will form a Quality Assurance Committee consisting of 3 participants from the consortium. The participants should not have the role of Output Leader and should have enough experience so as to be able to identify risks and decide upon the necessary corrective/preventive actions. Below is the synthesis:

Consortium partner	Name of the representative
One person from the Cyprus Mathematical Society	Andreas Skotinos
One person from Universities partners.	Christian Mercat or Patrick Berger
One person from the Schools partner	Oliver Kaufmann

BASIC INDICATORS OF SUCCESS

A set of indicators will be used to measure the interest in the project, the degree of communication and collaboration of the partners, the extent of the material/ outputs produced and their quality and the impact.

The Basic Indicators of progress and success are:

Quantitative:

- Number of visitors to the project website and to the Social Network platform
 - Number of pupils participating in the piloting activities
 - Number of interested members of the Focus Group
 - Statistical results and outcomes of the evaluation reports
 - Number of Industry representatives responding to invitations
 - Number of replies to the IO1 survey
 - Number of three months (quarterly) reports completed on time
- Qualitative:
- All partners have excellent understanding of their obligations and needed work for the project
 - The time plan is followed as in the project timeline
 - The contingency and risk plan is not used throughout the project
 - The Quality Assurance statement is respected by all partner participants
 - Partners are sending the necessary reporting material on time
 - Content of the three months (quarterly) reports

The Basic Indicators of measuring project results and objective are:

Project Management Level:

- Schedule performance index (budgeted cost of work performed/budgeted cost of work scheduled)
- Cost performance index (budgeted cost of work performed/actual cost of work performed)
- Number of meetings carried out (target 5 transnational meetings)
- Number of deliverables submitted on time (Target 100%)
- Number of budget revisions (target 0)
- Number of reallocation of responsibilities (target <10%)

Project Quality and Impact Level:

- Number of events organized per partner (target at least 1 local multiplier event)
- Number of trainings provided (target 100%)
- Number of visits of the project website (target >60/month)
- Number of stakeholders reached (target >5000)
- Number of gifted students supported (target >50)
- Attendance rate at the dissemination events (Target >90%)

Monitoring and Evaluation of performance Level:

- Number of participants making use and accessing the products of the project (target >100);
- Number of Schools promoting and embracing the INNOMATH idea (target >50);
- Number of people in total that attended the local multiplier events (target > 150);
- Number of risks with high, medium and low impact which the partners addressed (target <1-2);
- Number of risks the partners avoided through the implementation of preventive actions (target =100%);

Measuring the impact

Indicators to be measured include:

1. Participation in the Pilot Phase
2. Participation in the Multiplier Events
3. Submission of related topics to EUROMATH and EUROSCIENCE conferences.
4. Visits to the project website.
5. Reaction to Social Media communication.
6. Interest of teachers to participate in the KA1 training course.
7. Interest to join the INNOMATH Focus Group.

How we will know if our strategy is working (targets)?

- Measure the response to our invitation to participate in the Focus Group.
- Measure the response to our Messenger Group
- Monitor the increase in our indicators.
- Expect a positive result in the pilot testing.
- Evaluate the interest shown by European schools in the Training Course and the inclusion of the INNOMATH outputs in their European Development Plan.
- Positive reaction from Industry for supporting the exploitation plan of the project

Additional indicators may be set by the consortium during the first six months of the project life:

Criteria leading to the desired outcome that are measurable include:

- The quality of the proposed problems and the required level of mathematics needed to handle them. These aspects are evaluated beforehand by experts in the field of mathematics and mathematics education, as collaborative work.
- The structure of the teams. To create good teamwork, the team members are chosen based on their own application of interest where they present themselves and their skills.
- Involvement of a few participants with experience on working with mathematical tools on industrial problems. Those will be handpicked by consortium members where they will pilot the method.
- The satisfaction and joy of working in teams (together with other math-enthusiastic people) on hard problems. This is evaluated through a questionnaire after the implementation.

Quality statement

We, the partners in the INNOMATH project, undertake to cooperate with all parties involved, abide by the rules and regulations specified or to be agreed in the meetings or set by the funding authorities. Furthermore we undertake to work promptly in order to produce outcomes of high quality and standards.

2 October 2019: Signed and approved by all partners representatives in Meeting 1.

Organisation	Country	Person in charge	Signature
P0. Volkshochschule Schrobenhausen e.V.	Germany	Jana Gerstmair	
P1. Humboldt University	Germany	Jurg Kramer	
P2. Immanuel-Kant-Gymnasium	Germany	Oliver Kaufmann	
P3. Casa Corpului Didactic Teleorman	Romania	Simona Gabriela Bataus	
P4. The Heritage Private School	Cyprus	Antonis Philippou	
P5. Université Lyon 1 Claude Bernard	France	Patrick Berger	
P6. Pedagogical University of Krakow	Poland	Daniel Wojcik	
P7 Cyprus Mathematical Society, Cyprus	Cyprus	Gregoris Makrides	