

Thematic Issue Based on the Results of the International Conference “Innovation in Learning Instruction and Teacher Education”

Editorial for Thematic Issue

[Martin Hayden](#), [Hoang Hai Ha](#)

Dear Readers,

This special issue aims at providing new approaches to *competency-based teacher education, seen from the perspective of international experience*.

Globalization and the fourth industrial revolution (Industry 4.0) have raised the requirement for more significant consideration of issues of competency-based learning and high-quality teaching and learning in universities of pedagogical higher education. In this context, teachers and educators play a crucial part in promoting students' life skills, creative abilities, and ability to perform practical skills. Inspired by the development and advancement of information and communication technology, together with digital technology, teacher education and training are undergoing significant changes with the focus on practice-based education, teachers' and teacher educators' professional knowledge, and ICT integration.

The 1st International Conference on “Innovation in Learning Instruction and Teacher Education”, co-organized by Hanoi National University of Education (HNUe, Vietnam) and Southern Cross University (SCU, Australia), took place in Hanoi in December 2019. The Conference received generous support from The World Bank, Enhancing Teacher Education Program, Vietnam's Ministry of Education and Training, the National Foundation for Science & Technology Development (NAFOSTED), Educational Studies Moscow and Jurnal Penelitian dan Pembelajaran IPA.

The Conference theme was *competency-based learning and teacher education*. This theme is highly topical in Vietnam because of a recent directive from the Ministry of Education and Training that teacher education training programs in Vietnam should pay more attention to developing pedagogical competencies for application in classrooms. This directive has prompted widespread discussion within teacher education institutions. How should it be interpreted? How should it be

Translated
from Russian by
I. Zhuchkova.

applied? While the Ministry wishes to see more attention given to the development of competencies within the general education school curriculum, a point made by Professor Nan Bahr, a keynote speaker from Southern Cross University, is that quality in teacher education may be represented as follows: $Quality = (competencies + productive behaviors) \times personal\ attributes$. In other words, being competent in pedagogical skills is only part of what entrants to the teaching profession need. At least as important is experience in translating those competencies into productive behaviors, and then consideration must be given to the many personal attributes required to be an effective teacher.

The conference provided a forum for researchers, academics, professionals, experts in educational science, and educators from 10 countries (Australia, Belgium, USA, Taiwan, Singapore, Germany, France, Spain, Indonesia and Vietnam) to share their theoretical knowledge, research findings and educational practices with their colleagues. The Conference's international scientific committee dedicated an enormous amount of time and effort in patiently reviewing and editing the conference papers, as well as in building the conference agenda. At least two reviewers with relevant expertise reviewed any full articles submitted for the conference. Accepted papers were organized into thematic sessions or roundtable discussions. The conference featured 12 oral sessions, ten invited presentations/papers, 200 abstracts and a Roundtable. The conference showed how educators contribute positively to human resource development to keep pace with the constantly changing aspects of life and, in so doing, meet the needs of the community.

The conference papers addressed a wide range of issues concerning competency-based education. Some papers discussed the nature of competency-based education. Others addressed the implications of an increased emphasis on a competency-based model in specific disciplinary settings. Some papers looked at questions of competency at different levels within the education system, while others explore competency within the curriculum of teacher training programs. In general, there was agreement that educators, whether in schools or teacher training universities, now face many professional challenges in determining how best to integrate a focus on competencies in the curriculum.

The six papers included in this issue of the journal are eclectic in their focus and interests. Indeed, it is their diversity that contributed to their attractiveness for inclusion in the Journal.

Vietnamese scholars wrote two of the papers. The first of these focuses on lecturer professional development at a provincial university in Vietnam. Of interest here is the perceived importance of on-site professional development opportunities provided for members of academic staff. The investigation provides insights that might well inform

future policy and practice in Vietnam’s higher education sector in the context of ongoing educational reform.

The second focuses on teacher professional development, in this case regarding the use of in-service education to impact attitudes to STEM (Science, Technology, Engineering, and Mathematics) education. Results from this investigation pointed to the value of particular aspects of offline forms of learning to the development of a positive outlook on STEM education. The authors argue that teachers and the methodologies they employ play an important role in promoting STEM education, thereby assisting young people to become better prepared for a labor market in which STEM skills will be more valuable than ever.

In recent years, STEM education has expanded rapidly in many Asian countries. The first of the papers from beyond Vietnam comes from Taiwan. It also addressed the theme of teacher professional development in the context of STEM education. The authors developed STEM material and modules to support teachers and students to engage in hands-on, inquiry activities, while learning multidisciplinary contents of physics, chemistry, biology, mathematics, electronics, and programming. The results throw light on strengths and weaknesses in the design and delivery of teacher professional development programs in the STEM area.

The paper from Belgium reports on the flipped classroom as an instructional model, with the focus on its long-term effects for learners and teachers. The author conducted surveys in seven European settings, including Belgium, Italy, Bulgaria, Slovenia, Poland and the Netherlands, regarding students’ and teachers’ perceptions of the implementation of the flipped classroom model in their teaching. The participants also reported on the challenges of integrating technology in their classrooms. Based on the survey results, recommendations for increasing the chances of a successful implementation of the flipped classroom model were raised and then tested during flipped classroom training activity involving Belgian and Vietnamese teacher education institutions.

Another paper comes from France, where an ambitious international program of teacher professional development concerning the use of blended learning is underway. In this paper, the focus is on reporting the experiences of Pakistani teacher-educators who participated in an award program entitled “Blended Learning Training for Teachers Educators between Europe and Asia” (BLTeae) supported by the European Commission’s ERASMUS+ program in 2016. This paper reports on the professional development of teacher educators across European and Asian regions in an era of digital ecosystems. The researchers created a transcultural and international ‘community of practice’, supported by online resources, the sharing of videos, and the use of online forum and small-group face-to-face discussions.

The paper from Germany reports on an innovative approach to guiding students through the process of reflecting deeply on issues

related to sustainable development. It defines the appropriate competencies that should be initiated among pupils in the context of education for sustainable development (ESD). These are said to include systems thinking, assessment and action competences. The authors developed online learning arrangements (referred to as 'reflectories') as an instrument for promoting these competencies.

To conclude, the collection of papers in this issue of the journal reflect the richness and variety of the scholarly inputs to the conference. It was a conference that lived up to expectations of a focus on innovation in learning and teacher education. To make this special issue a reality, we would like to thank all authors, the Editorial Board, and the anonymous reviewers. We are especially grateful to Ms Julia Belavina, the Executive Editor of *Voprosy obrazovaniya / Educational Studies Moscow* for her patience and enthusiastic support.

Martin Hayden, PhD, Professor of Higher Education, School of Education, Southern Cross University, Australia.
Email: martin.hayden@scu.edu.au

Hoang Hai Ha, PhD, Associate Professor, Hanoi National University of Education, Vietnam. Email: hahh@hnue.edu.vn