

Vlasta Vizek Vidović
Faculty of Philosophy
University of Zagreb
I. Lucica 3, 10 000 Zagreb
Croatia
e-mail: vvizek@ffzg.hr

Professor of educational psychology at the University of Zagreb. Member of the Board of *The Centre of the development and research of education* in Zagreb, as well as the Croatian non-governmental organizations Step by step and Forum for the Freedom of Education. Research interests lie in the field of teacher education, achievement motivation in educational settings, management and quality assurance in higher education. Coordinator of the several EU Tempus projects related to the university management and implementation of the Bologna process in higher education.

Vlatka Domović
Faculty of Teacher Education
University of Zagreb
Savska 77, 10 000 Zagreb
Croatia
e-mail: vlatka.domovic@ufzg.hr

Current position: associate professor; vice – dean for science and international cooperation of the Faculty of Teacher Education, University of Zagreb; vice – president of Croatian Academy of Educational Sciences (Akademija odgojnih znanosti – AOZ), member of the Board of Directors of International Step by Step Association; president of Scientific Committee of the Centre for Education Research and Development; member of the Board of Step by Step Croatia. Research interests: teacher education and training, educational administration, multicultural/intercultural education, comparative education, school effectiveness, and vocational education and training.

Researching teacher education and teacher practice: Croatian perspective

Summary:

The aim of the paper is to outline the current developments in teacher education research in Croatia with the emphasis on the changes introduced by the implementation of Bologna process. Two aspects of teacher education research: research on and research in teacher education are explored using phenomenological approach. Research on teacher education has been grouped in three categories: policy oriented research, curriculum development and

Bologna process monitoring studies, small - scale research conducted in specific settings such as university classrooms and practicing schools. Research in teacher education has been divided into four categories: research related to subject content knowledge, research related to educational sciences, interdisciplinary research connecting subject content knowledge and pedagogical knowledge (teaching methodologies), and evaluation research. For each category a short description of the state of art as well as the outlines of its strengths and weaknesses are given. In conclusion general recommendations for the strengthening of the area of teacher education research are offered.

Key words: teacher education, evidence – based teacher education, research on teacher education, research in teacher education, Bologna process

1.Introduction

The discussions of why, how, who and for whom to do research in teacher education dominate the educational sciences last decade with wide polarization of views. The critics raise issues at several levels. One is related to the general approach in the field which seems to consist of non-cumulative research data. Others point out problems with the external validity of the data and their limited possibility to generalize from one context to another. Another set of issues are related to teachers' or policy maker' motivation to apply new knowledge or to perceive it as useful. Still others point out that the main problem lies in the ineffective communication of research findings to the wider public (Brusling, 2005). Such serious critical arguments might give an impression that this line of research is at dead end carrying the danger of being at least temporarily abandoned. But in spite of controversies it seems that the evidence-based approach to teacher education and its importance for the effectiveness of teaching and learning has come into focus of wider public from policy makers at the highest level to school authorities and school practitioners. This topic has become the central theme of several conferences at the EU level leading to the conclusion that not only researchers should expand their study of teaching and teacher education but that research competences should also become the standard component of teachers' toolkit (Niemi, 2005). At this moment we can only speculate what was „the tipping

point“ (Gladwell, 2006) which helped to bridge the gap between the theory, research and practice. Perhaps, it was the use of new concepts describing desirable social goals such as „knowledge society“, „learning society“, or „life-long learning for all“. The concepts from economy such as cost benefit analysis, accountability, quality management also took hold into education, especially at the level of higher education. This line of thought supported the establishment of generally recognized quality indicators in education as well as gave rise to the series of international comparative studies on the effectiveness of the education in terms of learning outcomes. The contribution to the strengthening of the research in teacher education might have also come from the implementation of such practices as benchmarking of teacher education and teacher practices between educational systems or analyzing experiences from other fields. Actually the notion of evidence based practice has been derived from comparison with the medical practice (Brussling, 2005). We might still add a lot of items to our list of hypothetical factors which contributed to the recognition of the importance of research in and on teacher education what in itself might become a new interesting research topic.

But in this paper our main interest lies in the examination of different aspects of research related to teacher education in Croatia. Our aim is to investigate whether the current process of transformation of teacher education supports the relevant research which might provide the more solid base for long term planning, decision making as well as for the immediate improvement of school practice.

In this presentation we will focus on outlining the major research trends in Croatian teacher education with some illustrations in each research stream and will also try to propose a categorical framework for the future in- depth analysis of the field.

2. Domains in teacher education research

The teacher education research usually falls in two broad categories labeled as “research on teacher education and teaching practice” and “research in teacher education and teacher practice”.

Research on teacher education can be further categorized according to the different criteria.

One of them is the use of research results at three levels:

- a) at the macro level for defining policy and supporting decision making;
- b) at the intermediate level for curriculum development of pre-service and in-service teacher education;
- c) at the micro level for practice evaluation purposes conducted in specific settings such as university classrooms, practicing schools, etc.

Second criteria could be the orientation towards outcomes/products or processes. Research orientation also defines methodological approaches – qualitative or quantitative methods and sources used.

Research in teacher education and teacher practice consists of several aspects:

- a) Research related to the subject content knowledge – meaning that teachers should understand how knowledge is generated in their specific academic disciplines and also should have the knowledge of most recent research results in research in subjects they teach. They should develop critical scientific literacy and they should be able to teach their students how to critically read and evaluate scientific data.
- b) Research related to the educational sciences – meaning that teachers should be able to understand and participate in research related to different variables in educational contexts.
- c) Interdisciplinary research connecting subject content knowledge and pedagogical knowledge (teaching methodologies).
- d) Evaluation research – meaning that teacher education should prepare teachers in using research methodology to evaluate the effectiveness of their teaching. It also means that teachers should learn how to interpret the obtain data, how to communicate and how to make evidence based decisions.
- e) Research – oriented attitude and value of lifelong learning - meaning that teacher education should support teachers in development of new aspects of their professional role. They should perceive themselves as agents of change in changing society being analytical, open to new experiences, innovative and committed to lifelong learning.

3. Research on teacher education

a) Policy oriented research

Recently Croatian educational system has changed at all levels including also teacher education system. Bologna process has profoundly transformed initial teacher education affecting also the in-service teacher education. It should be noted that the changes in initial teacher education have also started from within, due to the internally recognized needs for improvement. Policy oriented research had an important role in those developments. That kind of research is relatively new in our educational tradition and the support of international programs, experts and funds (EU - CARDS, World bank, OECD, OSI, etc.) had an important role in initiating such studies. Some of these programs also supported the institutional capacity building, such as the *Center for research and development in education* in Zagreb. The Center started its first larger scale educational policy oriented research program in 2003 with a set of interrelated research projects in curriculum development, teacher education, external evaluation of educational outcomes, and structural aspects of school system. As an illustration of above mentioned projects can serve a large scale study *Development of a model of teacher lifelong education*, carried out from 2001 to 2006. (Vizek Vidović, 2005). This study combines multiple sources and multiple methods approach in examining Croatian teacher education within EU context. The methodology used consisted of content analysis of relevant national and international documents, analysis of existing statistical data combining with large scales surveys of student teachers, practicing teachers and university teachers. Based on the results of this study the general recommendations for the development of initial and in-service teacher education model were proposed.

Some of the research projects on national teacher education system, supported by the Ministry of science, education and sport and by international institutions and grants, were also carried out at the universities. The projects *Programme for acquisition of educational competencies of subject teachers* (Domović, 2005) and *Structure of lifelong teacher education* (Radeka, 2007–2010) fall into that category.

Furthermore, some studies were initiated by the Ministry itself, such as *Teacher Education in Croatia and Other European Countries* (Domović and Oldroyd, 2005).

b) Curriculum development and Bologna process monitoring studies

Implementation of Bologna process had a special significance for initial teacher education for various reasons. First, the education of prospective primary teachers has been upgraded from vocational college to the university level. So, the duration of education of all school teachers (classroom and subject, primary and secondary level) has been equalized with other university programs leading to the MA degree. Moreover, the third cycle (Ph.D. program) has been opened for primary teachers which did not exist before. Those structural changes were accompanied by the new requirements for teacher educators and for curriculum development. Structural changes were also introduced in the education of prospective secondary school teachers. All teacher faculties educating secondary school teachers adopted two cycle model and in some cases simultaneous model has been replaced by consecutive one. The implementation of these changes was facilitated by the participation of Croatian experts in EU projects supporting and monitoring Bologna process. These projects also had strong research component providing indicators for comparisons and benchmarking.

Examples of such EU projects in which Croatian representatives participate is *The Tuning Education Structures in Europe-phase III: Validation, Dissemination and Further Development and phase IV Curricular Reform Taking Place: Learning outcomes and competences in Higher Education (Education group)*.

Some of the projects in this category were aimed at regional cooperation, such as: *Improving of teaching quality in South Eastern Europe, Enhancing professional development of education practitioners and teaching/learning practices in SEE countries, Tuning Teacher Education Curricula in the Western Balkan, and Regional Tuning – Towards the European Higher Education Area* in which Croatian experts have been participating.

Special projects were also developed aimed at curriculum development at teacher education at specific fields. Croatian experts were mostly engaged in the projects related to the foreign language teacher education (for example: *Tempus project -Foreign languages at primary level: training of teachers*).

There are also projects which are oriented towards curriculum development of in – service teacher education and training. These projects can be categorized as need assessment screening. Recently, national agencies (Education and Training Agency and Vocational training agency) which are responsible for in – service teacher training have begun systematically collecting evidence to support their strategic planning in this area.

c) Small - scale research conducted in specific settings such as university classrooms, practicing schools

Such research has relatively long tradition in Croatia and the results of these studies are usually published in several specialized Croatian journals, such as: *Metodika, Odgojne znanosti, Napredak, Metodički ogledi, Strani jezici*, etc. At this moment it is difficult to categorize them by topics because there are no systematic bibliographies or meta-analysis in the field. Regarding research methodology, inspection of several volumes revealed the use of both qualitative and quantitative methodology. In that respect it can be observed that the most advanced research methodology, including experimental designs, has been used in the research of teaching foreign languages.

4. Research in teacher education

a) Research related to subject content knowledge

In Croatia, as well as in some other countries (Buchberger, Campos, Kallos, and Stephenson, 2000) there was a long tradition of dichotomy in education of primary (classroom) and subject teachers (upper primary and secondary). Subject teachers were practically always educated at universities meaning that their study programs always had strong component of research methodology in their specific subject/academic discipline and the requirements for their educators combined both teaching and research competencies. On the other hand, until 2005 classroom teachers were educated at teachers colleges which offered tertiary vocational degrees. In other words, classroom teacher education was more oriented toward acquisition of practical skills and their educators were not obliged to participate in scientific projects and

research. Since 2005 when classroom teacher education was upgraded to university level the research component of the respective academic field has been introduced in the curriculum.

b) Research related to educational sciences

In comparison to the research in subject content knowledge the position of educational sciences research in teacher education was almost reverse. In education of subject teachers the dominance of academic disciplines was so strong that very little room was left for the teaching of educational sciences and teaching methodologies (between 7% – 10 % of total study time) (Vizek Vidović and Vlahović Štetić, 2003). So paradoxically, at the institutions where the educational scientists were doing educational research in disciplines such as psychology, pedagogy, sociology, their results were rarely communicated to the prospective teachers. Bologna process has offered a new chance for integrating educational sciences and research into new curricula for prospective subject teachers. In developing new curricula, the general recommendation has been formulated stating that the scope of these topics should be increased up to 20 percent and more. Approximately, in the half of the programs for subject teachers these recommendations have been taken into account.

Regarding education of future primary teachers, traditionally more space in curriculum was devoted to the educational sciences and teaching methodologies (between 40 to 60 percent). This ratio has been kept in new Bologna programs, offering also opportunities for developing the entirely new courses in research methodology.

It should be emphasized that these structural changes in initial teacher education have opened the whole new range of possibilities for advancement of educational research by establishing the third cycle of studies – doctoral studies and master specializations.

c) Interdisciplinary research connecting subject content knowledge and pedagogical knowledge (teaching methodologies)

This field of research is still underdeveloped and consequently underrepresented in curriculum. It should be noticed that interdisciplinarity in teaching and research is missing in general, partially due to lack of structural support. Until recently the categorization of

scientific fields, system of research funding and system of academic advancement did not support interdisciplinarity neither in teaching nor in research. The proposal of the new act of scientific fields developed by National scientific council opens the possibility to establish interdisciplinary scientific fields. It might be expected that in the future this will enhance the development of interdisciplinary research in the field of teacher education.

d) Evaluation research

This aspect of research in teacher education (also action research, reflections on school practice, etc.) has been recently introduced into the courses of teaching methodologies or school practice, especially in the fields of foreign language and Croatian language teaching. It should be pointed out that previously the practicing teachers were acquainted with those topics mostly through the in-service training, especially when it was provided in cooperation with foreign experts.

Conclusions and recommendations:

Regarding research in and on teacher education in Croatia it can be concluded that it is still rather underdeveloped. On the other hand it can be also observed that recently the general level of awareness of different stake holders about the importance of this kind of research has been significantly raised. The structural changes introduced by the implementation of Bologna process created framework for more intensive developments in this field.

The key factors which should be taken into account regarding enhancement of teacher education research are as follows:

1. It is necessary to invest in capacity building for teacher education research at the institutional level. The efforts should be directed towards the development of institutional infrastructure within and outside of universities. It means that the empowerment of existing as well as establishment of new research units is necessary.
2. Special attention should be paid to the development of research potential among teacher students at all levels with emphasis on doctoral students. The important mechanism to

achieve this goal is the academic mobility of students and university teachers. In that respect, the capacity building is also needed for student teacher educators, specifically for mentoring and supervising student projects and thesis.

3. The financial instruments should be provided in order to support interdisciplinary research and networking of expert groups at national and international level.
4. In order to foster the high level attainments in teacher education research the concepts of research quality assurance and research benchmarking should be widely introduced and applied across teacher education.

References:

1. Brusling, Ch. (2005). Evidence – based practice in teaching and teacher education. <http://www.samford.edu/ctls/evidencebasedpracticeinteachingcb.pdf>
2. Buchberger, F., Campos, B. P., Kallos, D. i Stephenson, J. (eds.) (2000). Green Paper on Teacher Education in Europe. http://www.see-educoop.net/education_in/pdf/green_book-oth-enl-t02.pdf
3. Domović, V. (2006). Profesionalne kompetencije studenata nastavnčkih fakulteta i predmetnih nastavnika. *Metodika*, 12, 43 – 52.
4. Domović, V. and Oldroyd, D. (2005). Teacher Education in Croatia and Other European Countries. Report for the Ministry of Science, Education and Sports. 65 p.
5. Gladwell., M. (2000). *The Tipping Point: How Little Things Can Make a Big Difference*. USA: Little Brown
6. Niemi, H. (2005). Evidence – based teacher education – investment for the future. http://ec.europa.eu/education/policies/2010/doc/testingconf/niemi_en.pdf
7. Vizek Vidović, V. (ed).(2005). *Cjeloživotno obrazovanje učitelja i nastavnika: višestruke perspektive*. Zagreb:Institut za društvena istraživanja.
8. Vizek Vidović, V. and Vlahović Štetić, V. (2003). Current models and new developments in Croatian teacher education. In: Moon, B.; Vlasceanu, L.; Barrows, L.C. (eds). *Institutional approaches to teacher education within higher education in Europe: current models and new developments*. Bucharest: UNESCO – CEPES, 51-65.

