

European Testing Conference on Common European Principles for the competences and qualifications of teachers

Hannele NIEMI, Vice-Rector, University of Helsinki

Evidence-based teacher education - investment for the future

Introduction

Evidence-based teacher education means that teacher education has an active and intensive relationship with research work in different disciplines needed a teacher's work. It also provides the important knowledge-base for a teacher's professional work. This means that teachers are familiar with the most recent research work in their subject matter and in pedagogy, and they have a critical scientific literacy. Furthermore, they can integrate academic research-based knowledge with their own professional behaviour in a reflective way.

Why evidence-based teacher education? - Ideas behind the principle

Teacher education should prepare teachers to respond to the evolving challenges of the knowledge society. Teachers should be able to reflect on the processes of learning and teaching through an ongoing engagement with the most recent knowledge of subject matter, curriculum content and pedagogy, as well as with the social and cultural dimensions of education. And they should make decisions to improve education for different learners.

Evidence-based teacher education means that teachers are active knowledge acquirers and producers. There is no repertoire of specific skills or packages of knowledge which would be valid throughout a teacher's professional career or which would be transferable to changing circumstances and various contexts. Therefore, teachers should have a solid basis of knowledge in different disciplines needed in their work, and, in addition, they should have their own experiences of knowledge creation.

Research work or research-oriented work can provide a basis for teachers' concepts of knowledge and learning, and help them to internalise the principles of active learning and knowledge construction. Teacher education should provide teachers with competences to analyse situations as researchers and to make decisions and reach conclusions to act or to change something in a specific situation. This means that the teacher should develop a critical mind and the ability to reflect.

Teacher education is multidisciplinary and it comprises many components: (1) knowledge of the subject matter; (2) knowledge of pedagogy; (3) the skills and competences required to guide and support learners; and (4) an understanding of the social and cultural dimensions of education, which allows them to respond to the needs of individual learners in an inclusive way. In evidence-based teacher education, teachers would have solid, scientifically-based knowledge as the foundation of their profession, and they would have the capacity to expand and deepen their professional wisdom through their own observations in their professional practice and through critical reflection.

c) How the principle addresses the issues –What does evidence-based teacher education mean?

Teacher education must be a part of the European Higher Education Area and its status should be equivalent to other higher education studies. The principal requirement is that it fulfils high-level academic standards in the quality of research and teaching.

→ Evidence-based teacher education provides tools to use research as a means to improve teaching and learning opportunities:

Subject-content knowledge and pedagogical-content knowledge

Teachers need a profound knowledge of the most recent advances in research in the subjects they teach. In addition, they should be familiar with the latest research on how something can be taught and learnt. Interdisciplinary research on subject-content knowledge and pedagogical-content knowledge provides the foundation for developing teaching methods that can be adapted to support different learners and prevent exclusion.

Critical scientific literacy

Teachers need an understanding of how knowledge is constructed and of what kinds of knowledge can be trusted. They should also teach critical scientific literacy to their pupils in schools.

Research methods

Evidence-based teacher education means that teachers would develop the ability to use research methods or other systematic methods to acquire information from phenomena in educational settings. They need different approaches to understand why some students have high learning outcomes and others do not. Student teachers should become familiar with qualitative as well as quantitative research traditions. The aim of these studies is to train students to find and analyse problems they expect to face in their future work.

Authentic projects

Research studies provide students with an opportunity to complete an authentic project in which they must formulate a problem in an educational field, be able to search independently for information and data related to the problem, elaborate on the problem in the context of recent research in the area, and synthesise the results in the form of a written thesis.

Evaluation and reflection

Research studies in teacher education prepare teachers to use systematic data gathering to evaluate the effectiveness of teaching and schooling. Student teachers should also learn to reflect on the results of their research and make decisions on how to improve teaching.

→ Research-oriented attitude and continuous learning in the teaching profession

Teachers are working in conditions in which continuous change, cultural dispersion, and increasing diversities in all areas of life are typical features. The structures of families and working life have undergone a huge process of change. The changes in economic life, societal structures, production, and information technologies have an influence on schools and on pupils' lives.

The aim is for teachers to internalise a research-orientated attitude towards their work. This means that teachers learn to take an analytical and open-minded approach to their work and are ready to learn new methods for their professional practise. The aim is to enable them to see their profession as an intellectually, socially and morally challenging career.

All teachers should have the opportunity to continue post-graduate studies to the highest level in order to develop their teaching competences and to increase their opportunities for promotion within the profession.

➔ **Teacher education in itself should also be an object of study and research.**

This research should provide knowledge about the effectiveness and quality of teacher education implemented by various means and in different cultural contexts. Developing teacher education requires evidence-based knowledge about the teachers' own learning processes in different stages of their career. A teacher's work is also changing and we need more research on teachers' new roles in different social and technological environments.

➔ **We need to increase teachers' status in society and among other professions**

The teaching profession should provide an inspiring career which will attract talented candidates. A basic condition is the adoption of high entrance requirements for teacher education and for the teaching profession. The higher the requirements are, the more attractive the profession will be. In the long run, a lack of teachers can never be remedied by lowering standards. Teacher education needs a clear connection with the European Higher Education Area, and a research component as its essential part is an investment for the future.

Possible discussion questions

Is the principle of evidence-based teacher education important enough to be emphasised in the Common European Principles for the competences and qualifications of teachers?

Should it be kept as one of the main principles?

If yes, can the text describing it be improved?

If not, why not? Does the principle need to be replaced with something else?

Is the evidence-based teacher education principle visible throughout the paper, and reflected in the competences and recommendations?

To what extent will an acceptance of the proposed recommendations help to ensure that the principle is embedded in policy developments?