

## TEACHERS' PROFESSIONAL DEVELOPMENT AND MATHEMATICS LSA: FIRST RESULT OF NATIONAL PROJECT

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Our study is part of the broad epistemological and didactic debate about how to integrate the results, methods, theoretical frameworks, and findings of large-scale tests into the actions of teachers and the wider context of educational institutions. Large-scale assessments (LSA) becoming the subject of several research in mathematics education (Suurtamm et al., 2016). In Italy, the National Institute for the Evaluation of the Education and Training System (INVALSI) is a public research institution, part of the National Evaluation of the Education and Training System (SNV), that promotes the improvement of educational levels through the deployment of tools to measure the students' learning outcomes and skills, and through the quality assessment of schools. Macro phenomena highlighted in these surveys can provide useful information and become interpretative tools of some aspects of the mathematics teaching-learning processes specific to the Italian context (e.g. Ferretti & Bolondi, 2019). Our study shows outcomes of the National Research Project "Mathematics standardized assessment as a tool for teachers' professional development", which aims to develop theoretical and operative tools for exploiting the results of the mathematics national assessment tests with respect to teachers professional development. The main expected outcome is the development of models for pre-service and in-service mathematics teachers, based on an effective and conscious use of standardized assessments. In particular, a model for the professional development of in-service and pre-service teachers is outlined. Qualitative and quantitative analyses will lead to an increasingly fine-tuned delineation of the model, which will be implemented in numerous in-service teacher professional development courses and degree courses for pre-service teachers. This national project is financed by European Union and Italian Ministry of Education and University (PRIN 2022 - research projects of significant national interest).

### References

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