

This project aims to support primary schools in socially disadvantaged areas in using the dynamic approach to school improvement (DASI) to promote both quality and equity in education.



## Background and Aims

- International evaluation studies reveal that in Europe approximately 20% of children are not equipped with the basic skills in mathematics and that the great majority of them can be found in socially disadvantaged areas.
- The PROMQE project establishes links between theory, research and practice and supports primary schools in socially disadvantaged areas to help them become more effective.
- Through PROMQE, schools in four European countries are trained to use DASI and develop, implement and evaluate school-based policies and action plans which promote not only student achievement gains in mathematics (quality) but also reduce the impact that the socioeconomic status (SES) can have on student achievement (equity).
- The improvement efforts target the schools' policy for teaching and the schools' learning environment (SLE), two factors that have been found to be associated with student learning outcomes.
- An advisory and research team supports schools to help them identify their priorities of improvement and develop strategies and action plans that consider the knowledge-base of educational effectiveness research and each school's specific context and challenges.

## Methods

- A sample of 72 primary schools in four European countries (i.e., Cyprus, England, Greece, and Ireland) was selected at the beginning of the school year 2015-2016. The school sample was randomly split into the experimental and the control group.
- Data on achievement in mathematics of all grades 4, 5 and 6 students (n=5560) of the school sample were collected at the beginning and at the end of the school year. Student background information was also measured.
- At the beginning and at the end of the school year we evaluated the policy and actions taken to improve teaching and the SLE in each school.
- Both groups were asked to develop school improvement strategies and action plans.
  - The experimental group received support to use DASI. A handbook for designing improvement strategies and action plans for promoting quality and equity was provided.
  - The research team provided feedback to the control group about the results that emerged from the pre-measure however, school stakeholders were asked to develop their own strategies and action plans without making use of DASI.
- Across and within countries multilevel analyses of mathematics achievement were used to examine the effect of DASI on promoting quality and equity in education.

## Results and Implications

- The intervention had a positive impact on both quality and equity in all countries participating in the project.
- In each country, students' progress in mathematics achievement in the schools that used DASI, was greater than students' progress in the schools which didn't use the dynamic approach.
- The overall effect of the intervention on the quality dimension in the four participating countries was statistically significant and relatively high (d=0.31).
- The intervention also contributed in improving the equity dimension in all countries participating in the project, by reducing the impact of SES on student achievement in mathematics.

By using DASI not only student learning outcomes can be promoted but also learning differences among students coming from different socioeconomic backgrounds can be reduced.

This project reveals the importance of utilising *theory-driven* and *evidence-based* approaches to school improvement for promoting quality and equity in education.

