

Version May 2020

O3 Electronic Guidebook of Methods and Tools for teacher facilitators

INNOMATH Guidebook Digital Portal (INNOMATH-GDP).

Introduction

How to use these Guidelines

PART A Definitions and Characteristics

- Introduction

- Definitions/characteristics of giftedness

- Set of definitions for gifted/talented school students

- Characteristics-Executive Functions of gifted students

- Tools for Identification and Motivation of gifted/talented school students

PART B – A collection of Good Practices and Methods used to support gifted/talented pupils in schools

Part B - Chapter 1: A collection of Mathematics Problems for gifted/talented school students (age under 14)

Part B – Chapter 2: A collection of Mathematics Problems for gifted/talented school students (age over 14)

Part B - Chapter 3: Projects and Applications

B3.1 Projects/Investigation and Applications related to other sciences(STEAME) and real life

B3.2 Projects/Investigation and applications related to gaming

B3.3 Projects/Investigation and applications related to industry/business

world/thematic/research institutes/authorities/organizations relating to real life issues

B3.4 Projects and applications related to cooperation with universities

Part B - Chapter 4: Competitions/Challenges and Communication activities

Part B - Chapter 5: Videos and Interactive Media related to giftedness

PART C – The Mathematics meets Industry in School model –Guidelines for implementation of a Mathematics Industry Day(MID)

The MID Day (BootCamp in Schools)

2.1 Definition and Glossary

2.2 Methodology, Requirements and guidelines for school teachers (the teacher as a mentor and co-creator)

2.3 Methodology, Requirements and guidelines for universities supporting MID days (the researcher as a mentor and facilitator)

2.4 Examples of MID days

- one from France,
- one from Romania,
- one from Cyprus,
- one from Poland,
- one from Germany)

2.5 Evaluation results, Dos and Donts

2.6 Why Industry should get involved, benefits for industry, suggestions for engaging industry

ANNEX: Teaching & Learning material that talented/gifted students may need for solving problems of Industry/Businesses

- Lesson/Learning Plans examples
- Research Project Methodology
- Survey development and analysis methods
- Basic Statistical methods for survey analysis
- Writing a report , presenting a report, graphics and communication

PART D - Communication channels

Google form link to provide submission of material by teachers and researchers

Google form link for Companies to submit problems for solution by gifted students

Space for publication of open problems/projects proposed by companies

Useful Links