

Italian School as Associated Partners

Name of organisation	Type of institution	City
Junior High School "Istituto Comprensivo 15"	Public	Bologna
Junior High School "Istituto Comprensivo Gasparini"	Public	Novi (Modena)
High School "Istituto Comprensivo C. Bassi"	Public	Castel Bolognese (Ravenna)
High School "Istituto Comprensivo 3"	Public	Renazzo (Ferrara)



Formative Assessment in Mathematics for Teaching and Learning (FAMT&L)

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The project

Teaching and learning processes concerning mathematics and sciences are a fundamental component of school activities, preliminary to most of the competences that are significant in life and necessary for the citizenship education.

Nevertheless, despite researchers' and teachers' engagement, the crisis in mathematics learning is becoming very diffused and serious.

The main goal of this project consists in realising a training model (using e-learning) for middle school math teachers (that can be applied to in-service and pre-service training). This training model (or methodology) should improve teachers' competences:

- on educational planning and assessment (both formative and summative assessment; assessment for learning);
- on mathematics didactics.

This set of competences would allow teachers to apply and plan specific methodologies and tools for learning processes based on problem solving.

The training model is also aimed at making teachers acquire a scientific attitude consisting in:

- analysing complex educational situations;
- identifying student's learning needs, concerning mathematic discipline as well as transversal competencies (meta-competencies, learning strategies, study methods);
- making hypotheses and planning educational strategies and techniques in order to detect difficulties and offer remedies for an effective learning of math;
- using on-going assessment with a formative purpose in order to give to teachers the possibility to verify, rearrange and improve their methods and allowing students to self assess and become conscious of their own learning processes.

This training model will tend to make teachers protagonist of the educational planning path and more aware of the strategies that appear to be more effective responding to student's learning needs. It also promotes the construction of a reflexive professionalism where teacher becomes able to use the reflexive thinking for facing complicated and problematic educational situation.