MINIMUM PEDAGOGICAL EDUCATION FOR UNIVERSITY TEACHERS

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Abstract

Teaching is one of the most difficult and demanding professions. At the same time, it cannot be performed by everyone because a good teacher has to master a range of competencies and personal qualities related to this profession. Most frequently, these competencies are mentioned in the context of the teaching profession: knowledge of the subject matter, pedagogical competence, managerial, civic and communication competencies, creative and critical thinking and competencies related to the use of modern information and communication technologies.

We frequently hear about teachers burning out, which is conditioned by several successive and also unrelated factors. These include continuous contact with children and adolescents, mutual and ongoing cooperation with colleague teachers, low societal prestige of this profession in the Czech Republic and their low financial compensations, and a number of others.

Teachers of pre-school, primary and secondary education are trained in the Czech Republic in specialised institutes, which are mostly the faculties of Czech universities, namely pedagogical and natural science faculties and faculties of art. Their students become experts not only in their specific fields but also specialists in the fields of psychology, pedagogy and didactics. The question remains about university studies or rather university educators. It is clear that teaching at universities is done by scholars and experts in their respective fields. However, it is not known if they are also educated in pedagogy, psychology and didactics, and have been through the so-called pedagogical minimum.

The paper presents a research carried out at the selected faculties of two universities of the Moravian-Silesian Region of the Czech Republic, namely VSB – Technical University of Ostrava and University of Ostrava in the period between December 2018 and January 2019, which aimed at answering whether university teachers have knowledge in pedagogy, psychology and didactics and if this knowledge is important for their teaching.

Keywords: teacher, university teacher, pedagogy, psychology, didactics, pedagogical minimum, minimum pedagogical education, pedagogical competencies.

1 TEACHER AND THEIR POSITION IN THE EDUCATION PROCESS

The teacher is the person number one of the educational process. They are the main source of relevant professional information for pupils and students. They create and implement the educational process. The general public frequently uses the term “teacher” to refer to a specialist in a particular science field whose knowledge and skills are extended by a “pedagogical minimum”, i.e. knowledge of the fields of pedagogy, psychology and didactics of their field; or to an employee of a school facility who performs direct pedagogical activity but without proper pedagogical education. According to Pedagogical Dictionary [8], a teacher is one of the key factors in the learning process, a professionally qualified educator who is co-responsible for the preparation, management, organization and outcome of the process. The authors of the vocabulary state that the teacher is traditionally regarded as the main actor of education, ensuring the transfer of knowledge to pupils, co-creation of the educational environment, the classroom climate, the organization and coordination of pupils’ activities, directing and evaluating the learning process. Podlahová et al. [6] define the teacher this way: “A professionally qualified pedagogue responsible for the preparation, implementation and outcomes of the educational process, traditionally regarded as the main subject of education.”

According to the currently valid Education Act (2004), education in Czech schools and school facilities is provided by pedagogical staff who have specific rights and obligations defined by this law. The Czech Act on Pedagogical Staff [3] defines them as follows „A pedagogical worker shall be a person who performs direct teaching, direct educational function, or direct special educational
needs activities or direct pedagogical-psychological activities directly affecting learners thus implementing education and training pursuant to the special legal regulation (hereinafter referred to as “direct educational function”) who is an employee of a legal person carrying out the activities of a school, or an employee of the state, or a head teacher unless such a person is in a labour-law relation to a legal person carrying out the activities of a school or who is not an employee of the state. A pedagogical worker shall be also an employee performing a direct educational function in facilities providing social care.”[4].

To perform their profession, every teacher must have, in addition to excellent knowledge of their field, also knowledge of pedagogy, psychology and didactics of their particular scientific field, they also need to have mastered competences and apply them constantly in teaching. By competences we understand “personal qualities” (i.e. a set of knowledge, skills and attitudes) that entitle/predestine a teacher to successfully handle the tasks and situations which occur in the teaching profession. The main competences of teachers include: competence for learning, competence for problem-solving, communicative competence, social and personal competence, civic competence, work competence. Let us add that the teacher’s competence in Pedagogical Dictionary [8] is defined as a set of professional skills and dispositions which a teacher should possess in order to be able to practise their profession effectively; they are built on personal and professional competences of each individual.

2 TEACHER VS. UNIVERSITY TEACHER

Teaching at universities in the Czech Republic is carried out in accordance with the Higher Educational Act. According to Slavík [11], higher education encompasses the entire academic-oriented level of the education system, which connects to upper secondary schools and continues with lifelong learning. Miklošíková [2] adds that the university level of the education system is characterised by the type of institution, higher education legislation, internal standards, organisational structure, academic culture, the structure of educational programs and, finally, the nature of educational processes. Act No. 111/1998 Coll. § 70 describes the academic staff as university employees who perform both pedagogical and scientific, research, developmental, artistic or other creative activities and are obliged to uphold the good name of their university. According to the aforementioned Act, academics include professors, associate professors, lecturers, assistants and scientific, research and development staff involved in teaching activities. The law also adds that at universities, academics are the teachers. Miklošíková [2] defines a university teacher as follows: “The university teacher performs pedagogical, scientific, research, developmental, and also artistic activities and subsequently applies them in teaching students and graduates. Their typical activities include:

- developing study programmes, methodologies and learning practices that are then introduced into teaching,
- conducting seminar, yearly, bachelor, master and dissertation theses,
- providing student consultations, educational and expert services,
- publishing activity,
- registering pedagogical activity.”[2]

In connection with university teachers, many authors also define their competences, i.e. the competences of university teachers. Vašutová (2002 in [6]) explains that they involve a set of specific and highly expert knowledge, skills, attitudes and experience that reflect the dynamics of tertiary education processes and the transformation of the student population. At the same time, she draws attention to the high intellectual and character qualities, individual interests and educational needs of university students. The competences of university teachers are: expert and subject-related; psychological; communicative; managerial and organisational; advisory and consultative; and organisational-administrative. Simultaneously, the pedagogical competences of university educators must not be neglected – competences related to teaching and problem-solving; social, personal, civic, professional and motivational competences; creative and critical problem solving, competences associated with the optimal use of modern information and communication
technologies or the competence of a comprehensive view of the education process and one’s own pedagogical activities.

Primary and secondary school teachers acquire the above-mentioned competences during their studies at relevant institutions. University teachers teaching at (not only) technical universities are most frequently graduates of the given scientific fields, i.e. engineers, who continue to increase their scientific expertise at the parent institute or at another university. As such, graduates become doctoral students, doctors, associate professors and professors. Only a small part of the technical staff of technical schools will supplement their education with the aforementioned pedagogical minimum. To clarify and specify the pedagogical minimum – it consists of a set of three social science disciplines that help increase the effectiveness of the educational process. Pedagogy is one of the three. It is defined as an educational discipline. Průcha et al. [8] define it as: “In a professional sense, the science and research dealing with education and upbringing in various spheres of life of society.” [8] Průcha [7] defines its basic concepts and writes: “Education is considered to be a deliberate effect on the personality of an individual in order to achieve changes in different components of personality. The concept of education is generally understood in pedagogical theory as a process of deliberate and organised acquisition of knowledge, skills, attitudes, etc., typically realized through school teaching.” [7] Didactics is defined as the theory of education and teaching in various professional publications. Skalková [10] states that didactics deals with the issues of content that, as a result of the socio-historical experience of mankind, becomes the individual property of pupils in the process of teaching. At the same time, it deals with the process that characterises the activities of teachers and pupils, during which pupils acquire this content, i.e. through the process of teaching and learning. The third social science discipline is psychology, which is necessary for teachers to master and deeply understand. Fürst [1] states that it is defined in terms of both its subject and the methods used and in the spirit in which these methods are applied. He further adds that in the strict sense, the subject of psychology is the exploration of a person, both the way they behave and the exploration of the state of their consciousness, emotional states and experiences. Simultaneously, psychology attempts to reveal and formulate the laws of these phenomena, as well as to find out how they were created in order to be able to influence or change them. Plháková defines it as follows: “Psychology is a science that studies human behaviour, mental processes and physical events, including their mutual relationships and interactions.” [5]

3 PEDAGOGICAL EDUCATION SURVEY AMONG UNIVERSITY TEACHERS AT SELECTED FACULTIES OF THE MORAVIAN-SILESIAN REGION UNIVERSITIES – GOALS AND SURVEY METHODOLOGY

The presented survey had two specific objectives: 1) To find out whether the university teachers of individual faculties of the Technical University and the Faculty of Medicine obtained the so-called pedagogical minimum, and 2) And whether further education in the field of pedagogical minimum is evaluated positively by higher education teachers. The survey of the pedagogical minimum of university teachers took place between December 2018 and January 2019 with the use of classic questionnaire survey method. Surveyed university teachers were employees of two universities from the Moravian-Silesian region of the Czech Republic, specifically VŠB - Technical University of Ostrava and the University of Ostrava. Only the Faculty of Medicine was selected for questionnaire research at the University of Ostrava because other faculties of this university are involved in the preparation of future teachers for pre-school, primary and secondary schools and their teachers are in many cases themselves graduates of this institution, such as Faculty of Science or Faculty of Education. The second selected university was the Technical University of Ostrava, whose priority is technical education. Teachers of all faculties of VŠB – Technical University of Ostrava were included in the survey (HGF – Faculty of Mining and Geology, FBI – Faculty of Safety Engineering, FMT – Faculty of Materials Science and Technology, FS – Faculty of Mechanical Engineering, FAST – Faculty of Civil Engineering, EKF – Faculty of Economics, FEI – Faculty of Electrical Engineering and Computer Science). The addressed university teachers answered several questions about their teaching methods, their further education in the so-called pedagogical minimum and their length of teaching experience. A total of 400 university teachers were approached. As a result, 379 university teachers participated in the survey.
4 RESEARCH RESULTS

Tab. 1: Number of academic workers on VŠB – TUO and UO with the pedagogical minimum
(Author: Iva Vlková, 2018, 2019).

<table>
<thead>
<tr>
<th>University – Faculty</th>
<th>Total number of approached academic workers (also in %)</th>
<th>Number of AW without pedagogical minimum (also in %)</th>
<th>Number of AW with pedagogical minimum (also in %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VŠB – TUO HGF</td>
<td>68 (100 %)</td>
<td>59 (87 %)</td>
<td>9 (13 %)</td>
</tr>
<tr>
<td>VŠB – TUO FBI</td>
<td>26 (100 %)</td>
<td>22 (85 %)</td>
<td>4 (15 %)</td>
</tr>
<tr>
<td>VŠB – TUO FMT</td>
<td>37 (100 %)</td>
<td>35 (95 %)</td>
<td>2 (5 %)</td>
</tr>
<tr>
<td>VŠB – TUO FS</td>
<td>46 (100 %)</td>
<td>41 (89 %)</td>
<td>5 (11 %)</td>
</tr>
<tr>
<td>VŠB – TUO FAST</td>
<td>59 (100 %)</td>
<td>54 (92 %)</td>
<td>5 (8 %)</td>
</tr>
<tr>
<td>VŠB – TUO EKF</td>
<td>32 (100 %)</td>
<td>29 (91 %)</td>
<td>3 (9 %)</td>
</tr>
<tr>
<td>VŠB – TUO FEI</td>
<td>45 (100 %)</td>
<td>41 (91 %)</td>
<td>4 (9 %)</td>
</tr>
<tr>
<td>UO – FM</td>
<td>66 (100 %)</td>
<td>60 (91 %)</td>
<td>6 (9 %)</td>
</tr>
<tr>
<td>Total</td>
<td>379 (100 %)</td>
<td>341 (90 %)</td>
<td>38 (10 %)</td>
</tr>
</tbody>
</table>

The table clearly shows that only a small part of academic staff studied the pedagogical minimum, namely 38 teachers (10%) out of a total of 379 (100%) approached university teachers. In a more thorough analysis of the data, it was found that some university teachers (15; 40%) began their studies at an education or science faculty, where they studied teacher programmes in various fields. Only after graduating from their master’s program did they begin to pursue their scientific career at the Medical Faculty of the University of Ostrava or at the Technical University of Ostrava. Other respondents (23; 60%) stated that they had obtained their pedagogical minimum at courses of IGIP (Engineering Pedagogy), which are carried out at VŠB – Technical University of Ostrava within the framework of further education of pedagogical staff. When evaluating the quality of their teaching before and after completing the pedagogical minimum, all respondents clearly agreed that acquiring knowledge and skills from pedagogy, didactics and psychology, facilitates and improves their teaching practice; it makes it easier for them to write study supports, better communicate with students and colleagues, it is easier for them to prepare materials for teaching, they innovate their lessons more frequently and write scientific articles with more ease, etc.

Tab. 2: Teaching and research work areas of improvements of university teachers with the pedagogical minimum (Author: Iva Vlková, 2018, 2019).

<table>
<thead>
<tr>
<th>Area of improvement</th>
<th>Communication with students (Number of respondents and positive answers)</th>
<th>Communication with colleagues and research staff (Number of respondents and positive answers)</th>
<th>Teaching preparation (Number of respondents and positive answers)</th>
<th>Study materials (Number of respondents and positive answers)</th>
<th>Scientific articles (Number of respondents and positive answers)</th>
<th>Other academic publications (Number of respondents and positive answers)</th>
<th>Research results presentation (Number of respondents and positive answers)</th>
<th>Improving own classes (Number of respondents and positive answers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of respondents</td>
<td>38 (100 %)</td>
<td>38 (100 %)</td>
<td>38 (100 %)</td>
<td>38 (100 %)</td>
<td>38 (100 %)</td>
<td>38 (100 %)</td>
<td>38 (100 %)</td>
<td>38 (100 %)</td>
</tr>
<tr>
<td>Number of positive answers</td>
<td>38 (100 %)</td>
<td>38 (100 %)</td>
<td>38 (100 %)</td>
<td>38 (100 %)</td>
<td>38 (100 %)</td>
<td>38 (100 %)</td>
<td>38 (100 %)</td>
<td>38 (100 %)</td>
</tr>
<tr>
<td>Number of negative answers</td>
<td>0 (0 %)</td>
<td>0 (0 %)</td>
<td>0 (0 %)</td>
<td>0 (0 %)</td>
<td>0 (0 %)</td>
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5 FURTHER EDUCATION OF UNIVERSITY TEACHERS

Any further education is challenging for employed people. They frequently have to combine further study with their work, family, interests and hobbies. In addition, continuing education in the so-called pedagogical minimum focuses on social science disciplines that can be problematic for people with technical education and thinking. VŠB – Technical University of Ostrava provides not only its employees with the possibility of education in the field of pedagogical minimum within its educational programme Engineering Pedagogy. The content of this programme is an education in pedagogy, didactics and psychology. The program is designed in such a way that its participants must actively work and engage in individual tasks. The whole training programme is under the auspices of the International Society for Engineering Pedagogy IGIP (http://www.igip.org). Programme graduates can apply for an “ING Paed IGIP” title. The whole program lasts three semesters. Participants can earn a maximum of 35 credits. It is concluded with final examinations in pedagogy, didactics and psychology and a presentation of the final thesis.

The IGIP training program is most frequently attended by employees of the VŠB – Technical University of Ostrava, whether they are directly academic staff or doctoral students; also employees of the University of Ostrava, specifically those teaching at its medical faculty. The curriculum is highly praised for its interactivity and teachers, who are experts in their respective fields. At the same time, in the feedback evaluation of the participants, there are positive comments on the high demands of the programme, on the objectivity of its teachers, on the excursions offered and on other aspects. The only recorded negatives refer to the time demands of the education programme.

6 CONCLUSION

In-service education is an integral part of teachers at all levels and types of schools. In the case of university teachers, it is a standard in their professional sphere. A smart and useful choice for university teachers of not only technical subjects but also graduates of medical or legal faculties may be the study of the so-called pedagogical minimum, represented by studying subjects of pedagogy, didactics and psychology. The study provides teaching skills and craft that definitively belong to the educational process. However, the questionnaire survey revealed that further education in this sphere is neglected among university teachers. At the same time, however, the graduates of the educational programme mention its numerous and clear positives and advantages.

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REFERENCES

