

Requirements on the Adaptation Process of Technical Subject Novice Teachers

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Abstract

To achieve adequate quality vocational education and training at secondary vocational schools, it is necessary to ensure high-quality teaching staff. In the career system of the Slovak Republic, a beginning pedagogical and professional employee (novice teacher and novice training supervisor) is obliged to undergo an adaptation education, the purpose of which is to master all activities for the effective performance of the profession. Career requirements are of two kinds, personal requirements regarding the expertise in the given field and requirements regarding the general competencies to successfully perform the pedagogical employee profession. The paper presents the results of an inquiry aimed at the content and scope of adaptation education at secondary schools in the Bratislava region with a focus on novice teachers of technical subjects.

Keywords: Novice teachers, Adaptation process, mentors, Development of novice teachers' competencies, Technical subject teaching

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1 Introduction

Beginning pedagogical and professional employees (novice teachers and novice training supervisors) in Slovakia are obliged to undergo an adaptation education to master all activities for the adequate performance of their profession. Career requirements to perform the job effectively are of two kinds: personal requirements regarding the expertise in the given field and conditions regarding the general competencies to successfully perform the pedagogical employee profession. One of the essential guidance practices for novice teachers starting their professional careers in teaching is mentoring. In Slovakia, novice teachers' professional induction is legislatively guaranteed by Act No. 317/2009 on teaching staff and professional employees. This Act officially introduces the role of mentor-teacher (so-called introducing teacher), and the position of novice teacher (§ 28, Act No 317/2009). In the Act, the function of a mentor is briefly defined, together with the manner of their appointment and definition of the job position of a mentor-teacher or professional employee as somebody who "performs specialised activities together with the performance of educational activities ..." and who is responsible for the implementation of novice teachers' induction and its continuous monitoring. The position of a mentor teacher can then be performed by an independent educator (teacher) or professional employee with the first attestation.

Compared to some other countries' school policies, no complex mentor training programme for mentor support has been developed in Slovakia. The first attestation and several years of teaching experience are adequate preparation for this position. However, in recent decades, the role of mentors in the education system has become increasingly important and at the same time, more and more attention is paid to the issue of their training (Duse et al., 2017; Gabrhelová & Pasternáková, 2016; Gadušová & Vítečková, 2013; Hrmo et al., 2015; (Le & Vásquez, 2011; Whitehead & Fitzgerald, 2006). Examples of various initiatives focused on professional mentor training provision can serve two international projects, the main co-ordinator of which is Constantine the Philosopher University in Nitra. One is the project *Mentor Training (Mentra*, Erasmus+2020-1-SK01-KA201-078250, <https://www.mentra.ukf.sk/>), and the second one is the project *Mentor's Vademecum (MeVa* <http://www.ktit.pf.ukf.sk>). In connection with these two projects, there was carried out an inquiry aimed at the content and scope of the technical subject novice teacher's adaptation education among the technical subject novice teachers at upper secondary vocational schools in Bratislava region.

2 Mentors as the Key Factor of the Novice Teachers' Adaptation process

The competence of teachers and ways in which to improve their practice has been the focus of a variety of initiatives across Europe (Gadušová, Hartánská, 2015). Much of this has concentrated on the production of explicit indicators for teacher quality (Strong, 2011; Sclafani, 2009; Zumwalt, Craig, 2005), in terms of competence, standards (Koster, Dengerink, 2008; Fisher, 2005; Houston et al., 2002;), learning goals and outcomes, and key qualifications (Common, 2005; Standards, 2005; Darling-Hammond, Youngs, 2004). The importance of career-long updating and development for practising teachers has been recognised (Danielson, 2007 Cochran-Smith, 2003), and practising teachers have become increasingly involved in training new entrants (Radulović et al., 2022) to the profession in many countries. To support this movement, the European Commission has developed the Common European Principles for Teacher Competencies and Qualifications (Common, 2005). Teachers Matter (OECD, 2005) recognises and stresses the need for more attention to the needs of those beginning their careers.

Already Trotter (1986) drew attention to the fact that a teacher needs many years of teaching experience before becoming skilful. The transition phase from a teacher trainee to a novice teacher involves different challenges, experiences, and roles. Novice teachers must improve their knowledge and skills acquired during their pre-service training and increase the effectiveness of their teaching techniques to achieve the status of expert teachers. In order to achieve this, novice teachers should be provided with the necessary assistance to help them manage the early phase of their teaching career (Solodkova, Ismagilova, Polyakova, 2017).

Many studies have been done to explore the issues and problems faced by novice teachers (Vítečková et al., 2016; Gadušová, Vítečková, 2014). Typical findings of them are that there is a lack of teaching and learning skills among novice teachers in classroom teaching and a need for novice teachers to be helped so they can improve their teaching skills. Additionally, classroom activities seem to be the most significant problem faced by novice teachers, as it causes them to fail to apply the knowledge, they receive during their classroom training (Saidin et al., 2020). Moreover, novice teachers who are not fully prepared to enter the teaching profession can also adversely affect the student's performance, which subsequently can cause a decline in their schools' grades. The further problems novice teachers face when they are first posted to schools are pointed out already Calderhead and Shorrock (1997). According to them, novice teachers have problems with their adaptation to the actual classroom environment, with proper guidance in managing students in classrooms, managing relationships with students in the classroom, with observing students' understanding of lessons, and with adapting to their roles in school's social structure. To overcome all these obstacles, the novice teachers should be given proper guidance. However, there is no common focus on the specific needs of novice teachers or the concomitant needs of those who will

induct and support them in schools, i.e. mentors (Vítečková et al., 2016). In several EU countries mentors have become a valued and integral part of the pre-service training of teachers (Skaniakos, Penttinen, Lairio, 2014); in a few countries, they are also involved in the induction and support of new entrants to the profession. However, in most countries, there is no adequate preparation for teachers to become trained and qualified to act as mentor teachers. The teachers usually act as mentor teachers only based on their previous practice. This was a reason why in four of the Central European countries (Slovakia, Czech Republic, Hungary and Serbia) arose an initiative to prepare a program in the frame of which both in-service teachers, as well as mentor teachers, could be trained to perform adequately in the mentor teacher position (Hašková et al., 2022). Within the already mentioned international project, *Mentor Training* (a superstructure of which in a specific meaning is the other already mentioned Slovakian – Serbian bilateral project *Mentor's Vademecum*), six higher education institutions from the four Central European countries have been designing teaching materials (), which should:

- support mentors' professionalism and equip them with relevant mentoring knowledge and skills, thus, making them more self-confident about their role;
- increase the level of mentors' (or the teacher trainers and introducing teachers') mentoring competencies and understanding of their importance;
- contribute to creating professional but more trainee-friendly education/adaptation environments.

However, every medal has its reverse and obverse. To increase mentors' professionalism, it is not sufficient to know only the professional needs of the mentors. One must also know the participants' needs, i.e., teacher trainees but mainly of the novice teachers, and how the novice teachers evaluate the support they got from their mentors during their adaptation process. That is why there was carried out an inquiry aimed at the content and scope of the adaptation process of the novice teachers of technical subjects teaching at secondary vocational schools in Bratislava region.

3 Methodology of the Carried-Out Inquiry

One of the identified novice teachers' weaknesses, and in teacher training, very often the underrated area is the administration of pedagogical documentation (Vítečková et al., 2016). According to Vítečková (2018), only 10% of novice teachers do not declare the need for help or guidance. Approximately one-third (31%) declare only a rare need to obtain some help or guidance. In comparison, quite a considerable number 43% of novice teachers usually need help and advice, and even 16% of novice teachers need to be supported in this work very often. Based on the stated, we believe mentors of novice teachers should pay great attention to familiarising the novice teachers with this issue. We tried to find whether they do it and

how the novice teachers are satisfied with the support the mentors give them in this area during their adaptation process based on a questionnaire inquiry.

Within the questionnaire inquiry, the novice teachers (i.e., teachers with teaching practice of up to 5 years) stated from their point of view how they were satisfied with the way and scope in which their mentors had familiarised them with the administration of 22 basic kinds of pedagogical documentation (stated in Table 1). The respondents express the satisfaction scale rate using the “*definitely not satisfied – rather not satisfied – neutral – rather satisfied – definitely satisfied*”. To be satisfied means using the scale that the mentor appropriately acquainted the mentee with the given topic to perform the relevant activities independently. Subsequently, at processing the collected research data, the used scale was transformed into the point values of 1-5. This assessment was the critical item of the questionnaire inquiry. Besides this item, there was an open question in which the respondents could state further activities they consider essential for teacher job performance. Mentors should familiarise novice teachers with them during their adaptation process. Another “open” question was the item in which the respondents were asked to state how long lasted their adaptation education (“open” it was as there were offered no answers. However, the possible answers were limited because, according to the legislation, it should be completed within one year of the novice teachers’ practice).

The questionnaire was administered electronically to 52 secondary schools in the Bratislava self-governing region, from which 15 were vocational-technical schools, 16 were grammar schools, and 21 were other (non-technical) schools. From the addressed schools, 63 teachers of technical subjects with teaching practice of up to 5 years responded to the call to participate in the administered questionnaire inquiry. Return of the questionnaires per addressed schools depended on two factors: the scope of the technical subjects taught at the concerned school. The other one was the number of novice teachers of these subjects acting at the school (the term novice teachers describe the beginning teachers with teaching practice not longer than five years).

4 Results and Discussion

Results of the assessment of the novice teachers’ satisfaction with how their mentors had familiarised them with the administration of 22 different kinds of pedagogical documentation are summarised in Table 1.

The percentage score in the table expresses the percentage rate of the achieved number of points from the total sum of 315 points, which each kind of the given pedagogical documentation could achieve. As the total number of respondents was 63, and each could assess each kind of the stated pedagogical documentation with a maximum of 5 points, each of the given items could achieve $5 \times 63 = 315$ points.

Assessed item	Percentage score
Getting familiarised with pedagogical documents - class book, class report, managing filling in the forms	86.98
Getting familiarised with the School's Educational Program, curriculum, content and performance standards, cross-cutting topics, and thematic educational plans	86.98
Getting introduced to methodical instructions, and assessment and classification of students	85.71
Getting familiarised with the School's Regulations, Organisational Rules, Work Rules, Operational Rules	85.40
Getting familiarised with the rules for filling in the electronic class book (ECB) - recording grades, attendance and lessons	83.81
Getting familiarised with thematic educational plans creation	82.86
Getting familiarised with school forms and their recording	81.90
Getting familiarised with the pedagogical and organisational instructions of the given school year	81.90
Instructions for preparing various school events and extracurricular activities, e.g. insurance of different competitions or subject Olympiads	81.59
Instructions on how to solve the problems with student's school attendance. and consult it with the parents	81.27
Instructions for completion of the class book, class report and personal records	80.95
Instructions for dealing with students' poor school attendance. through consultation with an educational advisor	80.63
Instructions for writing activities during lesson hours	80.32
Getting familiarised with working with the school information system	80.00
Getting familiarised with the procedures applicable in the event of an accident, or insurance claim, when releasing students from lessons	79.37
Getting familiarised with the school director's advisory bodies	78.41
Instructions for the fulfilment of the thematic educational plans, to the preparation of documentation, e.g., related to schools in nature, excursions, and trips, following the valid internal directives	77.14
Dealing with analysis and solution of the main tasks related to the work of the subject committees, dealing with the responsibilities resulting from their sessions	76.19
Instructions for finalisation of documents for (quarterly, half-yearly, three-quarterly, and end-of-year) classification	76.19
Getting familiarised with the school library and the literature available in it	73.97
Getting familiarised with checklists, class inventory control reports, and work of the inventory committee	71.11
Getting familiarised with the printing of (midterm, and end-of-year) certificates	59.68

Table 1: Ranking of the areas of the pedagogical documentation according to the novice teachers' satisfaction with how their mentors had familiarised them with the issue of their administration.

At first glance, the obtained results (ranking of the areas of the pedagogical documentation in dependence on the level of familiarisation of the novice teachers with them presented in Table 1) confirm the logically expected fact that the immediate attention both in pre-gradual training of teachers, as well as in adaptation education of novice teachers is paid to the critical kinds of pedagogical documentation. These are the items ranked at the first eight places, pedagogical documentation connected with common everyday teaching activities of teachers (items with achieved values of percentage scores more or less 82 and more percentage). The second group of pedagogical documentation in the obtained ranking also consists of crucial pedagogical documentation. However, in contrast with the first group of pedagogical documentation. However, these pedagogical documentations are an integral part of everyday teaching activities; they are not included in their everyday teaching activities. As such, the following six items of the obtained ranking ranked ninth to fourteenth with the obtained percentage score from the interval 80 – 81.6. The third group of pedagogical documentation consists of the kinds of documentation with a percentage score of less than 80%. This is the documentation with which the teachers come into contact either in exceptional cases of their activities or only after some long-time of their pedagogical practice; what is the reason why the mentors do not pay attention to get the novice teachers familiarised with them at the very beginning of their practice.

Although one can say that the inquiry did not bring any new knowledge, as the results (results presented in Table 1 and the above-presented comments) could be logically expected, a deeper analysis of the collected data brought one interesting significant finding.

As the duration of the adaptation education led by the mentor differs, the respondents were asked to state how long it lasted in their case (according to the legislation, it should be completed within one year of the novice teachers' practice, who decides about it is the head of the school, not the mentor). The results showed that in the case of 43% of the questionnaire respondents, their adaptation education was less than three months (54% stated its duration was 3 – 12 months, and 3% even more than one year). The deeper analysis showed that just those respondents, the duration of the adaptation practice were less than three months, stated dissatisfaction with their familiarisation with the kinds of the first group of the pedagogical documentation. The figures presented in Table 1 can be understood in such a way that the items ranked in the first eight places represent essential pedagogical documentation, with which all novice teachers should be wholly familiarised, and the figures show us still a 10 – 20% reserve of the novice teachers' concerned knowledge. Based on the analysis, this "reserve" is due to novice teachers' weaknesses (drawbacks) with the short duration of their adaptation education. These were those who stated a low satisfaction with how their mentors had familiarised them with the issue of their administration. The main conclusion resulting from this finding is that three-month adaptation education is not enough. It should be carried out in its maximal length of 12 (or ten concerning the duration of the school year) months. This will allow the mentors:

- wholly to familiarise the novice teachers with all basic kinds of pedagogical documentation,

- to familiarise the novice teachers also with the pedagogical documentation related to particular activities of teachers (not every day performed activities).

Another “open” question was the item in which the respondents were asked to state how long lasted their adaptation education (“open” it was as there were offered no answers. However, the possible answers were limited because, according to the legislation, it should be completed within one year of the novice teachers` practice).

The possibility to state in the questionnaire open question topics, which they consider to be essential for teacher job performance, and mentors should make the novice teachers familiarised with them during the novice teachers` adaptation process was used only by 19 respondents. The list of the topics stated in the case of 14 of them is as follows:

- familiarisation with general rules and obligations,
- dates of the teacher's work schedule,
- explanation of Edupage and familiarisation with the school premises,
- explanation of Edupage more thoroughly,
- information about the group of students, about the organisation of time, etc.,
- communication and assessment of integrated students,
- how to work with integrated students,
- level of students' intelligence,
- issue of students` intelligence,
- instructions on how to solve conflicts with students and parents,
- communication with parents, solving a conflict situation,
- feedback on own teaching,
- familiarisation with the structure and history of the school,
- ethics code.

The other five respondents did not know what else they would appreciate discussing with their mentor (some responses or not claiming any response were also influenced by the fact that the respondent had not completed his/her adaptation education):

- I was not familiarised with anything yet,
- everything mentioned above is probably the most essential, especially if it is necessary to focus on such practical matters as using what is available in the school, to whom the same applies, where certain aids can be found,
- All that are listed,
- I cannot think of any others,
- I cannot think of anything yet.

5 Conclusion

Although the position of the mentors in the education system in many European countries is also introduced in their legislation, there is no consensus on the professional mentor profile, qualification, and duration of novice teacher adaptation education. Mentors are dependent on themselves when carrying out the mentoring activity. The finding resulted of the presented inquiry can be understood as a contribution to solving the stated issues.

The main finding regards the duration of novice teachers' adaptation education. On the one hand, the lengths of the adaptation process should allow sufficient time for the novice teacher to transfer from the position of a teacher trainee to the position of a qualified, competent teacher. On the other hand, it should offer sufficient time to the novice teacher's mentor to familiarise his/her effort with the school environment and all duties and responsibilities accompanying the teaching career.

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