ABSTRACT

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discussing some of the literature on the subject and by asking novice
teachers and teacher educators about the characteristics of good teacher
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difference between the professional knowledge of teacher educators and
teachers. Furthermore, experienced teacher educators were asked to choose
artifacts as evidence to be included in a presentation portfolio of their
professional competence. Findings indicate that even though there is much
overlapping in the professional knowledge of the two groups of professionals,
there are also distinct differences of importance to the current discussion
on education for and standards of teacher educators. (Contains 42
references.) (Author/SM)

Teacher Educators' Professional Knowledge-

How Does It Differ from Teachers' Professional Knowledge

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Abstract

Professional knowledge of teachers has been the topic of many research papers in the field of teacher education published in recent years. Less attention is, however, given to professional knowledge of teacher educators, the focus of this paper. The paper examines the issue by discussing some of the literature on the subject, and by asking novice teachers and teacher educators about the characteristics of good teacher educators, the professional knowledge of teacher educators and the difference between the professional knowledge of teacher educators and teachers. Furthermore, experienced teacher educators were asked to choose artifacts as evidence to be included in a presentation portfolio of their professional competence.

Findings indicate that even though there is much overlapping in the professional knowledge of the two groups of professionals, there are also distinct differences of importance to the current discussion on education for and standards of teacher educators.

Introduction

In recent years the topic of teachers' professional knowledge has been widely discussed in related professional literature. There seems to be general agreement among researchers that teachers' professional knowledge relates to subject matter knowledge, pedagogical and didactical knowledge, self-awareness and social skills (Fish, 1995; Beijaard and Verloop, 1996; Day, 1999, Smith and van der Westhuizen, 2000). Teachers involved with Smith and van der Westhuizen's (2000) study were found to have high demands of themselves as professionals and they could easily translate professional competence into portfolio entries for a presentation portfolio of their professional competence. Some of the entries were in recorded form (audio and video) as teachers claimed that much of their professional knowledge is tacit and can be documented only by showing teaching in action.

During teacher education the seeds for professionalism in teaching are planted and nourished in order to develop independently after graduation from pre-service teacher education. Teacher educators are responsible for providing teachers-to-be with strong foundations of professional knowledge and with tools for ongoing, independent professional development. In addition to supplying theoretical information, it is taken for granted that teacher educators assist teachers-to-be in developing the tacit aspects of professional competence. Little attention is, however, given to the professional knowledge of teacher educators (Korthagen, 2000, Koster and Dengerink, 2001). What is the composition of the professional knowledge of teacher educators? In this paper the issue is examined by looking at some of the relevant literature and by asking novice teachers and teacher educators the following open questions:

1) What does it mean to be a good teacher educator? (functions)

2) What is the professional knowledge of teacher educators? (deriving from functions)

3) How does professional knowledge of teacher educators differ from that of teachers?

Recently portfolios have been recommended as a tool for professional development and documentation of professional competence (Topping, 1998, Darling-Hammond and Snyder, 2000; Brown and Irby, 2001; Smith and Tillema, 2001; Zeichner and Wray, 2000; Craig, 2003). With the purpose of collecting information about what teacher educators choose as evidence for their professional quality, twelve experienced teacher educators from various teacher education institutions in Israel were asked to propose portfolio entries documenting their professional competence.

Relevant literature

Functions of teacher educators

Tamir (1991) defines professional knowledge as 'that body of knowledge and skills which is needed in order to function successfully in a particular profession. This knowledge is determined by two commonly accepted procedures: (a) job or task analysis, and (b) consensus of the community of people who are recognized as professionals in a particular field' (pp.263, 264). Koster et al (1996) discuss eight general functions teacher educators fulfill:

1. Facilitator of the learning process of the student teacher.

2. Encourager of reflective skills

3. Developer of new curricula

4. Gatekeeper

5. Researcher

6. Stimulator of professional development for school teachers

7. Team-member

8. Collaborator (external contacts)

Koster et al. (1998) make a distinction between school-based teacher educators (mentors) and institution based teacher educators. The latter group is responsible for teacher education in teacher education institutions, and have, to a certain extent the overall responsibility for the pre-service teacher education. Whereas this paper focuses mainly on institution-based teacher educators, the responsibilities of the two types overlap to a large extent. Wherever there seems to be major discrepancies, these will be pointed out in the text.

Teacher educators are responsible for developing reflection in student teachers. This is done in school with a more immediate discussion of experiences, whereas at the teacher institution there is a more distant (in time) reaction and objective analysis which brings the reflection to a theoretical level. Korthagen and Kessles (1999) compare the two types of analysis to Aristotle's concepts of phronesis and episteme. 'Phronesis, often unconsciously, focuses the attention of the actor in the situation on certain characteristics of the situation, characteristics important to the question of how to act in the situation. Episteme aims primarily at helping us to know more about many situations' (: 4). The school-based teacher educator works with teachers-to-be at the level of phronesis, and the institutional-based teacher educator works more at the level of episteme.

An additional function of teacher educators is to create new knowledge in and

about teaching. The development of new curricula and learning programs is related to research, and the responsibility for creating new knowledge lies more with the institution-based teacher educator than with the mentor in terms of allocation of time (less teaching hours) and facilities available (better library, offices, computers, and research grants). Teacher educators create new knowledge of two types; practical, in form of new curricula for teacher education and for schools, and theoretical knowledge generated from research. Standards for Dutch Teacher Educators divide teacher educators into two group, those engaged in in-service education and those engaged in research (Koster and Dengerink, 2001). The latter group is required to *contribute towards the production of knowledge in the field of teacher education* (p. 350).

Furthermore, the institution-based teacher educator is, to a large extent, the collaborator with external contacts with other higher educational institutions and decision-makers (Koster et al. 1998). The mentor is the one who has the responsibility of familiarizing the student teacher with the context in which practice teaching takes place and of establishing contact with other teachers, head teachers and the school management.

Both types of teacher educators are involved in helping the student teacher develop the skill of collegiality as a good team member, first by modeling this in relations among the three parties (student teacher, mentor and institution-based teacher educator). Jointly they form a team working together on a specific project, educating a new teacher. Second, by being involved with teamwork in the respective contexts they work (university and school), and by encouraging student teachers to become involved in teamwork.

Similarly, the role of gatekeeper, those who decide who can enter the gate to the professional community, is a shared responsibility of the mentor and the teacher educator

from the institution. It is found to be more problematic, however, for the mentor to take on this role because mentoring is mainly associated with support and encouragement. The assessment part of the job is likely to create a conflict for mentors and for student teachers (Koster et al. 1996). The greater responsibility for assessment of teachers-to-be lies, in most pre-service programs, with the teacher education institution and is therefore part of the responsibility of the institution-based teacher educator.

Teacher educators are expected to initiate and teach in-service professional development courses for professional development purposes of teachers.

Standards for teacher educators

Out of defined areas of responsibilities standards for teacher educators have been developed. Ozer (1998) defines standards as a defined stock of knowledge, which needs to be acquired by experts. Standards describe a requested level of professionalism, translated into actions and performances. Standards serve as guidelines for training and evaluation. The big question is what are the standards for teacher educators, what is a good teacher educator and what professional knowledge is absolutely essential? Murray (2001) expresses concern that there is an overreliance on standards, and that there is, in fact, little consensus about what the explicit standards for teacher educators should be. Examples of this disagreement, according to Murray, are if faculty in teacher education institutions should all be qualified teachers with a teaching license or if they all need to have experience in teaching children in school. Little has been written about such "hard" or external standards. Is this because it is obvious or because many teacher educators would find it difficult to fulfill this standard? Recent literature on standards for teacher educators relates to "soft" areas such as presented in the professional standards for Dutch teacher

Education:

- Content competencies

- Pedagogical competencies

- Organizational competencies

- Group dynamics and communicative competencies

- Development and personal growth competencies

(Koster and Dengerink, 2001).

Even though it is much more complicated to define the construct of these competencies and to translate them into operational performances, it seems that this is what teacher educators and decision-makers concern themselves with. Koster and Dengerink (2001) carefully describe examples of translating the area of competencies into ability and skills in the Dutch standard in their paper (which is recommended for further reading on the subject). Examples of standards are:

Teacher educators are able to acquire and maintain knowledge and skills to do with their own discipline (Content competencies, p. 349)

Teacher educators are able to make their own learning process visible to colleagues and students (Developmental and Personal Growth Competencies, p. 350)

American Teacher Education (ATE) define standards as agreements about what teacher educators should think about, know, and be able to do. The standards serve multiple functions; to provide teacher educators with an opportunity to review and adopt a knowledge base that can be tested, modified and reviewed and to provide the opportunity to coalesce a knowledge base that will make public the characteristics of the profession, to meet the requirement of transparency. ATE presents seven standards required of Master

teacher educators (TE) (ATE Website, 2002).

- Master TEs model professional practices

- Master TEs inquire and contribute to teaching/ learning

- Master TEs inquire systematically into and reflect on own practice for

  personal professional development.

- Master TEs provide leadership in education

- Master TEs collaborate inside and outside the institution

- Master TEs serve as informed and critical advocates for high quality

  education

- Master TEs contribute to improving teacher education

There is a large extent of overlapping in the two lists of standards. The ATE list emphasizes, however, to a larger extent, the responsibility of the teacher educator to contribute to education in general and to the professional community of teacher educators in particular.

Professional knowledge

A major element in a teacher educator's professional knowledge is the skill of making knowledge about teaching and learning explicit. Van Manen relates to knowledge in practice as the noncognitive knowing of teachers. He presents four types of such knowledge:

1) Knowledge resides in action as lived and is part of teachers' classroom behavior.

2) Knowledge resides in the body and is expressed through teachers' body language and hidden messages.

3) Knowledge resides in the world of the near and more distant context in which

teachers act.

4) Knowledge resides in relations which is reflected in teachers' communication and interactions with others.

(van Manen, 1999: 69)

Much of the above is reflected in teacher educators' tacit professional knowledge, and the problem seems to be in making this noncognitve knowledge accessible to student teachers.

Zanting et al. (1998) discuss problems mentors have in articulating tacit knowledge they have about teaching and difficulties mentors find in developing a language of practice. They focus on three main reasons for this:

1) Practical knowledge is tacit, and experienced teachers (mentors) find it difficult to put words to their professional skills.

2) Practical knowledge is part of their holistic act of teaching. It is integrated into teachers' behavior in class, and fragmentation of it, which is essential for explaining practical knowledge, becomes difficult.

3) Some mentors are hesitant to talk about how they teach and what they do, as they believe their main task is to bring out teaching abilities within the student teacher and to create opportunities for the student teacher to put the theory learned at the teacher education institution into practice.

'On the whole, the articulation of one's own practical knowledge seems a complex and unnatural activity for mentor teachers' (Zanting et al. 1998: 17).

Slick (1998) argues that a major role of teacher educators' roles is to serve as a bridge between the theory student teachers study at the institution and the actual teaching

practice in school. Therefore, teacher educator needs to be able to articulate the more tacit aspects of teaching by explaining these to student teachers, to develop perceptual knowledge- the phronesis of teaching (Korthagen, 2001).

Criteria for promotion in the profession

An additional source of information about professional knowledge required of teacher educators can be found in criteria for promotion within teacher education institutions. Whereas at universities the main criterion for promotion is the number and quality of publications, a recent development in Israel focuses on other criteria in promoting college teacher educators. There are three domains in which teacher educators are assessed for promotion purposes:

(Insert table one about here)

As can be seen from the table, the higher the promotion, the greater the importance of research and the less the importance of excellence in teaching. This does not necessarily mean that a senior lecturer A is not a good teacher. In order to climb the ladder the quality of teaching is important, however, as teacher educators aim for advanced academic ranks, more academic skills are required.

Quality of teaching

Being a good teacher is considered the most important criterion when assessing teacher educators. The quality of teaching relates to theoretical subject matter knowledge and the didactics of teaching it. The teacher educator is required to be updated in recent developments and acquainted with updated professional literature. The practical aspect of teaching, e.g. organization of courses, clarity, interesting sessions, is found in the criteria

of teaching competence and in the relationship to students. The latter is a reflection of more ethical aspects of teaching; such as respect for the student as a person, modeling punctuality and moral values, and providing feedback which is fair and constructive. Teamwork is also seen as an integral part of the quality of teaching.

Initiative and development of programs and learning material

A good teacher educator is expected to be involved with activities within the institution and in the educational community as a whole. Examples of such involvement are providing counseling to schools on staff development and introducing new teaching methods and programs. It also includes active participation in official committees at a policy-making level. Teacher educators are expected to be involved in taking steps to improve teaching within their own institution, and to start personal professional development in terms of advanced academic degrees.

Teacher educators are expected to produce learning material for schools and material for use within the institution for teacher education.

Publication and research

Publication and research are the main criteria for academic promotion. Teacher educators seeking advanced ranks are expected to be involved with research and to publish in well-known refereed professional journals.

Summary of professional competence of teacher educators

When comparing Dutch and American standards against which teacher educators are appraised we find that there is a large extent of overlapping. The main requirements teacher educators are expected to meet are:

1. The teacher educator is expected to be a model teacher with the ability to

articulate tacit knowledge of teaching and to bring practical experiences to a theoretical level in an empathetic and supportive environment.

2. The teacher educator is expected to be involved in creating new knowledge of practical (learning materials, curricula) and theoretical nature (research, publication in professional journals).

3. The teacher educator is expected to engage in and to make an impact on education within and outside the institution, to be active in pre- and in-service education of teachers, to take on a leadership role.

4. The teacher educator is expected to be involved in ongoing personal professional development and to facilitate professional development in others.

In order to compare the information discussed above to what people in the field have to say about professional knowledge of teacher educators, a study involving novice teachers and experienced teacher educators was carried out.

The study

Expert information about professional knowledge of teacher educators was collected from three groups, novice teachers, Israeli experienced teacher educators, and Swedish experienced teacher educators. They were all asked to relate in writing to the following three questions:

1. What does it mean to be a good teacher educator?

2. How would you define the professional knowledge of teacher educators?

3. How does the professional knowledge of teacher educators differ from the professional knowledge of teachers?

The study had two stages: First eight novice teachers and eight experienced teachers

were asked to respond to the questions. At a second stage 32 additional novice teachers and 10 more teacher educators were asked the same questions bringing the total numbers of respondents to 40 novice teachers and 18 teacher educators. The reason for increasing the number of respondents was to look for a broader basis for examining the research questions. The 40 novice secondary school teachers who were in their first year of teaching, had graduated from the same teacher education institution, but within different disciplines (English, mathematics, history, Hebrew language, literature and geography). Rudduck (1999) claims that students are expert witnesses on teaching, and teachers who have recently graduated from a four years teacher education program are, in this paper, considered expert witnesses on teaching by teacher educators.

Eighteen experienced teacher educators who teach in the same institution, but represent various fields of expertise (curriculum development, didactics of mathematics, history, Hebrew literature, sociology of education, developmental psychology, value education, and educational assessment) volunteered their opinion. The range of experience as teacher educators was from 6 to 22 years with a mean of 16 years.

At the first stage of the study a group of five teacher educators from Umea University in Sweden responded to the writer's request to share their views on the above questions. The number of Swedish respondents was not increased in the second phase of the study.

The written responses were analyzed for each group and for each of the three questions separately. The ranking of the frequency of the statements is presented in numbers as well as in percentages for the novice teachers and the teacher educators. Due to the small number of Swedish respondents (five) all statements given by these are presented without ranking.

Two people, the researcher and an experienced teacher educator who was not a respondent, read the written answers to the three questions. The data was listed independently by the two who met afterwards to work out the lists presented in the tables.

Findings and discussion

What does it mean to be a good teacher educator?

Table two presents the frequency of the responses to the first question: *What does it mean to be a good teacher educator?*

(Insert table II about here).

Novice teachers who have recently been exposed to a variety of teacher educators are very clear about the statement that teacher educators need to practice what they preach. It is not enough to talk about good teaching and alternatives in teaching, but teacher educators are expected to practice this in their own teaching at the teacher education institution. A similar claim is found in the ATE standards for Master teacher educators where the teacher educator is expected *to model professional teaching practices* (standard 1). Teacher educators did not make this explicit in their statements. This finding indicates that teachers educators pay less attention to the fact that student teachers find a gap between theories taught and practices exercised by teacher educators.

Another difference between the two groups is the claim from novice teachers for teacher educators to have recent experience in teaching children in school. *School changes, and it is not convincing when you hear somebody talk about how it was to teach teenagers ten years ago, the good old days, when today's reality is so very different (teacher)*. Murray (2001) points out that there is a lack of professional consensus regarding the credentials of teacher educators, one of which is the teaching license. In this

study the teaching license itself does not provide sufficient credibility for teacher educators. 72.5% of the novice teachers would like to study with teacher educators with recent experience as schoolteachers. Support for this claim is found in a study by Kanan and Baker (2002) who found that Palestinian students prefer mentors who have rich and recent experience in teaching children of similar age and level to those found in their own practice.

A third salient claim from novice teachers (65%) which is not mentioned by teacher educators is the need for teacher educators to be able to teach meta-cognitively and to articulate their tacit knowledge of teaching, explaining the whys and the hows of their actions and in-action decision making, what van Manen (1999) calls non-cognitive knowing. Ethell and McMeriman (2000) raises the dilemma how expert practitioners make sense of the their teaching and how this can be made available to student teachers. The findings in Ethell and McMeriman's study show that the articulation of the thinking of expert teachers facilitates the understandings of theoretical and practical components of teacher education. This finding supports the statement made by novice teachers in this study.

There is general agreement among all three groups that good teacher educators provide support to student teachers. 60% of the novice teachers mentioned this whereas 67% of the teacher educators made similar statements (show patience and empathy), and the Swedish educators expressed a similar statement saying that good teacher educators have good listening skills. Similar claims are frequently expressed in the literature (Malderez, 2002; Kanan and Baker, 2002; Ginns et al. 2001; Korthagen, 2001; Trumbell, 2001; Fairbanks et al. 2000; among others). Teacher education is about growth and

professional development, much of which involves changes, and a good teacher educator provides support to student teachers during the process of professional and personal growth.

40% of the novice teacher believe that a good teacher educator is also a good manager of time and people, a point that is included in the competency areas for Dutch teacher educators as described by Koster and Dengerink (2001). The two groups of experienced teacher educators did not specifically mention this point in their statements.

Teacher educators ranked enhancement of reflection in trainees (88.9%) as the most salient characteristic for good teacher educators. This is in full agreement with Korthagen's theory expressed in the realistic approach to teacher education (Korthagen 2001) which emphasizes the importance of developing perceptual knowledge in teachers through reflection evolving from the trainees' actual experiences. Teacher educators are also required to exercise self-reflection and be self-aware (72.2%) which are part of the requirement of ongoing professional development (66.7). Similar standards are presented at the ATE list and the list for standards Dutch teacher educators (Koster and Dengerink, 2001; Lunenberg, 2002).

In terms of personal characteristics the teacher educators believe a teacher educator should be assertive and confident regarding their work and in their professional development. Furthermore, they are expected to create a relationship of trust and empathy with the student teachers.

The Swedish teacher educators stressed the need for teacher educators to have the courage to be gatekeepers and to make sure that competent people graduate and are permitted into the education system. This point was not brought up by any of the two

other groups.

A final point relates to research as an important activity for teacher educators. Research is required for higher academic promotions for Israeli teacher educators, it is part of the American as well as the Dutch standards. The Dutch standards differentiate, however, between teacher educators who are involved with research and those who are not (Koster and Dengerink, 2001, Lunenberg, 2002) and is also related to Koster et al's (1998) distinction between institution based and school based teacher educators. In this study novice teachers did not relate to research as a characteristics of good teacher educators whereas half of the teacher educators involved (50%) believe that good teacher educators are involved with research. There is not necessarily a correlation between research and effective teaching (Marsh and Hattie (2002), but teacher educators believe that being involved in research advances their career (Katz and Coleman, 2002).

What is the professional knowledge of teacher educators?

Table 3 presents the ranking of the statements to the question *What is the professional knowledge of teacher educators?*

(Insert table III) about here.

There are several similarities in the answers given to the first and second question. It seems to be problematic to differentiate between the functions of teacher educators and the types of professional knowledge they own. There is also much overlapping in the responses of the three groups.

A vast majority of the novice teachers (97.5%) claim that knowledge about interpersonal communication is the most important type of knowledge required by teacher educators. This is also highly ranked by teacher educators, as it is in the suggested

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standards for teacher educators (Koster and Dengerink, 2001).

The most highly ranked component of teacher educators' professional knowledge as ranked by teacher educators (94.4%), is the knowledge of subject matter and of pedagogy and didactics. There is also a claim for the knowledge to be updated: *Teacher educators are those who present recent literature, ideas and changes in education to the student teachers (teacher educator)*. These findings are not unexpected when examining the literature on teacher educators' professional knowledge (ATE standards, 2002; Koster and Dengerink, 2001, Lunenberg, 2002. Raelin (2002) talks about three types of knowing evolving from reflections: Propositional knowing which is external and based on empirical research, practical knowing which is mediated through the practitioners' context and includes "rules of thumb" for teaching and, in our case, teacher education. Thirdly, dialectical knowing which emerges from practice and is mediated through intra-personal and collegial reflections and discussions. It seems that the respondents in this study attribute high value to knowledge that is acquired in various ways, from external as well as from internal sources. Knowledge about assessment is another aspect of professional knowledge appreciated by novice teachers (85%) and to a smaller extent by teacher educators (55.5%). Novice teachers have recently experienced being assessed by teacher educators, and they seem not to be fully pleased with their experiences. Not all teacher educators find this specific aspect of their responsibilities as important as the assessees do. Even though assessment is a crucial aspect of teacher educators' professional knowledge, especially from the student teachers' point of view, only 10 out of eighteen respondents mentioned that knowledge about assessment is worthwhile mentioning. This is in agreement with findings from a study examining how assessment and evaluation is dealt

with in terms of assessment practices, professional development courses in assessment for teacher educators, and related books and journals stocked in teacher education college libraries in Israel (Smith and Drori, in process).

The data show a slight contradiction in the fact that only 50% of teacher educators claimed that a good teacher educator is involved in research, whereas 66.7% of the same teacher educators find knowledge about and how to do research an important part of teacher educators' professional knowledge. Katz and Coleman (2001) found that research was viewed as more instrumentally important for teacher educators in the beginning of their career and more personally satisfactory for people with tenure and with a rich research record. Israeli teacher educators with tenure need to be involved in research to reach advanced academic rankings (Oranim, 2002, Katz and Coleman, 2002).

Furthermore it was found that teacher educators cannot be familiar with merely fragments of the educational system, they need to be able to see the overall picture of the system.

The final issue related to knowledge is the knowledge of teaching adults and children. All three groups involved made statements about the need for teacher educators to be knowledgeable about teaching children and adults. Teacher educators are expected to be aware of differences between teaching children and adults, which are seen as crucial, mainly by novice teachers.

The last question asked was *What is the difference between professional knowledge of teachers and that of teacher educators?* Data presented in the last part of table three show that teacher educators believe there is much commonality in the professional knowledge of teacher educators and teachers. The main differences lie in the

comprehensiveness and depth of knowledge such as: subject matter knowledge, pedagogical and didactic knowledge and knowledge about how to understand and communicate with people. *The teacher educators have reached a level of professional knowledge and maturity, which is not that crucial for teachers (teacher educator).*

Another salient difference (82.5) according to novice teachers is the requirements of teacher educators to be able to teach and think aloud, to articulate their professional content knowledge (Ethell and McMeriman, 2000). Teachers are not expected to do so, as they do not teach how to teach. Teacher educators need to make their teaching explicit, so the modeling is brought to a conscious level of the student teachers. This requires a high-level of meta-cognition, it is verbalizing the reflection in-action, (Schon, 1983) the tacit part of professional knowledge in teaching.

There is also difference in the requirements of teachers and teacher educators in doing research and developing curricula. Most teachers do this at the level of their own teaching by producing worksheets and programs for their own classes, but they do usually not develop this into a publication. 66.7% of the teacher educators asked in this study believe research is part of a teacher educator's professional knowledge and 55.5 of these point out that conducting research is a feature of their work which differs from that of teachers.

Furthermore, the findings show there is a difference in the context with which teachers and teacher educators are expected to be familiar. Teachers see mainly their own context of teaching, classes, school and themselves, whereas teacher educators are expected to be knowledgeable about education in general at a national and international level, at least from a theoretical aspect.

The last difference in the professional knowledge of the two groups of professionals lies in the age of their learners; children and adults. This is again related to the depth of knowledge, as both groups need to know what it means to teach children, whereas teacher educators' knowledge in addition includes teaching adult learners.

Evidence of professional competence to be included in teacher educators' presentation portfolio

The last source of information about teacher educators' professional knowledge used in this paper is evidence of professional competence teacher educators choose to include in a presentation portfolio to be used for appraisal and promotion purposes. Twelve teacher educators from various teacher education institutions in Israel were asked to decide what evidence they would include in their presentation portfolio.

Campell et al (1997) discuss two purposes of teachers' portfolio; a working portfolio which assists teachers in organizing teaching material and a presentation portfolio which includes evidence the teacher wants to present in appraisal situations. The evidence presented reflects the professional competence of the teacher. Smith (1998) suggests a framework for the portfolio which includes two parts; one part with compulsory standardized entries and the second part with a specific number of evidence the teacher chooses from a long list of possible entries. This model was introduced to the group of twelve experienced teacher educators who participated in an in-service training course on assessment in teacher education. The outline of the portfolio is relevant to this paper because the portfolio content was decided by teacher educators, who discussed what evidence best reflect their professional knowledge and competence. The outline presented below is the outcome of a long and intense discussion about teacher educators'

professional competence, and how this can be documented in portfolio entries:

Part one, the compulsory part:

- Professional vision within the context of work

- Description of an instructional encounter with students (tutorials)

Part two, documentation of professional competence out of which at least two are chosen:

- Professional curricula vitae including personal comments

- Evidence of teaching experience including personal comments

- Publications in the field of teacher education including personal comments

- Model for tutoring students including explanation

- Examples of students' assignments including feedback given to students

- Plan of a teaching unit including explanation

- Reflection on systematic student feedback on teaching

- Reflection on feedback from colleagues

- Critique of theoretical material related to teacher education

These 12 teacher educators choose to present evidence of who they are, their professional vision, and how they put it into practice in their work with students. They reflect professional confidence, they have reached a level of professional maturity which enables them to express their beliefs and the practice of these when being appraised. This is, as seen by this group of teacher educators, a compulsory part of their professional profile.

There is also evidence of practical and theoretical professional knowledge in form

of examples of student assignments and feedback given by teacher educators documenting self-assessment of the dialogue with the students in which teacher educators engage.

These teacher educators see feedback from students and colleagues on their teaching and reflection on the feedback, as part of their professional competence. Feedback is essential for professional growth, and professional maturity lies in the reflection on external feedback. Portfolio work requires reflection related to each piece of evidence, and in this way the portfolio differs in form from traditional professional profiles. An integral part of the portfolio is the reflection, and a major requirement of teacher educators is ongoing reflection of practical and theoretical aspects of their work (Smith and Tillema, 2001). The portfolio documents teacher educators' self-awareness.

Conclusions

This paper has examined the professional knowledge of teacher educators from various aspects. Information has been taken from relevant literature, from recently developed standards and criteria for professional promotion. Furthermore, novice teachers, and teacher educators from Israel and Sweden were asked to characterize good teacher educators, their professional knowledge, and how this differs from schoolteachers' professional knowledge. Finally, information was collected from a group of twelve experienced teacher educators regarding evidence they chose to include in their professional profile.

Findings show that novice teachers straight out of teacher education view practical aspects such as recent experience in teaching in schools, and the actual practice of the preaching as the most importance characteristics of a good teacher educator. Teacher educators focus more on the personality characteristics in their work with student

teachers. The findings are not in full agreement with American standards for teacher educators which emphasizes the professional responsibility of teacher educators to contribute to the profession of teacher education and to education in general (ATE standards for Master teachers).

Teacher educators' professional knowledge is expected to be rich and extensive in terms of the specific subject matter taught and of a wide range of related areas, such as didactics, pedagogy and psychology. These areas form the basis for the professional body of knowledge of teacher education.

Even though, the findings point at similarities in the professional knowledge of teachers and teacher educators, there are differences which are mainly found in:

- The level of knowledge. The professional knowledge of teacher educators is required to be wider, richer and deeper than that of teachers.

- The level of articulation of reflectivity. The teacher educator is required to reflect and talk about in-action reflections , explaining tacit knowledge of teaching and make it available to teachers-to-be; bridging between theory and practice. Teacher educators are expected to be epistemologists whereas teachers are mainly required to be good practitioners.

- The knowledge of how to create new knowledge by writing curricula and to be involved with research. There is a claim for ongoing credited professional development, part of which is to actively engage in research. Research is not required of teachers.

- Comprehensive knowledge of educational system. Most teachers see only the context in which they work.

- Knowledge of how to teach children and adults whereas teachers specialize in teaching children.

Recently we see results of work on developing standards for teacher educators which provide guidelines for teacher educators themselves, for decision-makers, for program designers, and they serve as benchmarks for assessment of teacher educators. Standards need, however, to be treated with utmost care. We need to be aware that standards often put constraints on professional autonomy and are, if they become too detailed and limited, likely to dictate and hamper professional creativity and development. Standards are guidelines for work within a specific context and they need to allow for individual routes to achieving professional competence which is mainly directed by professional responsibility. Teacher educators in this study were found to have professional maturity which included reflective collegial and self-criticism of their work.

The points summarized above provide food for thought about how teacher educators are chosen and how they are educated for the job. Do institutions of teacher education examine candidates for teaching posts in line with the profile of professional competence which has been developed in this paper? Is education available for teacher educators-to-be created around the professional functions and knowledge of teacher educators? It seems that this field is still in its infant stage (Durcharme and Durcharme, 1996; Korthagen, 2000).

Darling-Hammond et al (2002) found that teachers who had been educated in a thorough teacher education program feel more confident about their teaching than those with no or less solid preparation. Little is known about how teacher educators feel about the preparation they get or do not get before entering teacher education. However, based

on findings from the above-mentioned study, it is possible to hypothesize that teacher educators would gain confidence by being professionally prepared for their responsibilities. Further research is required to learn more about how to design programs for teacher educators. A good place to start seems to be by learning more about the professional knowledge of teacher educators, not only from teacher educators themselves, but also from novice teachers who have recently completed their teacher education.

The aim of this paper is to add to the understanding of the topic. The points discussed and the conclusions reached need to be viewed in the context of the paper and in the limitations of the study.

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Table I: Criteria for academic promotion within Israeli teacher education colleges

Title	Excellence in teaching	Publications	Initiatives/ educational material
Senior teacher	50%	30%	20%
Lecturer	30%	50%	20%
Senior lecturer	20%	40%	40
Senior lecturer A (Ass. Professor)	20%	20%	60%

(Oranim, 2002, Katz and Coleman, 2002)

Table II. Ranking of answers to the question "What is a good teacher educator?"

Question	Novice teachers	N 40	%	Israeli teacher educators	N18	%	Swedish teacher educators
1. What does it mean to be a good teacher educator?	Practice what is preached and relate taught theory to own practice	35	82.5	Enhance reflection in trainees	16	88.9	To be creative and open-minded
	Recent classroom experience in teaching children which matches that of the novice teachers' context of teaching	29	72.5	Create understanding of education in trainees	14	77.8	To be confident
	Give useful feedback	32	80	Show self-awareness	13	72.2	To be enthusiastic about the teaching profession
	Practice a meta-cognitive approach to teaching: explains "why" and "how" in relation to own actions while teaching	26	65	Engage in ongoing professional development	12	66.7	To engage in ongoing professional development
	Provide support	24	60	Show patience and empathy	12	66.7	Self-reflect
	Manage time and people well and with confidence	16	40	Act assertively	11	61.1	To have listening skills
				Present various models of teacher education	9	50	To have the courage to be a gate-keeper
				Act upon personal and educational values	9	50	
				Research and publish	9	50	
				Believe in education	8	44.4	
				Work in teams and support colleagues	7	38.9	

Table III. Ranking of answers to the questions: What is the professional knowledge of teacher educators?" and "What is the difference between the professional knowledge of teacher educators and that of teachers?"

Question	Novice teachers	N 40	%	Israeli teacher
educators	N18		%	Swedish teacher educators
2.What is the professional knowledge of teacher educators?				Knowledge of inter-
personal communication	39		97.5	Subject matter knowledge and knowledge of
related subjects	17		94.4	Subject-matter knowledge translated into
didactics				
	Solid knowledge of subject matter taught			36 90
	Pedagogical and didactic knowledge			17 94.4
	Knowledge of psychology and pedagogy			
	Knowledge about assessment		34	85 Knowledge
about how to do and make use of research	12	66.7	Research knowledge	
	Updated and deep knowledge about changes in education and in subject matter			
taught	32		80 Knowledge about evaluation and assessment	
	10		55.5 Knowledge of supervision	
	Knowledge of teaching adults		19	47.5
	Knowledge about mankind 9		50	Administrative
knowledge				
	Comprehensive knowledge of the educational system		17	42.5
	Knowledge about how to teach adults			7 38.9
	Knowledge about society in general			
			School teaching experience	6
	33.3		Knowledge about children and young people	
3. What is the difference between the professional knowledge of teacher educators				
and that of teachers? TE articulate the tacit part of teaching			33 82.5 There is	
much in common	15		83.3 There is no crucial differences, the	
difference is mainly in degree.				
	TE need to constantly test theories	23	57.5	TE know
more, especially about teaching and learning	13 72.2 TE have extensive contacts which provide a			
wider understanding of the educational field				
	TE teach adults, not children	19	47.5	TE have
a higher level of meta-cognition	12 66.7 Some TE do research, teachers do not			
	TE see beyond own class and school. TE familiar with the whole educational			
system	18		45 TE have a higher level of professional maturity	
	10		55.5	
			TE do research	10 55.5
			TE enjoy more professional autonomy	
	5		27.7	

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