International Conference on Education & Educational Psychology 2013 (ICEEPSY 2013)

The Level of Reflective Skills of Nursery School Teachers

Vladimíra Hornáčková*, Zora Syslová, Eva Hercíková, Eva Holubářová

*Department of Primary and Pre-Primary Education, University of Hradec Králové, Rokitanského 62, Hradec Králové 500 03, Czech Republic

Abstract

The paper draws attention to the reserves of initial training for kindergarten teacher qualifications in the Czech Republic in terms of their reflective skills levels, to improve their education in the context of curricular reform. Research focused on qualitative investigation using a semi-structured interview, observation of video-studies and reflective conversation. Video-recordings of programs in kindergartens were analysed using Videography program (Rimmele, 2002) with methodology of compliance with video-studies analyses rules (Najvar et al, 2011). Research methods monitored the issue of preparatory training and skills of kindergarten teachers to reflect the results of their activities. Part of the research survey is to identify teachers' understanding of their works results, how they interpret it, so to improve in the future.

© 2013 The Authors. Published by Elsevier Ltd.
Selection and peer-review under responsibility of Cognitive-counselling, research and conference services (c-crcs).

Key words: Preschool; education; a kindergarten; teacher; reflection.

1. Introduction

The democratisation of education in the Czech Republic results in the need to change the paradigm of preschool education. This is connected with increased demands on the professional skills of nursery school teachers. The qualities of teachers and improvement of the system of their preparation are considered key tools of the educational reforms in most civilized countries. The proofs of this can be found in international documents of the

* Corresponding author. Vladimíra.Hornackova. Tel.: +4-204-933-31369; fax: +4-204-933-1313.
E-mail address: vladimira.hornackova@uhk.cz
UNESCO, OECD etc. Numerous studies suggest that higher preparatory education enables teachers to become more responsive to the child’s individuality and it influences the results of pre-school education and its efficiency (Barnett, 2004; Oberhuemer et al, 2010; OECD, 2012). However, none of the contemporary studies has treated the issue of the quality of pre-school education and the quality of the work of nursery school teachers and their preparatory education in the Czech Republic (Syslová, Najvarová, 2012).

The objective of the following text is to help to reveal the differences in professional skills of nursery school teachers with secondary and those with university education in the Czech Republic, focusing on their reflective skills. The obtained information should be used to improve the preparatory education at the faculties of education.

2. Theoretical bases

Preparatory education granting the qualification needed to become a nursery school teacher in the Czech Republic is highly diversified. There are three ways of qualifying as a nursery school teacher – secondary education (ISCED 3A), higher education (ISCED 5B) and university education (ISCED 5A).

For illustration, let us give general examples of education for nursery school teachers (pre-primary education – ISCED 0) in the countries of European Union. Tertiary education is needed in most of them. Malta and Romania are the only countries providing secondary education only. It is impossible to describe the situation in more detail since continuous reforms are under way in most countries.

Parallel preparation (secondary and university) is in several countries. Tertiary non-university education only exists in Belgium, Denmark, Luxembourg, Ireland, the Netherlands, Portugal, Switzerland, Hungary and Poland. Finland, Italy, Greece, Spain, Sweden, Great Britain and Bulgaria have tertiary university preparation. In some countries there is the possibility to choose either university or non-university education (Syslová, 2013). In some cases, the preparation for pre-primary and primary education merge (e.g. England, the Netherlands).

Non-university preparation of pre-school pedagogues and preparation at the level of higher secondary schools usually do not grant the qualification to become a teacher. They focus on the preparation of assistant professions (e.g. assistants and caregivers working mainly in private sector and non-institutional pre-school education).

Czech secondary pedagogical schools integrated the study programme for nursery school teachers in the programme pre-school and extracurricular pedagogy, the graduates of which can find employment in various institutions (after school clubs, free time centres, day care centres, children’s homes etc.). At present, the Framework Education Programme for the study branch 75-31-M/01 pre-school and extracurricular pedagogy (MŠMT, 2009) has the same outputs as the other framework education programmes (pre-school education ISCED 0, primary education ISCED the 1st and 2nd grade of primary schools and K-12 schools ISCED 2) in the form key competences, i.e. competence to learn, decide problems, competence for communication, personal and social, civil and cultural competences. ISCED3A focuses on completing the general education. General education is supplemented with specialized education, labour competence and business activities, mathematical competences and ICT competences.

The advantage of the education at secondary pedagogical schools is a certain “formability” of the young (15-19) students’ personalities. It is possible to develop their practical skills in the area of physical activity, arts etc. Nevertheless, this wide concept of education does not seem to provide enough specific (theoretical) knowledge necessary for the demanding task of being a nursery school teacher.

Pedagogical faculties educating nursery school teachers rely more and more on the concept of the so-called reflective practice (Laboskey, 1994; Schön, 1987). The essence of this concept is to confront one’s own actions.
professional knowledge is acquired through reflecting on activity/practice, which makes the student an active co-author of the findings instead of a passive recipient of information provided by an external observer. Schön (1987) considers this procedure to be the key stage of professional learning.

In accordance with other authors we regard **pedagogical knowledge** (Walterová, 2001; Vašutová, 2004; Janík, 2005; Švec, 2006) as an important part of professional competences. This knowledge is not merely theoretical, the term refers to the practical aspect of cognition as well. Future teachers acquire this practical knowledge through acting in pedagogical situations. Acquisition of practical knowledge is conditioned not only by sufficient theoretical knowledge but mainly by the ability to reflect on pedagogical experience. Some authors (Spílková, 2004; Švec, 1998) consider self-reflective skills to be a **meta-competence** enabling to develop and assess other competences.

Research demonstrates (Oberhuemer et al, 2010) that some countries define formal requirements for the qualification of teachers as well as for their professional preparation. Other countries have requirements for the qualification but no requirements for professional preparation and the rest define no requirements at all. This is also the case of the Czech Republic. Formal requirements are often defined as professional competence or standards.

Despite the situation in the Czech Republic a complex tool **Rámec profesních kvalit učitele** (The Framework of Professional Qualities of the Teacher) has been created, mainly to help teachers and headmasters of nursery schools with long-term self-assessment and evaluation of the teachers’ qualities. This instrument was created as a part of the national project of The Ministry of Education, Youth and Sport (MŠMT) Cesta ke kvalitě (The Way towards Quality) (Tomková, A. et al., 2012), whose objective was to provide supporting material for the self-evaluation of schools. The Framework is based on the **Podkladový materiál pro tvorbu standardu kvality profese učitele** (The Source Material for the Creation of the Standard of Teachers’ Professional Qualities). This document has become important for the definition of categories of this research.

A metaanalysis of 32 studies (Kelley, Camilli, 2007) pointed out the importance of preparatory education. The analysis treated the relationship between the teacher and the child and its impact on education results. The results showed a significant difference between pedagogues with the bachelor’s degree and their colleagues with lower education. The former reached higher efficiency of education.

Furthermore, an American study (Early et al, 2006) examining the relation of the qualification of teachers and the cognitive development of 800 four-year-olds in 237 nursery schools in 6 states suggests that bachelor’s degree is not sufficient. The conclusion of this study includes a recommendation not only to provide further education of teachers but also to change education policy: extend the components of teachers’ quality, mentoring, monitoring and supervision and provide adequate human and material resources. It has been proved that one of the factors influencing the quality of an establishment is the education of its headmaster (Sylva et al, 2004).

Thus, university preparatory education has to be conceived in accordance with Korthagen (2011) as “theory for practice”, the student being a reflective practitioner (Schön, 1987). This concept helps to develop the teacher’s ability to choose suitable procedures responding to the needs of children and families in the continuously changing social contexts. This means that facing a highly complicated matter, the teacher is able in a relatively short time to gather, sort out, evaluate, generalize and use the information needed. Moreover, it means that the teacher is able to learn constantly, i.e. to process new information and save it, draw a lesson from every piece of experience (one’s own as well as others’) and put it in the inventory of one’s competences.

This research should answer the following questions: Does the preparatory education for nursery school teachers ensure sufficient development of reflective skills? Are there differences in the reflective skills of nursery school teachers with university and those with secondary education?
3. Research Methodology

The aim of this research was to learn about the level of reflective skills of nursery school teachers as a key component of the teachers’ professionalism in contemporary nursery schools in the Czech Republic. The research should also show how the teachers understand their activity and interpret it in order to prospectively improve it.

The results of the research should help to reveal the holes in preparatory education of nursery school teachers in the Czech Republic observed from the perspective of the level of their reflective skills and improve the preparatory education for nursery school teachers in accordance with the requirements of the curriculum reform in the Czech Republic in the context of the development of reflective skills.

The research is qualitative and comparative and it uses the methods of semi-structured interview and a video study. The first part of the research consisted in making video recordings of the morning education programme in nursery schools. The recordings were analysed using the software Videograpgh (Rimmele, 2002) and the methods observing the rules of video study analysis (Njvar et al, 2011). The goal of this first part was to identify the selected categories of professional skills described in The Framework of Professional Qualities of the Teacher.

The second part of the research was a semi-structured interview with the nursery school teachers concerning the video recording. The interview focused on monitoring the nursery school teachers’ abilities to reflect on the results of their activity in order to improve it. It was recorded using a Dictaphone and transcribed. The open coding was used (Strauss, Corbin, 1999).

Deliberate sampling was used. The target group comprised teachers with 5-10 years of experience and secondary or university qualification so that it was possible to compare the two. The criterion of 5-10 years of experience is connected with the present state of the curriculum reform under way and of preparatory education.

1) It has not been possible to get the qualification pre-school teacher on the level ISCED 5 until the last 10 years, during which all (9) but one faculty of education in the Czech Republic opened the study programme Teacher Training for Nursery Schools.

2) The content of preparatory education could not be influenced by the humanisation of the school until the White Book (2001) or the first version of the Framework Education Programme for Pre-school Education (2001).

The research sample comprises 8 nursery school teachers, four of whom have the ISCED 3 qualification and the remaining four have the ISCED 5A qualification. The teachers are from two Czech regions – Jihomoravský and Královéhradecký. This is due to the fact that the home faculties of education of the investigators are situated in those two regions.

4. Research results

The research sample is too small for the findings to be generalized. Still, some of the findings agree with the results of the Czech school inspection (2012). The analysis of the video recordings was based on the indicators and criteria from the area of “Learning processes”. All the participant teachers used thematic plans prepared in advance. The assessment was based mainly of the 2nd criterion in Table 1 below, which touches a wide range of methods and forms of work.

Table 1. Learning processes 1
The teacher uses education strategies which enable every child to understand the content of education, develop the desirable competences and gain inner motivation and skills for lifelong learning.

**Criterion 1**
The teacher relies on a plan prepared in advance, responds to the development of the situation and the needs and possibilities of the individual children, does not lose the focus on the fixed learning objectives

**Indicators:**
- Discusses the education objectives with the children in order to obtain information about their experience with the topic and awaken interest in it (inner motivation)
- Reacts to the immediate situation and needs of the children by changing the plan;

**Criterion 2**
The teacher uses a wide range of methods and forms of work, focusing on active learning

**Indicators:**
- Creates educational situations which make the children use previously acquired knowledge and experience;
- Provides space for thinking and confrontation of different opinions and ideas;
- Asks open questions supporting the development of higher levels of thinking, encourages the children to ask questions and appreciates their will to ask (Why, What would happen if…?, How would you explain…?, What do you think…?, What is your opinion…?, How would you solve…?)
- Children play and work in groups often;
- Encourages the development of effective individual ways of learning;
- Presentation of ready made findings and frontal education used only when well justified;
- The core method is learning based on direct experience and active participation of the child, the so-called experience learning;

**Criterion 3**
The teacher differentiates and individualizes the teaching according to the possibilities and needs of individual children, tries to make each child reach his/her personal maximum;

**Indicators:**
- Keeps record about the individual needs and possibilities of children (e.g. in the form of record of observation, portfolio of children);
- Assigns tasks of different difficulty (time limit, qualitative and quantitative differences);
- Takes the individual speed of learning into account, gives enough time for the solution of the tasks;
- Offers the choice between controlled and spontaneous activities;
- Does not present ready made information, presents the content of education as a problem to be solved;

**Criterion 4**
The teacher maintains and arouses the inner motivation to learn

**Indicators:**
- Connects teaching with situations from real life;
- Connects teaching with the personal imaginations and experience of children;
- Presents problems to be solved;

**Criterion 5**
The teacher communicates in a way corresponding with the children’s age, in a refined, clear and comprehensible manner

**Indicators:**
- Uses standard Czech;
- Speaks language understandable for children;
- Uses non-verbal communication a lot.

Further assessment focused on the use of reflection and self-reflection of teachers, which serve them as the basis for the planning of their professional growth and the development of professional competences. This was done using the indicators under criterion 3 in Table 2.

**Table 2 – Learning processes 2**

<table>
<thead>
<tr>
<th>The teacher handles professional challenges and tasks and accepts responsibility for the possible risks connected with their solution</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Criterion 1</strong></td>
</tr>
<tr>
<td><strong>Indicators:</strong></td>
</tr>
</tbody>
</table>

| **Criterion 2** | The teacher continuously reflects on his/her work (not only his/her teaching duty hours), i.e. s/he is able to describe, analyse and assess it, explain the reasons motivating his/her professional actions and possibly propose alternative ways of work; |
|---|
| **Indicators:** | Keeps a pedagogical diary or a professional portfolio with notes testifying to his/her reflections on his/her pedagogical style and its changes corresponding with the children’s development; |
| | Assumes responsibility for his professional decisions. S/he is able to explain them in the context of the recognized theoretical concepts, analyse and assess them and possibly propose alternative solutions; |
| | Is able to assess his/her strong and weak points and work on his/her further professional development; |

| **Criterion 3** | The teacher makes plans concerning his/her professional growth based on reflection and self-reflection and continuously develops his/her professional competences |
|---|
| **Indicators:** | Develops his/her attitudes and values, knowledge and skills from the areas of pedagogy and psychology, didactics, his/her field, law and work and modern information technologies; |
| | Uses the reflections of children, colleagues and superiors for his/her professional development; |
The results proved that teachers with university education relied more on work in groups, to the exclusion of frontal education, which led to greater activity of the children. Almost none of the teachers from either group met the criterion “The teacher differentiates and individualizes the teaching according to the possibilities and needs of individual children, tries to make each child reach his/her personal maximum”. These results agree with the findings of the Czech school inspection (2012). “Connecting teaching with situations from real life”, on the other hand, was evident in both groups of teachers. The same is true of criterion 5 (communication), which was clearly met by both groups. Exceptions to this concern the use of some non-standard forms of words.

The semi-structured interviews with the teachers brought similar results. Both groups demonstrated interest in their profession, when answering the question: What does the profession of a nursery school teacher mean to you? Besides the answers of the kind “the fulfilment of my life” or “supporting and helping the youngest children” it was shown that the teachers often spend their private time preparing teaching aids, making teaching plans and reading professional literature or records about children.

The next question was focused on criterion 2 (Table 2), i.e. the teacher’s ability to analyse, assess and explain the reasons motivating his/her professional actions and possibly propose alternative ways of work. The following question was asked: What have you seen in the video recording and what is your assessment of your work? There were significant differences in the answers of the two groups of teachers. The teachers with secondary education focused on their own person (e.g. I believe that I have reached the given objective, I did all the planned activities) while the teachers with university education described the actions of children more often (e.g. they helped one another, they were able to engage in the demanding activity, they showed independence) and they assessed their work (e.g. I gave the children the space for their own expression, work in groups proves useful, I do well to attune the classroom decoration to the topic of the education offer).

The differences in the answers to the question Would you change anything that you have done? were of similar nature. The teachers with secondary education were generally satisfied with their work and they did not see much room for changes (e.g. I wouldn’t change anything, the current management of the day suits me, I am used to it and so are my colleagues), while the teachers with university education reflected on the possibilities of improving the organisation and the conditions of children’s games and activities (e.g. I could use more products of nature for the group work, I would add graphomotor exercises, I would use the artistic corner for independent activities of the children etc.).
The answers to the question: *What does the self-reflection and the assessment of your work look like?*, differed greatly from teacher to teacher. They said something rather about the level of school management. The answers prove the management of nursery schools to be a very important factor of the teacher’s professional development. Some headmasters do not go on inspections and do not require the self-reflection of teachers. Teachers in several schools fill in a questionnaire concerning the assessment of their own work every year. Only one of the schools involved in this research uses various methods supporting self-reflection – video recordings, portfolios, inspections, interviews with the headmaster focused on evaluation, self-reflection questionnaire. The teacher from this school was the only one capable of proving her ability of self-reflection and she also gave proofs of her progress, i.e. the use of self-reflection for the improvement of teaching. Moreover, she reached better results in the analysis of the video recordings than the rest of the teachers.

5. Conclusions

The findings presented in the text above cannot lead to definite conclusions, nevertheless they brought interesting observations concerning the reality of pre-school education and reflective skills of nursery school teachers. There are positive findings testifying to very good motivation of the teachers to work and their effort to meet the requirements of the Framework Education Programme for Pre-school Education. However, it appears that the teachers are helpless, lacking support and feedback (except one of the examined nursery schools which provides very good support). The teachers often ask themselves questions about the correctness of their actions. They feel the lack of offers of further education. As the findings of the Czech school inspection suggest, the teachers seldom manage to individualize their teaching, which could be caused by the underdeveloped ability to recognize the stage of the child’s development and his/her needs.

Neither group of teachers have really good reflective skills, however, reflective skills of the teachers with university education are slightly better. This can be connected with their better ability to prepare education offer encouraging higher activity of the children resulting in more effective development of key competences (competence to learn, for communication, personal and social competence, civil competence and labour competences) including the necessary asking questions skills (Havigerová, Haviger, 2012).

The number of teachers participant at the research was limited, therefore it is necessary to extend the sample and cover other Czech regions before the results can be used as a basis of the adjustment of qualification requirements for nursery school teachers. The improvement of pre-school education becomes one of the crucial areas of the currently prepared strategy of education policy (MŠMT, 2013). This is based on international studies suggesting that “pre-school education is the key factor of the pupil’s later success at school and in lifelong learning. Investments in this level of education have the greatest return, since the nature of neurological development makes an early intervention the most efficient one and pre-school education serves as a basis of all the subsequent stages of study. Very good pre-school programmes improve school results as well as children’s behaviour, the positive effects being stronger in children living in poverty and children whose parents have lower education.” (MŠMT, 2013, p.8). The concrete steps leading to the improvement are yet to be described in the upcoming documents (National Educational Programme etc.), therefore it is appropriate to support their creation with research findings.

The results of this study will be used for the improvement of tertiary education in the area of reflective skills of the students of the study programme Teacher Training for Nursery Schools at the faculties of education. Moreover, they will be made accessible to the experts in order to point out the pitfalls of the curriculum reform.
Acknowledgements

This paper presents the result of the Specific Research of Faculty of Education of University Hradec Králové number 2114 named: Analysis of reflective skills of teachers of kindergartens.

References


