



Enhancing Learning In Teaching via e-inquiries

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# Briefing Documents

on/for teacher training



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## WHAT IS ELITe?

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ELITE is a 3-year project co-funded by the Erasmus+ programme of the European Commission. The acronym stands for *Enhancing Learning In Teaching via e-inquiries*.

ELITE is concerned with supporting STEM teachers' **development of knowledge, skills and attitudes** so that they can effectively address their roles as **lifelong learners, facilitators of students' learning and members of educational communities**. The project adopts the **inquiry-based learning (IBL) methodology** in professional learning activities as a means to facilitate STEM teachers' inquiry and reflective practice.

ELITE aims to on the one hand **highlight the links between inquiry skills practicing and STEM teachers' competence development**, and on the other to **inform curriculum development** in STEM teachers' education.

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## OUTLINE

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### **Space for intervention for supporting STEM teachers' competence development**

#### Insights

The document provides insights on the space of intervention for supporting STEM teachers' professional learning for competence development in the educational contexts of Greece, the Netherlands, Bulgaria and Spain. Outlined are: systemic opportunities and challenges for supporting STEM teachers' professional learning for competence development in the countries; critical factors that affect STEM teachers' professional learning for competence development in the countries; recommendations for taking advantage of the opportunities, and addressing the challenges towards ensuring STEM teachers capacity building. The results aim to be a basis which education stakeholders can reflect on, and consider how to support more effectively STEM teachers' professional learning for competence development in the countries.

**Key concepts:** Requirements for STEM teachers' competence development in each of the national contexts of GR, NL, BG, ES; critical factors that affect STEM teachers' professional learning; Policy recommendations towards supporting STEM teachers' professional learning for competence development

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### **Supporting STEM teachers' professional learning for competence development**

#### Working with parents

This document reflects on the state of play on STEM teachers' competence development in four very different European countries – namely Greece, the Netherlands, Bulgaria and Spain – from the parents' perspective. The aim was to draft an ideal scenario and highlight areas to tackle on macro-, meso- and micro-systemic levels for development of STEM teaching, most of which not traditional, subject-specific areas, and to offer a starting point for training development on/for parental engagement.

**Key concepts:** Parental engagement & STEM teacher training; recommendations for STEM teacher training from the parents' perspective

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## **Evaluating the initiatives' impact on STEM teachers' competence development**

### Outcome indicators

This document introduces indicators (and sub-indicators) for evaluating the impact of initiatives on STEM teachers' competence development within the national framework of Greece, the Netherlands, Bulgaria and Spain. Both indicators and sub-indicators are based on EC (2013) framework for teachers' competence development. The document "Policy envisions and requirements for STEM teachers' competence development: the case of Greece, Netherlands, Bulgaria and Spain" provided the information relating each national context. Every sub-indicator is either relevant as national policy document and curricula for STEM teachers' training (explicitly), or as STEM students' curricula (implicitly).

**Key concepts:** Outcome indicators; STEM teachers' competence development

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## **STEM teachers' professional learning activities**

### Suggested thematic areas

This document outlines the ELITe project scenarios for STEM teachers' professional learning. A thematic map of the digital scenarios are provided, highlighting common issues and gaps in Greece, the Netherlands, Bulgaria and Spain within the framework of the teachers' professional development.

**Key concepts:** teachers/ trainers; thematic areas; digital scenarios; STEM teachers' professional development

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## **Guidelines for STEM teachers' inquiry and reflective practice**

### Key messages

The document conveys the *learning in teaching via e-inquiries* approach for STEM teachers' professional learning. It introduces the main elements of the approach, and outlines key messages for supporting STEM teachers' inquiry and reflective practice as emerged from the lessons learnt through the implementation of the approach in four national contexts – namely in Greece, the Netherlands, Bulgaria and Spain.

**Key concepts:** ELITE learning in teaching approach; guidelines; STEM teachers' professional development