



Co-funded by the
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INNOMATH: Innovative enriching education processes for Mathematically Gifted Students in Europe

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

Implementation period: September 2019 – August 2021

**Training program for teachers or others interested
in the identification/ support/ enriching with practical skills of
mathematically gifted students
in the context of the INNOMATH project**

Template (*for the Methodology and Structure of a Learning Plan for Presenting a
Module for the INNOMATH course programme, module of 3 hours duration*).

Module Number and Area/ Topic: Module 5

Project Based Learning and Project work Methodology

**Introduction and Broad Description of the Context and Goal of the area/
topic addressed:**

Project Based Learning (PBL) and project work Methodology (PBL) are teaching methods in which students learn by actively engaging in real-world and personally meaningful projects. In Project Based Learning and project work Methodology teachers make learning come alive for students.

This module explains what are these two methods and why are so important for the students. At the same time, the module focuses on how does PBL differ from “doing a project”, seven essential project design elements and seven project based teaching practises. The objective of this

module is the teachers to feel confident and ready to use Project based Learning and Project work methodology at schools.

Learning Outcomes: With the completion of this module the trainees will be able to

1. Understand the definitions and the meanings of the Project Based Learning and Project work Methodology
2. Why to involve Project Based Learning and Project work Methodology at schools
3. The impact on students
4. Understand how to approach these methods.

Content and Resources (providing information on the various constituents/ dimensions of the topic under consideration):

The training includes a presentation on PowerPoint and some examples of Project based Learning ready for the teachers to use.

Methodology and approaches for the module training presentation:

The methodology for Project Based Learning is divided into three parts. The first part is an overview of the PBL. The definitions and the importance of PBL are given to the trainees. In the second part , trainees will see how does PBL differ from “doing a project”, seven essential project design elements and seven project based teaching practises. In the third part, some PBL ideas are provided to the trainees ready to use at schools.

Instruments/ Tools/ Supporting Material/ Resources to be used:

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1. PowerPoint Presentation on the Project based Learning and Project Work Methodology.
2. A quick quiz on the trainees in order to assess if they understand how does PBL differ from “doing a project”.
3. Presentation of some PBL ideas that teachers can use in their lessons.

Pedagogical/Learning Sequencing and Activities Plan:

Introductory activities (creation of interest, reference to real value issues, relation to background experiences etc)

Activity 1 - Introduction	
Development	At the beginning of this module the trainees will start with the definition of PBL.
Materials	PowerPoint presentation
Resources	Lecture slides
Estimated Time	5 min
Environment/Room Setting	Lecture room or ZOOM
Trainees' role	Listening, taking notes

Development activities

Activity 2 – Impact on students	
Development	Here the trainees will find out how PBL impacts on school students and what the students develop from PBL.
Materials	PowerPoint presentation,
Resources	Lecture slides-ppt presentation
Estimated Time	10 min
Environment/Room Setting	Lecture room or ZOOM
Trainees' role	Listening, taking notes, Answer the quiz
Activity 3 – Approach to PBL	
Development	Here the trainees will discover how to approach PBL at schools. The trainees will discover seven essential Project design elements and seven project based teaching practises for PBL.
Materials	PowerPoint presentation
Resources	Lecture slides-ppt presentation
Estimated Time	35 min
Environment/Room Setting	Lecture room or ZOOM
Trainees' role	Listening, taking notes, Thinking

Practicing Activities (hands-on activity)

Activity 4 - How does PBL differ from “doing a project”?	
Development	Here the trainees will discover the differences between PBL and “doing a project”.
Materials	PowerPoint presentation
Resources	Lecture slides-ppt presentation, Quick quiz
Estimated Time	10 min
Environment/Room Setting	Lecture room or ZOOM
Trainees' role	Listening, taking notes, Thinking, Answer the quiz

Activity 5 – Examples of PBL	
Development	Here the trainees will see real examples for how to use PBL at schools.
Materials	PowerPoint presentation

Resources	Lecture slides-ppt presentation
Estimated Time	25 min
Environment/Room Setting	Lecture room or ZOOM
Trainees' role	Listening, taking notes, Thinking

Evaluation of Learning Outcomes

Activity 5- Changing ideas	
Development	Discussion between trainees and trainers.
Materials	PowerPoint presentation
Resources	
Estimate Time	5 min
Environment/Room Setting	Lecture room or ZOOM
Trainees' role	Discussing, Changing ideas

Reflection and Closure activity:

The trainees will work in small groups to develop suggestions on how to implement Project Based Learning and Project work Methodology at schools.