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FINNISH EXPERIENCE AND OPPORTUNITIES IN PRIMARY TEACHER TRAINING AND PROFESSIONAL DEVELOPMENT. UKRAINIAN REVIEW

Finnish teacher education has received a great deal of attention because of the high learning outcomes of Finnish 15-year-old students in Pisa achievement testing. Finland was in the highest position or among the three best countries in 2000, 2003, 2006 and 2009 (OECD). Many researchers, as well as Finnish policy makers, regard high quality teachers and teacher education as one of the major factors in good learning outcomes. During the last twenty years, Finnish teacher education has been evaluated systematically in many national and international evaluations. Many research projects and doctoral dissertations on some components of teacher education have also provided important knowledge for further development (7;17). Some of the evaluations have focused on structural and higher education policy issues, while some have concentrated on themes of teachers' professional development in teacher education.

The most important following evaluations are:

- 1989 National committee for developing teacher education
- 1993-94 National and international evaluation of educational sciences and teacher education (24;1;20).
- 1995-1998 Research project "Effectiveness of Teacher Education" as part of a large national research programme entitled "Effectiveness of Education" (12;10).
- 1998 National evaluation of ICT in teacher education (15).
- 1998-99 National evaluation of teacher education (5).
- 1999 Evaluation of the quality of research in the Department of Teacher Education of the University of Helsinki (21).
- 2001-2002 Evaluation of the quality of education and degree programme of the Faculty of Education at the University of Helsinki.

These evaluations have proven useful in efforts to develop teacher education, and some issues are still under discussion. The results of these evaluations have highlighted many strengths of teacher training in Finland. Class teacher education is one of the most popular study options available to students at Finnish universities. Teacher education has been successful in attracting very talented and diligent students. The competition has made teacher training very selective, and only 10-15% of the applicants are accepted into the degree programmes (17).

In the Finnish research project, "Effectiveness of teacher education" (1995-1998), a new approach to evaluation was developed. The purpose was to enlarge an evaluation concept and make

it a tool for continuous development and particularly a tool for creating increasing co-operation between different partners in TE. The theoretical basis of the project has been introduced in earlier articles (13;14;10). The project took a broad view of "effectiveness", and attempted to see it through the eyes of a variety of groups related in different ways to teacher education and its outcomes: teachers, teacher-education students, school children, Ministry officials, and a range of other relevant partners (including parents, business and working life groups and teachers' unions). Several sub-studies under the broad umbrella of the research project collected quantitative and qualitative evidence related to the general issue of the effectiveness of teacher education at three levels - society, culture and person. The aim of the evaluation was not to take the role of a judge by ranking or blaming TE institutions or TE educators. The interest of knowledge was participatory and reflexive-dialogical (6). All the time, the most important target was to activate and build communication between different groups and stakeholders and thematic together issues of TE (11;13).

Three central functions of communicative evaluation were outlined:

- *revelation* - helping people to understand cultural, social and interpersonal dynamics in and around programmes and settings, and to do so in a critical way,
- *anticipation* - helping people to orientate towards the future in increasingly unsettled times, and
- *building communication and partnership* - helping people to work together for transformation, not only at local levels but also in relation to global issues, trends and tendencies.

The project selected three levels on which to evaluate the effectiveness of teacher education: *culture, society* and *the person.* In Habermas theory of communicative action, these are regarded as the structural components of the lifeworld. Each of these levels has a special task in the process of social and cultural reproduction and transformation. In this way, the project aimed to recognize and respond to the notion that the effectiveness of teacher education is multi-layered. *Culture* includes interpretive frameworks, facts, norms and experiences. On the cultural level, different studies (9) in the research project targeted themes including:

- teachers' abilities to promote active learning in schools;
- teachers' abilities in curriculum development;
- teachers' readiness for new information technology;
- teachers' readiness for media education;
- teachers' readiness for partnership in educational tasks;
- teachers' abilities to encounter and handle moral dilemmas in school life;
- teachers' abilities to promote intercultural learning.

Some of these targets were selected on the basis of already-established needs and concerns; some were selected as new objectives which have emerged in relation to the moving horizon of contemporary social change. *Society,* according to Habermas, refers to the legitimate orders through which participants regulate their memberships in social groups and thereby secure solidarity (4, p.138). This concept of society includes relationships between different organizational subsystems. Institutional structure, administration, power, control, and cooperation between different partners are among the phenomena of interest in analyses at the society level. In teacher education, this level raises some crucial questions, including questions about the independence of teacher education, and the nature of relationships between teacher education and the administration of education systems.

The society level studies (9) conducted within the overall research project included studies focusing on themes like:

1. What does gender equity mean in teacher education?
2. How can greater cooperation between teacher education and different stakeholders in education and teacher education be facilitated?
3. How have relationships between teacher education institutions and other educational institutions promoted or hindered the effectiveness of teacher education?
4. How would different partners (working life, parents, local community, administration) like to see teacher education develop?

At the level of the *person,* we are concerned especially with matters to do with the competence that makes a subject capable of speaking and acting, that puts him or her in a position to take part in the process of reaching understanding and thereby to assert his own identity (4, p.138). In the research on evaluation of the effectiveness of teacher education, the studies have not focused so much on the general competencies which teachers may be assumed to have, but rather on teachers' and beginning teachers' personal interpretation of what the teaching profession means to them, and how they would like to develop as teachers. At this level, the studies have focused very much on the initial and continuing processes of teachers' professional identities (9).

Personal level studies of the research project addressed themes including:

- How has teacher education supported teachers' growth and identity as representatives of an ethical profession?
- How should teachers' growth as lifelong learners be supported in the future?

On all three levels – culture, society (social organizations) and person – the research proceeded on principles of communicative evaluation, involving revelation, anticipation, and aiming for communication and partnership. Empirical data have been collected using qualitative and quantitative methods which aim to produce an improved understanding of both subjective and objective experiences in teacher education. The project also explored the way the effects of teacher

education are transformed (or forestalled) in school contexts, from the multiple perspectives of student teachers, teacher educators, teachers and pupils (18).

Although teacher education has been successful in many respects, several problems remain that need to be taken seriously. Many evaluations have pointed out that inadequate co-operation between some partners decreases the quality of teacher education. Co-operation should be much better organized, more oriented towards common purposes, and more intensive. These needs are apparent in areas of co-operation between academic disciplines and educational departments, normal schools (called also university practicing schools) and teacher education departments, local schools and university schools, and between teacher education institutions and local communities. Another area of concern is the quality of learning. Doubts have been expressed that teachers are adequately trained to teach various different learner groups in an increasingly diverse and complex society. Learning in a multicultural information society, where social exclusion is a real threat, places new and increased demands on teacher competencies. Year after year, strong criticism has also been directed toward the student teachers' own learning culture, which often seems to be more receptive than active except in connection with teaching practice and the writing of the Master's thesis. The general result of the evaluations has been that the more demanding the studies were in terms of quality of learning, the more useful they were in the eyes of the student teachers (20;17).

The present study belongs to the latter evaluations. According to decrees issued in 1979 and 1995, all prospective teachers in Finland have to attain a master's degree as a teacher qualification. In terms of the Bologna process, the qualified teachers' degree is equivalent to the second cycle degree in the European higher education area (19). In the Finnish educational system, the combination of a three-year bachelor's degree and a two-year master's degree in appropriate subjects qualifies teachers to teach subjects in primary and secondary schools or general subjects in vocational institutions. This means that all other teachers must attain a master's degree (BA 180 European credits (ECTS) + MA 120 = 300 ECTS; 1 ECTS is about 27 hours' work). Primary teachers, also called class teachers, have educational science as their major, and this degree requires the completion of a master's thesis. The topics of the theses can be highly school-related, and the theses are very often action research projects. Teacher education in universities does not follow any strictly defined programmes. Students have opportunities to create their own study plan selecting those modules required for teacher qualifications for different levels of the educational system. Nonetheless, teacher education departments offer certain study schedules in order to make studies effective and efficient.

Finland does not have any common national standards for teacher education. Each university is responsible for the quality of the programmes and studies they provide. The Teacher Education Act and relevant decrees provide frameworks and common guide-lines; however, universities are

free to modify their own courses and programmes. Even though there are no national standards there are many unofficial common principles and recommendations on which national TE working groups and Deans of TE educational departments have agreed. The following main structural guidelines were accepted in 2006:

The main elements of all teacher education curricula consist of studies in:

- *Academic disciplines*. These can be whichever disciplines are taught in schools or educational institutions or in the science of education. Academic studies can be a major or minors depending on the qualification being sought. Class teachers have a major in educational sciences and minors in other disciplines.
- *Research studies* consist of methodological studies, a BA thesis and a MA thesis.
- *Pedagogical studies* (min. 60 ECTS) are obligatory for all teachers. They also include teaching practice.
- *Communication, language and ICT studies* are obligatory.
- *The preparation of a personal study plan* is a new element in university studies in Finland. Its main function is to guide students to develop their own effective programmes and career plans, and to tutor them in achieving their goals.
- *Optional studies* may cover a variety of different courses through which students seek to profile their studies and qualifications.
- *Pedagogical studies* The traditional distinction between class teachers and subject teachers has been retained, but the structures of the respective degree programmes allow students to take very flexible routes, to include both in the same programme or permit later qualification in either direction (17).

Pedagogical studies (60 ECTS) are obligatory for qualification as a teacher and are approximately the same for both primary and secondary teachers. These studies give a formal pedagogical qualification to teachers of all levels in the Finnish educational system regardless of the programmes in which they are provided. They provide teachers' general competences with an emphasis on a reflective and research-based orientation in the teaching profession. According to the law, pedagogical studies must be studies in the science of education. Pedagogical studies can be part of degree studies or they can be taken separately after the completion of a master's degree.

The goal of pedagogical studies is to create opportunities to learn pedagogical interaction, to learn how to develop one's own teaching skills, and how to plan, teach and evaluate teaching in terms of the curriculum, the school community, and the age and learning capacity of the pupils. Students should also learn how to cooperate with other teachers, parents and other stakeholders and representatives of the welfare society. Teachers' pedagogical studies also include guided teaching practice (approx. 20 ECTS). The aim of guided practical studies is to support students in their

efforts to acquire professional skills in researching, developing and evaluating teaching and learning processes. In addition, students should be able to reflect critically on their own practices and social skills in teaching and learning situations. During guided practical studies, students should meet pupils and students from various different social backgrounds and learning orientations and have opportunities to teach them according to the curriculum. An important aim of pedagogically oriented studies is also to educate teachers who are able to study and develop their own re-searched-based practices. For this reason, the modules on behavioral research methods are also obligatory for subject teachers.

For decades, the Finnish orientation toward teacher education has committed itself to the development of a research-based professional culture (19). The aim of TE studies is to train students to find and analyze problems they may expect to face in their future work. The measurements of professional skills are based on the paradigms of the reflective teacher, the teacher as a researcher, and inquiry-oriented teacher education (7;8;2). The theoretical framework of professional skills also consists of a concept that takes a broad view of teachers' professional role in schools and society. There are tensions in many countries on how the practical component of teacher education, e.g., teaching practice, should be integrated and implemented in teacher education programmes. As professionals, teachers need many practical skills that enable them to mediate academic subject knowledge, values and attitudes to individuals or groups. Teachers need the confidence to work with learners in real situations, and student teachers often ask for very practical advice on their teaching practice. Recent research on expertise has revealed that there are different phases in the development of individual expertise. Student teachers also need different kinds of support in the different phases of their development.

In Finnish teacher education the aim is for teachers to be able to work as independent professionals in schools and to make an active contribution to educational issues including the development of school curricula, as well as formative and summative assessments of students' learning. These competences require strong expertise and the integration of different kinds of knowledge. Davenport and Prusak have found that an expert needs codified knowledge and organized official and literally transferable knowledge. In addition, the development of expertise requires role models, observing experts, tacit knowledge, a social network and even good stories of successful practice. Davenport and Prusak point out that experts' knowledge is deep personal knowledge that has been tested in practical situations (2).

According to Schön, experts always face problems in situations that are unique and consist of uncertainties, value conflicts and other tensions because of complexity. They work in complex situations. This establishes special requirements for their knowledge base. Experts' knowledge is rational in nature, but this is not sufficient. They also need principles, rules and models, and they

need to know how to apply scientific theories and techniques to complex problems. Working as an expert means that one has the knowledge and practical abilities to work in complex situations. In addition, experts need confidence in two complementary ways: they need the self-confidence to carry out their expertise in demanding unique situations, and they also need to implement their expertise in such a way that their customers, stakeholders and colleagues trust them. In the teaching profession this means that students and parents, and even society at large, need to be able to trust teachers' expertise (23;17).

Active learning. How to get students to become more active learners is a very common problem in many countries. Active Learning research has revealed that teachers who seek to tutor their pupils to become active learners gain a new pedagogical role. They become facilitators who give more responsibility to students. They are more democratic; they negotiate more with students about aims, methods and control of learning. They see, more than before, all learners as resources for one another. New teaching methods, which consists of more independent learning, more collaborative arrangements, more open tasks and projects, enables students to collaborate with one another, but very often a teacher is also a partner in a learning team. A teacher's position is no longer at the front of the classroom, nor in the centre of the classroom, but she/he is a circulating expert, learning together with students and trying to give as much space as possible to his/her students. To promote active learning, the teacher should be a tutor. In addition to the teacher, other partners (e.g., peers, parents, employers) in networks and co-operative projects should have a tutoring and supporting role. These scenarios of teachers' work create new demands on teacher education. Hannele Niemi has investigated active learning in schools and teacher education (8). The research focused on the Finnish case of active learning in teacher education and found that there are many factors that are obstacles to active learning. Schools, as well as teacher education institutions, change very slowly. We carry our learning culture from the early days of our own school life, and it forms our concepts and ideals as to what we regard as the aims of learning.

The framework of active learning assessment in this study is based on theories that consider learning as a constructivist and collaborative process. Active learning consists of independent inquiry, the structuring and restructuring of knowledge, a problem solving orientation, a critical approach and the evaluation of knowledge. The goals of learning are that the learner can elaborate on applications of knowledge and s/he is capable of producing new knowledge individually and collaboratively. Active learners develop their skills of inquiry and learn to reflect on and control their own learning processes. Knowledge is not just an individual possession but is socially shared and emerges from participation in sociocultural activities. Learning is increasingly seen as building knowledge together. When seeking new ways for knowledge creation as an interactive process we see that all educational settings, including schools, should pre-pare students for 'virtuous knowledge

sharing'(17). The future primary teacher must assessed that they will had the following active learning experience the most often. They must worked intensively on their assignments, applied knowledge, and tried to understand matters and phenomena even though it required extra time.

We can distinguish some *main active learning methods* (17) which used in Finish teacher training: intensively work on assignments; to apply acquired knowledge; try to understand matters and phenomena even though it takes time; tutored if needed, otherwise work independently or in peer groups; discuss the best solution for the assignments; self-evaluate own products; seek a lot of additional knowledge; set objectives for ourselves and our learning; know how to develop our own learning; work in groups on problem-solving tasks; independently produce, e.g., reviews, outlines of sessions, and presentations; to seek almost all knowledge independently from different information sources; use and apply knowledge very critically; experiment and elaborate on new solutions to problems; independently plan and carry out learning contracts for which future teachers are responsible; use electronic databases and social media to seek knowledge for assignments; seek knowledge off campus; to elaborate on assignments independently or in peer groups only based on a general theme; to take responsibility for planning and carrying out fairly large projects; plan together the content and working methods of study unit.

According to main active learning methods the Finnish educators and scientist distinguish the highest *professional competences* (17) have been achieved in the following skills: designing of instruction; critical reflection on own work; becoming aware of ethical basis of teaching profession; lifelong professional growth; self-evaluating of own teaching; using teaching methods; development of own educational philosophy; mastering academic contents of curriculum; independent management of teachers' tasks; commitment to teaching profession; research of own work; education of a student's whole personality; critical assessment of teacher education; confronting multiculturalism; confronting changing circumstances of a school; supporting a learner's individual growth; management of classroom interaction; self-regulated learning; differentiating of teaching; intercultural education; developing applications of modern information technology; preparing students for a future society; promoting equity of sexes; developing of school curriculum; evaluating and grading of students; revising students' learning environments; readiness for media education; providing readiness for students for daily life; working as a change agent in a society; evaluating students' learning capacity; doctoral studies after ma in education; cooperation with representative of cultural life; acting in conflict situations (as mobbing); working in a school community (teaching staff and other school personnel); working with a student welfare group; cooperative action research; cooperation with parents; cooperation with representatives of work life; management of tasks outside the classroom (keeping on eye on students during recess, school

festivals, trips) morning assemblies, etc.); administrative tasks (information letters, reports, student transfers to other groups or schools) diaries).

*Conclusions***.** Finnish teacher education has a long history in educating high standard professionals. Typical features have been commitment to a research-based orientation and promoting teachers' work for contexts that require autonomous expertise. The present research provides important information about the strengths and weaknesses of current Finnish teacher education. Finnish student teachers are committed to the teaching profession and are aware of the ethical grounds of teaching. Student teachers assess that they have high competences for their profession. They have good skills in planning teaching and using different teaching methods. They are aware of their own teaching philosophy and their professional responsibilities. They consider the research component of TE as valuable for their independent and critical thinking. They are very engaged in studies. More training for cooperation with parents, representatives of work life and cultural partners is also needed in teacher education, as well as for the preparation of teachers to act in conflict situations (such as mobbing). A common feature of all of these skills is cooperation with partners outside the school community or tasks outside classrooms.

Students have a lot of active learning experiences. The study provides evidence that there is a strong relationship between active learning and high level professional competences: the more active learning, the higher professional skills and vice versa. The best active learning experiences emerge in collaborative working and study culture. Students appreciate having the freedom to experiment and design their own applications of active learning. The research component in teacher education is important to the majority of students, but there are also student teachers who are critical of these studies. Most critical voices are related to the quality of the studies or to practical arrangements (e.g., timing) and there is also a need to develop research studies in such a way that students can see their relevance to teachers' professional work. Finnish pre-service teacher education seems to function very well and to be effective in training professionals. Finnish teacher education has been assessed several times and its development is based on these reviews. The present study provides new information for further development. This study also provides scenarios and evidence regarding what research based-teacher education is and how to develop teacher education by implementing the following principles:

- Teachers need a profound knowledge of the most recent advances in research in the subjects they teach. In addition, they need to be familiar with the latest research on how something can be taught and learnt.
- 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.

The aim is for teachers to internalize a research-orientated attitude towards their work. This means that teachers learn to take an analytical and open-minded approach to their work and that they develop their teaching and learning environments in a systematic way.

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Summary

In the article described a short list of the following Finnish teacher education evaluations. Analyzes the main elements of all teacher education curricula. Shows aims of teacher education are to train students to find and analyze problems they may expect to face in their future work. Considered main professional skills, competences and active learning methods.

Keywords*: teacher education, main elements of primary teacher education, professional skills, competences and active learning methods.*

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