

AESTIT Affordable & Efficient Science Teacher In-service Training

1. Objectives

The aim of the project is the development of an affordable, sustainable and efficient in service training scheme for the Science teacher. This scheme has two main axes: a. face-to-face training courses, and b. online training courses. The face-to-face courses focus on the learning of the recent theoretical paradigms on the Science teaching and the relevant supporting pedagogical principles. The e-learning system to be developed, will be used by Science teachers and specialised scientists in the area of Science Teaching. The focus of the project is on the promotion of the collaboration and cooperation between teachers, schools and institutions involved in the Science teaching and in Science Teaching education. The fundamental philosophy is that learning can be developed and enhanced through the sharing of knowledge and best field practice experience of different groups involved in such activities. A further objective is the establishment of a network of people including scientists, school-teachers and researchers to promote Science and Technology education.

2.1.2 CIT in Secondary Science Seminar

During the months of June 2006 to September 2006, 22 secondary science teachers (Physics, Chemistry, Biology and Environmental Science) participated in a series of weekly 4-hour Workshops on using ICT tools to enrich science teaching practice. The workshops covered the theoretical principles of constructionism and active collaborative learning as a framework for designing and enacting science teaching that is more authentic with respect to the nature of science and seeks to engage students in meaningful learning pathways. The Workshop also provided repeated opportunities for teachers to familiarize themselves with various ICT tools (modeling, simulation, , data logging, eLearning and communication environments) as well as to use these tools to design teaching and learning activities in various topics of the local school curriculum.