The MENTEP policy experimentation - Research method & results at a glance

The starting point

Two-thirds of teachers in the European Union learn about ICT in their own time, and almost all are positive about the impact of ICT on students, according to the Survey in schools: ICT and education (2013). However, despite this readiness, many teachers in Europe still lack of competence in using ICT in their teaching and use it only to a small extent in their classrooms. That is why sixteen partners from 11 countries co-designed a self-assessment tool to help teachers develop that competence.

The Research Institute for the Evaluation of Public Policies (FBK-IRVAPP) carried out a counterfactual impact evaluation of the newly developed technology enhanced self-assessment tool (TET-SAT) for teachers.

The Evaluation question

What is the impact of the Technology-Enhanced Teaching Self-Assessment Tool (TET-SAT) on teachers’ TET competences?

The field trials

Target population: Teachers at lower secondary education level from 11 countries (Cyprus, Czech Republic, Estonia, Finland, France, Greece, Italy, Lithuania, Portugal, Slovenia and Spain).

Sampling: Two stages: schools, then teachers

1. First, a representative sample of all eligible schools was drawn in each country. 496 schools participated in MENTEP.

2. Teachers in these schools received an invitation to complete a Benchmark Survey at the beginning of the experimentation. They comprise the teacher sample (N=6391).

The experimentation: The sample of schools was then split into test and control groups. Only the teachers from the school of the test group were invited to use the TET-SAT. At the end of the experimentation teachers from both groups were invited to fill in a Follow-up Survey.

TET-SAT is an online tool developed in the MENTEP project for teachers to self-assess their technology-enhanced teaching (TET) competence. Personalised feedback is provided on their competence levels in four areas and they are directed towards national and European training resources to further develop their TET competence.
Methodology and results at a glance

How was the impact identified?
The impact of the TET-SAT on teachers' competences was identified by comparing the Follow-up Survey results for test and control groups. The Benchmark Survey was used to check if both groups were statistically comparable (counterfactual approach).

What was the starting digital competence level of teachers?
The sampled teachers participating in the Benchmark Survey showed a good familiarity with ICT, self-assessed their TET ability as very high and had very positive views about ICT in teaching & learning.

What did teachers think of the TET-SAT?
Teachers who made use of the TET-SAT clearly appreciated it and rated its features and content 7.5 points on a scale from 1 (low) to 10 (high).

A high proportion of teachers considered that:
- The tool was easy to use (75%)
- The feedback page was useful to assess their competences (69%)
- The TET-SAT helped them to assess their competence (64%)
- The TET-SAT helped them to re-think the use of ICT in teaching (62%)

The Benchmark Survey asked teachers to assess their TET competences and collected information on their views on ICT and educational and professional experience. The Follow-up Survey asked teachers to re-assess their TET competences (the outcome variable).

Each of the items was evaluated separately: graphic interface, online access, organisation, feedback page, usability, language, content overall and the four areas, and national and EU training resources.

The use of the tool was completely voluntarily. 34% (N=940) of the test group used the TET-SAT.

30% of teachers, who did not use the tool, mentioned time constraints as a main reason for not using it.
The probability of using the TET-SAT can be established according to two teacher profiles:

**TEACHER A**
- teaching a scientific subject
- with a teaching workload of 12 h/week
- with many ICT devices at home
- with positive views on ICT
- who is highly collaborative
- who followed training in ICT
- who has a high level of self-assessed ICT ability

has a probability of using the TET-SAT of 50%.

**TEACHER B**
- teaching a humanities subject
- with a teaching workload of 18 h/week
- with no ICT devices at home
- with negative views on ICT
- who is less collaborative
- who did no training in ICT for teaching
- who has a low level of self-assessed ICT ability

has a probability of using the TET-SAT of 15%.

What is the impact of the TET-SAT?

**Teachers clearly made use of the feedback from the TET-SAT**

The feedback provided by the TET-SAT confirmed in most cases teachers’ initial assessment as assessed in the Benchmark Survey of their competence. Around one in four teachers over-estimated their competence.

**28% OF TEACHERS**
received from the TET-SAT a lower level than the self assessed level indicated in the Benchmark Survey.

**64% OF TEACHERS**
received from the TET-SAT the same level as the self assessed level in the Benchmark Survey.

**8% OF TEACHERS**
received from the TET-SAT a higher level than the self assessed level indicated in the Benchmark Survey.

The experimentation captured short-term effects of the use of TET-SAT and evaluates impact on self-assessed ICT ability and views. Future research should look into medium-term effects (uptake of training) and long-term effects (changes in teaching practices).
The impact evaluation results show that using TET-SAT leads teachers to develop more informed and critical assessments of their TET competence.

After using the TET-SAT, teachers tend to have a more critical perception of their level of TET competences. Their self-assessed ICT ability decreases (especially among older teachers and women).

Moreover, teachers who used the TET-SAT showed more critical views on ICT in teaching and learning, especially those who started with a very high self-assessed TET competence.

A detailed report on the research results will be available in May 2018:
http://mentep.eun.org/