Bronislava Kasaćova
Matej Bel University
Banska Bystrica, Slovak Republic

Reflection in the undergraduate teacher training

Abstract

The study brings an outline of pedeutological bases as well as reasons of changes in teacher training in the sense of neo-professionalism. The following subjects are taken into account: changes to view teacher's profession; foreign researches on investigation in teacher training; reflection as a tool of teacher's professional development; phenomenological analysis, portfolios and diaries in student's reflection; reflection in the process of becoming a teacher.

Key words: *teacher training, changes in teacher training, a teacher as a reflective professional, reflection in teacher training, reflective techniques, reflective ability of a teacher and student*

Introduction

An ability to reflect changes implementing them into the area of theoretical and professional field is a basis for actualization, modernization as well as vitality of science. Pedeutology - the theory of teacher's profession solves changes in teacher training as an actual present problem. These changes are standard for the majority of developed countries of the world; this is proved by many international documents as well as profound theoretical works. Under our conditions, according to S. Svec, "pro-active and straightforward ever-ongoing school reform strategy" is necessary; "it reflects relativity of Slovak values, norms and patterns of national culture and democracy, taking into account geopolitical as well as social-cultural context, too" (Svec, 2002).

Bases of changes in undergraduate teacher training

Majority of changes in undergraduate teacher training have been justified by **changed needs** that shape societal requirements as to the work of teachers and, in particular, by **criticism of existing concepts** of teacher training.

1. As a result of **changed societal needs**, the understanding of teacher's professionalism is cardinally altered; also categories of his social status are under reformation. Teacher's conception as the one who passes on knowledge as well as interprets scientific systems to pupils is being abandoned, so it is his century-long accepted role - to provide for a transmission of veritable cognitive structures to pupils. In frame of changes, his formative role is being emancipated, too, from an "indoctrinator" of both cultural and moral norms and an exponent of societal moral appeal. Under this frame how to understand a teacher, his role, on one hand, was narrowly determined as passing on the cultural heritage to young generation. On the other hand, there were no distinct formulations of his actual tasks which were to be fulfilled towards pupils. In the last decennium, a trend to neo-professionalism in teacher's profession began. According to these views, teacher's professionalism is broader understood as so called model of broad professionalism; its character is defined as reflective (reflecting) professional (H a v l **i** k, 1998). As a result of the above, professional expertise is being changed and enhanced both as to the knowledge from pedagogy, psychology, social scenes and also as to the development of capabilities. Reproductive capability is replaced by a capability to master the application of gained knowledge in a school reality.

The field of teacher's activity is enhanced especially through an emphasis on development of socialization processes as well as the overall cultivation of child's personality (S p i l k o v a, 2002). In sense of a broad professionalism, teacher's educational and teaching work is not understood as two closely linked activities but as one activity only; this is neither inwardly nor formally separable while formation is more important than education and teaching cannot be non-formative (Z e l i n a, 1996). Teacher's role is characterized as facilitator of the child's personality development, what brings a bigger and broader formulation of responsibility for each pupil, for his cognitive, psychomotoric and affective development towards pupil's personal maximum. This creates higher demands on the part of teacher's competencies dependant on his professional, personal as well as ethical preparedness. Changed and enhanced are the demands on his/her ability to reflect, analyze, re-evaluate and modify his activity, to be able to reason for his understanding of teaching, to master discussion as well as to cooperate with colleagues, parents as well as with wider milieu.

The broad professionalism model means to seek for teacher's new professional identity based on new values of teacher's profession what means a challenge to teacher training (Spilkova, 2002). In the new sociological categories of professions, teacher's profession is ranked among so called helping professions (psychologist, psychotherapeutic, social worker) derived from anthropological sciences - pedagogy, psychology and sociology. For teacher training it

has real consequences which prefer as its focus pedagogical and psychological sciences in opposition to formerly prevailing (and presently existing in teacher training) academic ones. The focus of teacher training anchored in the frame of pedagogical and relative disciplines is at the same time "prevention" against understanding the pedagogic modeling of subjects as a second extreme, i.e. pragmatic tendencies. S v e c (1999, pp. 13-15) writes on five paradigms as the basis for suggestions on perfecting undergraduate teacher training based on alumni model as teacher training point of departure. These models are: an alumnus as a good employee, an alumnus as an associate professor, an alumnus as an innovator, an alumnus as a reflective professional and an alumnus as a fully functional personality.

Attempts to professionalize teacher training are linked to criticism of some tendencies in teacher training.

2. **Criticism of existing concepts** points mainly to overcoming of one-sided **behaviorist approaches** of teacher training understood as putting emphasis on training of definitely and specifically fixed professional skills. In their extreme form they may lead to technocratic, pragmatic or mechanical understanding of teacher's profession (S p i l k o v a , 2002). Not only training content is focused because these trends show tendency to decrease institutional level of training as well as degradation of teacher's profession to such that can be fulfilled by a skillful practitioner, and in its final consequence, it leads to societal status descent. Reflectivity is neither distinctively built nor developed at teachers with this training because the main method of professionalism building is an epistemic ground as well as transmissive character of work.

Conceptions coming out of the **academic understanding** of undergraduate teacher training became a criticism target. They place the focus of the subject preparation strictly based on the system of a given scientific area out of which curriculum for teacher training is derived through certain reduction. Such teacher is consequently not fully recognized expert in those disciplines (normally a combination of two, sometimes three subjects) but he is not matched with his teacher's profession to which he has not yet grown mature through profound study of educational sciences (S t e c h, 1998). That usually diminishes both pedagogic and psychological training as well as practical part of the training. Thus, there is lost a possibility to conceptually link the knowledge of given subjects both with conditions and sequences of school reality and specifics of children in a given development period. Researches proved remarkable tendencies to monologist as well as little communicative methods with absence of reflection in teacher's work at teachers who completed such a way of training (V e r l o o p, W u b b e l s , 2000).

Both pedagogical and psychological discussions criticizing either academism or pragmatism in training are based on the **personalistic as well as social constructivistic** approach. They are typical for international pedeutological researches in the ninetieth of the 20th century (S c h u t z et al., 2001). They however also point to the peril of overrating the standards that shape graduate's profile while graduate's skills are mechanically derived from them. Tendencies to standardize approaches to a creation of a unified **so called skill-oriented model** of teacher training with strictly identified skills are criticized because:

- the inner integration of declared skills and competences with knowledge as well as shaped stands are not reached;
- they do not satisfactorily reflect the changing school reality and through their compulsoriness they slide to rigidity in some time;
- they do not take into account humanistic dimension of teacher training with emphasis on both personal and ethical dimension besides developing the professional one.

Professionalism without ethical, moral conviction and personal prerequisites as well as permanent reflection of professional reality does not create sufficient ground for teacher's profession (K a s a c o v a, 2002).

We emphasize as very important for a training of a reflective professional to develop his **reflective capability** during the training. It is sort of **meta-capability** sui generis that leads students to **perceiving their own process of becoming a teacher.** Or, in accord with authors (M a n s f e l d e r - L o n g a y r o u x et al., 1999; B a i n et al., 1999), it is a meta-cognitive capability enabling self-reflection of a human in development process.

Analogical phases or levels can be found in such understood teacher training. For comparison:

Process models of autonomy teaching in teacher training

Model author	lst stage	2nd stage	3rd stage
Blaakman- Vermunt (1983)	Meta-cognitive stage	Regulative stage	Activity stage
Schon (1983)	Theory	Practical experience reflection	New theoretical model
Kolb (1984)	Abstract conceptualization	Reflective observation	Factual experience
Wright (1992)	Thinking	Reflection of one's own cogitation	Aims and performance

Learning is a continual reflection as well as confrontation with surroundings; however, cognitively centered schools narrow down or reduce learning

processes to a world of objects. The interpersonal and especially intrapersonal world is put aside (D a r g o v a, 2001).

However, a teacher is to live and help children live not in a knowledge-filled world of objects only but also in the world of human beings as well as with himself. D o u s k o v a (2000) lists dominant features of authentic interaction in teacher's work:
- intellectual, emotional and volitional potential;
- self-reflection as well as auto-regulation ability;
- creative teaching approach as well as readiness to take a risk;
- high professionalism;
- pupil-centered value orientation.

On the relation to target programs of education, S v e c (2002) points to re-constructivist model of teaching field of study as an innovator. This model both projects and grounds teacher training in the requirement that they become a source of renewal and innovation for school reality. This training should not adapt itself to the lagging reality of traditional schooling with conventional ways of thinking among teachers, but it should pro-actively make use of the latest knowledge and foresightedly project. Undergraduate training that uses reflection as a permanent tool of self-development as well as the training of a teacher as reflective professional is related to the above explained model.

Conditions for realization of innovative
changes inundergraduate teacher training

Present teacher training in both our country and in other countries of Europe can be characterized as rapturously changing as well as reflecting a lot of changes. These used to be and are influenced by intervention of thoughts, theories and concepts proved in the West-European pedagogic-psychological context. Those were and are personal changes too, changes in thinking as well as deliberation of those teachers who train teachers. Trends in sense of innovative procedures had many times more or less spontaneous shape. In order that innovations may become functional, that they survive initial "boom': they must meet several requirements, while teacher training teachers must for himself make clear and reflect these views (K a s a c o v a , 2002, p. 36):

1. They should be theoretically grounded, credible, purposeful and, at the same time flexible, that is open to changes of running scientific revising - theoretical context;

2. They should correspond with trends that are prevailing and being declared by a given institution, or in a broader context of national goals - institutional context represented by undergraduate training;

3. They should be "nourished" through **personal** involvement of the teacher - innovator, who should not forget permanent reflection of his convictions based on both cooperation with colleagues and a permanent dialogue - **personal experience and personal involvement;**

4. They should have an existing base in form of **pedagogic reality,** as a starting point, means and goal of innovation - **pedagogic application.**

These four preconditions we try to develop also in this pondering on reflection in teacher training.

Reflection as connectional part
of undergraduate teacher training - international experiences

International literary sources of the last years give a sufficient number of both theoretical and applicative studies as well as outcomes of researches on reflection in undergraduate teacher training. There are several wide-ranging approaches on how to grasp reflection in undergraduate training while most authors make difference between a reflection as pondering (leads to ability of meta-cognitive thinking) and a reflection as self-reflection (leads to a conscious self-development as well as to a conscious process of becoming a teacher).

The conception of reflective practice was worked out by A.D. S c h o n (1983) already in 1983 publishing his key book *Reflective practitioner: How professionals think in action* in London. His concept is based on students' self-reflection in a process of teacher traini$_{11}$g and learning teacher's capabilities as well as skills. According to the author, reflection facilitates integration of gained theory and practice through reflected practical experiences. Student reflecting his pedagogic experience goes back to his reactions and actions pondering over them, finding reasons for his actions. Through that he has a possibility to uncover what to intensify in his knowledge through further theoretical learning. This conception is like a spiral process from theory over practical experience, its reflection and analysis back to prospective theory.

The outlined problems have also become a subject of international researches in the eighties. They do it in the beginning mainly on basis of verification of reflection application (originally as a therapeutic technique) in programs of teacher training. In Finland, O j a n e n and V a j s a n e n (1992) examined both individual and group teachers' reflection. The research traced how to develop reflective abilities of students especially in time and through pedagogic practice. Later the researchers proved that reflective program develops both theoretical and practical aspects of teachers' personality.

Korthagen (in M e u l e n k a m p, 2002) in Holland published too, that teacher training is more effective if students are led and stimulated to in detail

reflect their experience. Kaganova compared 27 teaching programs in 1992 (N e z v a l o v a, 1998) and on basis of comparative studies she emphasized necessity to involve reflective programs into teacher training already from the first grade. Students who finished reflective programs of teacher training met adaptation problems less frequently in comparison with others as well as they held more realistic view of teaching.

Johan von W r i g h t (1992) from the University of Helsinki was involved in the reflection process development as well as self-reflection in learning. He aimed his attention to the functions of self-reflection as well as of reflections of intentions and other people opinion. He argued that through the use of phenomenographical methods by reflection and its analysis, we can clarify metacognitive thinking development. He claimed that both ability to metacognitively think and reflective skills are possible to develop. He distinguishes two levels of reflection. The first one is present in mind of a man since pre-school age (reflective beginner - new entrant) and it unintentionally works during the development of an individual. At that time the notion "I" is of individual substance. A man reaches the level of a reflective expert through the development of his "I-concept": through intentional self-consciousness. The notion "I" gets social character. Self-reflection according to Wright has a broader meaning; he distinguishes a reflection on the level of "consciousness" as well as a self-reflection on the level of "intentional awareness". He studied phenomenopraphical analysis of particular psychical processes development through self-reflection and he also was interested in the kind of mental process on whose grounds self-reflection grows. He asked whether reflectivity can be cultivated or whether it is possible to practise reflective skills. He shortly distinguished four phases in reflective skills development:

l) getting experiences;

2) a reflection of experiences: "What did l learn?" "What did l feel?" - as long as we do not understand experiences in the following perspective: why circumstances are perceived in a given light and how can we utilize them in future;

3) conceptualization of new views and their utilization for creation of more adequate concepts for the content of a given question as well as productive theory;

4) practicing of the revised theory and looking for a new feedback (Wright,1992,p.65).

We find sympathetic in author's approach especially the fact that he considers reflectivity development possible already in children's age and usefulness of this method he justifies by the development of metacognitive thinking. He lifted up the necessity to differentiate between the two kinds of reflection as it is usu-

ally understood, namely: **reflection as thinking** (consideration) and **reflection as self-reflection.** "Reflection about one's own knowledge or intentions involves an element which is absent from reflections about the surrounding world. Self-reflection presupposes, in the language of mental models, a 'metamodel': in order to reason about how I reason, I need access to a model of my reasoning performance" (W r i g h t, 1992, p. 61).

The reflections of students and teachers learning processes were focused by Mansfelder-Longayroux, Verloop and Beijaard (1999) from Leiden University in the Netherlands. They used phenomenographical analysis of students' portfolios. The built on a threefold reflective model:

1. **Pre-reflective** phase means that individuals expect and accept one correct solution of a problem.

2. **Quasi-reflective** phase means that individuals realize existence of valid knowledge but in knowledge not everything is sure. They realize the existence of various possible solutions but they expect confirmation through the objective truth.

3. **Reflective** phase means that individuals know how to come to their solutions of problems, they are able to reason for them and in a discussion, they accept arguments of others. They understand that the right solution is dependant on their agreement.

They were backed by a saying of Wright that the basis for a good teacher training is to understand that students reflect their experiences in a process of learning to learn others. The highest quality in cognition concepts is the development of understanding of self-understanding, self-recognition as the decisive step to understand reality.

Reflection in students' portfolios was put to phenomenographical analysis from four views. Based on results they tried to form a system of categories for portfolios analysis which should be used to evaluate students. They were interested in the following questions:

1. What is the content of students' reflections in portfolio?
2. What is the ground of students' reflections in portfolio?
3. What is the ground of experiences which students reflect in their portfolio?
4. What is the ground of practical knowledge reflected in portfolio?
   Mansfelder-Longayroux et al. (1999, p. 212) distinguish three kinds of **reflective thinking: cognitive, critical** and **narrative approach.**

Cognitive approach deals with how students and teachers make decisions as well as what knowledge and processes are employed in the process of decision making.

Critical approach to reflection stresses the importance of teacher's thinking on social-political problems in education.

Narrative approach (telling story) emphasized teachers' sayings about themselves, how they understand things and phenomena, what questions they ask, what they discuss in relation to their work improvement.

Australian authors B a i n , B a ll a n t y n e , P a c k e r and M i l l s (1999) dealt with the reflection of students of teaching during their practice. They used journal writing as the tool for reflection. They emphasize the use of journal writing to facilitate the reflection, to deepen personality understanding as well as to stimulate critical thinking. Specifically in teacher training reflection gets a wide use as the decisive element of teachers' professional growth (also: M e u l e n k a m p, 2000).

L a B o s k e y (1993) exposes a useful structure for a tabular as well as ground-centered reflection in teacher training. He recommends it as a research tool during investigation of reflective journals. Structure grounds in four dimensions (aspects) which students should embrace:

1. **Purpose** - stimulus for reflection that may be difficult to discern, inner motivation for reflection, a need to restore the control over the situation or a wish to better understand the task.

2. **Context** and **coherences** - structural means as a tool for reflection, partners or observers, time and place assignment.

3. **Story - process of employment** during an activity which is to be reflected as a frame of situation **from processual point of view**: arguments expression, an end of analysis and passing to generalization, **attitudes** such as: open-mindedness, responsibility and warmth.

4. **Content** and **its meaning** - aim of reflection that can be a practical problem, a theoretical clarification of integration of both in an optimal situation.

The meaning of reflection authors see in success to develop in students ability for immediate feedback through this way; they will learn to use it themselves right during pedagogic activity. A teacher provides for a constructive feedback while resisting their naive sayings and helps them discover alternative perspectives. He functions as the most important partner during encouragement of their reflective writing development (B a i n et al., 1999, p. 70).

N e z v a l o v a (1998) summarized advantages of the reflective teacher training according to international authors in the following points:
- A written reflection helps abstract.
- Reflection requires analysis, synthesis and evaluation of knowledge rather than reproduction of other authors' ideas.
- Reflection involves regular, periodical, formative teacher's feedback.
- Reflection is a ground for individual evaluation of a student.

**Generalizations from the research
of reflectivity among students of
teaching**

The author of this study in cooperation with K a r i k o va (1999) and Heinzova examined development possibilities of students' self-understanding through reflectivity development program among 2nd grade students of elementary school teaching. The research has proved that reflective techniques improved their real self-understanding confronted by the standard test of Kudlickova. At the same time, a significant value of statements themselves for both research and self-reflective purposes was proved.

The employed program consisted of seven self-reflective techniques based on verbal statements as well as on self-drawn analysis thematically directed to oneself as a teacher. Through a procedure of constant comparison, some significant phenomena were proved following a specification of extreme groups.

On basis of detected phenomena repeatedly present in given samples, we deducted possible inferences corresponding with the hypothesis that the selection of study from point of view "primarily against secondarily" will in extreme occurrences result in both forms and content of reflective self-expression and significantly partakes in the process of becoming a teacher.

l. The form of drawing among **secondary choice students** is poorer; it reflects a weaker topic concern as well as hesitation in its expression. It results in both use of colors and in its content. The form of drawing among **primary choice students** shows better color variegation, the drawing holds typical features of topic interest, it affects more harmonically, steadily, and the area is proportionally used.

2. The content of then drawing "I as a teacher" among **secondary choice students** shows a tendency to "go astray" from the topic. Child's figure disappears in their drawings as well as their own I dives way to symbols. The used elements as symbols show to be both aggressive and unsure. Among **first choice students** the content is displayed by an expression of attitude to children, a more specific topic shape, it involves both figures and actions; it pictures situation and emotional thrill.

3. **Phenomena expressed in the reflective questionnaire** show a character of indifference among **secondary - alternative** choice, there absents emotional type of expression, they eschew speaking about themselves, they write less. The content of their responses is reduced to a short, sometimes one word response; they are marked out by disinterest in finding answers to a question. They involve less positive meanings. **Primary choice** students express real experiences, in some occurrences strongly personal. Prom their perspective of phenomenographical analysis there occur positive experiences from childhood as well as

positive personalities of teachers. They rationalize negative remembrances protectively directing them to a positive personal goal.

Conclusion

Based on study of both international literature research and our own results of researches as well as on practice of a university teacher it is possible to postulate a presumption that reflection in teaching as well as in teacher training is not just an a'la mode trend. It perhaps is a way through which we can approach to that what is a goal of all personalistic pedagogic theories as well as practical approaches: to create a school in which children will experience a happy childhood with teachers whose work will be their vocation.

References

Bain J.D., Ballantyne R., Packer J., Mills C., 1999: "Using journal writing to enhance student teachers' reflectivity during field experience placements". *Teachers and Teaching: Theory and Practice.* Taylor & Francis, vol. 5, no. 1., pp. 51-73.

Havlik R., 1998: "Zrani ucitele". In: *Ucitelske povolani* z *pohledu socialnich ved.* Praha: Pedagogicka fakulta UK, pp. 91-110.

Dargova J., 2001: *Tvorive kompetencie ucitela.* Presov: Privatpress.

Douskova A., 2000: "Techniky sebavyjadrenia a sebarozvijania': In: *Śkola v kontexte celoźivotneho ucenia.* Presov: Metodicke centrum, pp. 68-74.

Karikova S., 1999: *Osobnostf ucitela.* Banska Bystrica: PF UMB.

Kasacova B., 2002: *Ucitel. Profesia a priprava.* Banska Bystrica: PF UMB.

La Boskey V:K., 1993: "A conceptual framework for reflection in pre-service teacher education In: *Conceptualizing Reflection in Teacher Development,* eds. J. Calderhead , P. Gates. London: Palmer Press.

Mansfelder-Longayroux D.D.,Verloop N.,Beijaard D., 1999: *Student teachers' reflections on their learning process: a phenomenographic analysis.* Biennial Meeting of the European Association for Research on Learning an Instruction. Goteborg: August 1999.

Meulenkamp H., 2000: "Leren reflecteren en het trainen van vaardigheden': In: *Projekt Zmena is Slowaaks voor verandering Ben Onderwijsondersteuni ngsproject.* Leuven-Apeldoorn: Garant, pp. 59-60.

Nezvalova D., 1998: "Reflexe v pregradualni priprave ucitelu" (Zahranicni zkusenosti). *Pedagogicka orientace,* no. 4, pp. 33-42.

Ojanen S., Vajsanen P., 1992: *Relationships between the learning style and reflection ability of the student teacher.* Paper presented at ATEE Conference, Lahti.

Schon D.A., 1983: T*he reflective practitioner: How professionals think in action.* London: Maurice Temple Smith.

Schutz P. A., Crowder K. c., White V. E., 2001: "The development of a goal to become a teacher': *Journal of Educational Psychology,* vol. 93, no. 2, pp. 299-308.

Spilkova V., 2002: "Soucasne promeny v pojeti ucitelske profese a pripravy na ni. Klicove trendy v Evrope". In: *Priprava ucitelov elementaristov.* Zbornik z medzinarodnej konferencie. Prdov: PP PU - Metodicko-pedagogicke centrum, pp. 11-18.

Stech S., 1998: "Dilemata a ambivalence ucitelskeho povolani". In: *Ucitelske povolani z pohledu socialnich ved.* Praha: Pedagogicka fakulta UK, pp. 43-59.

Svec S., 1999: "Modely absolventa a humanisticka orientacia v pregradualnom studiu ucitelstva (v kontexte sinymi koncepciami)': In: *Premeny pedagogickej zlozky pripravy ucitela* 1. *stupna ZS.* Banska Bystrica: PP UMB, pp. 13-32.

Svec S., 2002: "Teórie cieolych programov vzdelavania': *Pedagogicka revue,* vol. 54, no. 3, pp. 201-219.

VerlooP N.*,* Wubbels T., 2000: "Some major developments in teachers education in the Netherlands and their relationship with international trends". In: *Trends in Dutch Teacher Education.* Leuven-Apeldoorn: Velon, Garant, pp. 11-34.

Wright J. V., 1992: "Reflection on Reflection". *Learning and Instruction,* vol. 2. Pergamon Press, pp. 59-68.

Zelina *M.,* 1996: *Strategie a metódy rozwoja osobnosti.* Bratislava: IRIS.