

Attitudes of Secondary School Teachers Towards Professional Development and Innovation

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Abstract

Being a teacher in vocational education is a challenging profession. The demands on teachers' personal and professional qualities are increasing. Maintaining constant positive motivation to work and further professional development is not easy. In secondary vocational schools in the Czech Republic, teachers of practical teaching and theoretical vocational subjects often work side by side. This paper aims to report the results of a survey conducted at a secondary vocational school focused on gastronomic technology that focused on teachers' attitudes to professional development, preferences in further education and attitudes to innovation. The survey was completed through a questionnaire in the spring of 2022, and 117 teachers responded. This paper will present the results of the survey aimed explicitly at comparing the attitudes and opinions of above defined two different groups of teachers, as well as comparing the results according to professional-demographic characteristics.

Keywords: Professional development, Further education, Secondary school teachers, Vocational education

1 Background

The desired values of the future are more than others creativity and initiative, professionalism, with personal responsibility. Such a change in education can only be implemented with teachers' active participation and involvement. The teaching profession is now becoming far more demanding and complex than it was before. The demands on teachers' personal and professional qualities are increasing, as are their duties and responsibilities. Quite frequently,

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it is possible to encounter teachers who are no longer motivated to work and remain in education for the sake of existential reasons (cf. Lazarová, 2011). At the same time, we can read in the professional literature that the older the teachers are, the richer their professional experience is. Compared to young, less experienced teachers, they can better cope with complex situations of school life (Průcha, 2009). The quality of teachers is generally “considered to be a decisive factor that has a significant impact on the quality of school education” (Spilková, 2010, p. 21). The personality of a teacher consists of a complex of knowledge and pedagogical skills, personal qualities, and behavioural patterns. A quality teacher possesses professional and pedagogical competencies to perform their profession, acquired by studying a specific field in secondary or higher education and subsequently by further education and professional development.

The so-called Education Act defines secondary education in the Czech Republic by Act No. 561/2004 Sb. on preschool, primary, secondary, higher vocational and other education. This Act also prescribes how a teacher can obtain a professional qualification. The Education Act clearly defines the objectives and organisational form of secondary education. Secondary education is divided into theoretical and practical teaching and education outside the classroom. Practical teaching is divided into vocational training, apprenticeship and professional or artistic practice and sports training, according to the sub-disciplines of education. During the period of practical training, the regulations of the Labour Code, which stipulate working hours, occupational safety and health, the care of the employees and working conditions for women and adolescents, and other regulations on occupational safety and health, apply to pupils (Czech Republic, 2004). The competent teaching staff is responsible for compliance with these guidelines and the entire course of practical training. During practical training, pupils perform some work activities that are derived from the content of the training. In the case of some productive work, pupils may be financially rewarded for it.

There are different types of teachers in secondary education. The teaching profession is one of the regulated professions. The conditions for its performance, including requirements for professional qualifications, education, or experience, are defined in the Czech Republic by Act No. 563/2004 Sb., on Pedagogical Staff. In particular, Section 9 regulates the conditions for obtaining the qualification of a secondary school teacher (Czech Republic, 2004). In general, secondary schools are most often staffed by teachers of general education subjects, vocational subjects, practical teaching, and vocational training. Their structure can be seen in the table below.

	Converted hours					
	men		women		Total	
Teachers of general education subjects	7155.5	31.8%	15329.1	68.2%	22484.6	58.8%
Teachers of vocational subjects	4151.3	44.3%	5216.3	55.7%	9367.6	24.5%

Teachers of practical teaching and vocational training	3893.4	60.7%	2517.8	39.3%	6411.3	16.8%
Total	15200.2	39.7%	23063.2	60.3%	38263.5	100.0%

Table 1: Converted number of secondary school teachers in the 2018/2019 school year by gender and their average age

In principle, readiness and willingness for lifelong learning are a prerequisite for the teaching profession. Lucas (2007, p. 365) states that, in general, teachers' professional development can be interpreted "as their changes over time" – change in knowledge, change in attitudes, change in teaching practice, etc. Adamec (2019, p. 166) agrees with this; he perceives professional development as "a process of permanent coping with changes in the profession which includes all dimensions of teachers' personal development and competencies ". In doing so, the professional development of teaching staff should be the development of existing competencies and the acquisition of new ones to enhance the education of the students entrusted to them.

2 Motivation for Work and Further Education

The individuality of each of us is linked to specific relationships, and changes in these relationships are also the result of changes in behaviour and motivation. Some form of motivation is hidden behind every human activity. According to Egger (2005, p. 4), motivation is "a useful long-term management tool in understanding and assisting individuals in different job roles to bring out the best in themselves". Thus, motivating staff means understanding the factors that lead to their motivation and those that hinder it. Motivated employees are more willing to take on tasks, are more diligent, make fewer mistakes, achieve better results, and cause fewer problems and conflicts.

Thus, motivation to learn is also determined by a combination of internal and external factors that either feed or hinder it. While intrinsic motivation stems directly from the person and thus demonstrates that the activity is pleasurable and brings them pleasure and satisfaction, extrinsic motivation results from external pressure. Adult individuals often enter education for both of these reasons, where employer's pressure may be supported by a desire to learn something new (Rabušicová, Rabušic & Šedřová, 2008, pp. 97-98). This is the ideal state when both motivational factors operate simultaneously. Intrinsic motivation results from the needs and interests of the person. Its goal is self-satisfaction, which tends to be a powerful motivator. If there is a match between the personal needs of the staff and the goals of the organisation for which they work, long-term motivation is created. Therefore, the organisation should be concerned with what fulfils the employees and their aspirations. Typical intrinsic motivation stimuli concerning the job are recognition, performance, visible results, autonomy, responsibility, new skills, broadening skills, deepening qualifications, social

relevance, etc. Typical extrinsic motivational stimuli are a reward, punishment, salary amount, working conditions, privileges, benefits or sanctions, status and title, security, etc. Material motivation includes all financial rewards. They are also the most interesting to employees and are the source of the strongest motivation. However, they provide only a short-term motivational effect. Intangible motivation is represented by forms of rewards which, although they cannot be touched, develop knowledge, expertise and experience, thereby increasing the attractiveness of the job. Motivation can also be divided into positive motivation and negative motivation. If we reward the desired behaviour, we are talking positive one. Negative motivation is when we punish undesirable behaviour – it is meant to prevent mistakes from happening again.

In the context of adult education, the level of motivation is often adequate for educational achievement. According to the findings of Rabušic, Rabušic and Šedřová (2008, p. 109), motivation in adult education shows significant differences between the formal and informal sectors. While work motivation is paramount for interest in formal education, informal education is often stimulated by non-work reasons. It is noteworthy, however, that for individuals with different levels of educational attainment, different effects of work motivation emerge. Thus, the findings show that the higher the education, the higher the share of non-work motivation, i. e. more educated individuals more often perceive further education as “a tool for increasing their human capital, but also as a means of self-cultivation and personal development” (Rabušic et al., 2008, p. 109). Law and Glover (1996 in Vránová 2013, p. 21) concluded in their research that the primary source of motivation for male teachers is the amount of pay and the possibility of career growth. Female teachers consider job satisfaction, good working conditions and interpersonal relationships more critical than whether their workload is compatible with family life. The ability to target specific factors in the choice of incentives is now in the hands of the school principals. It is thus up to them to match the needs of their staff with the needs of the school.

In that context, there is also an ongoing discussion about the demotivators in school. These are counterproductive practices that occur in the school daily and are mainly: politicking; unproductive meetings; hypocrisy on the part of management; concealment, withholding of information; low quality of work of staff and management, its male qualification; constant, ineffective, hasty changes. Handy (1990 in Světlík, 2006, p. 245) defines five essential prerequisites for the motivation of teaching staff: rational-economic; social; self-actualisation; complex; psychological. We all have different needs, interests, abilities, temperament, aptitudes, etc. These personal characteristics are tied to certain relationships, and because of their changes, there are changes in everyone's behaviour and motivation (Světlík, 2009 in Vránová, 2013, p. 21).

A necessary condition for ensuring the quality of the work of a particular school is undoubtedly the teaching staff cooperating with their colleagues through the school's plan for their pedagogical development. The development of pedagogical skills is conditioned primarily by the motivation of individual teachers. However, there are several differences “how much time, energy and effort they are willing to devote to reflecting on, evaluating and

improving their pedagogical skills” (Kyriacou, 1996, pp. 28-29). This fact can be seen as an obstacle when the teacher has already acquired sufficient pedagogical skills to perform good teaching. This is mainly because teaching often becomes routine for them from now on.

3 Teachers’ Professional Development and Further Education

The term professional development has many interpretations and connotations. It is associated with professional growth, further education, lifelong learning, etc. According to Kohnová (2012, p. 21), teachers' professional development consists of three essential components: institutional continuing education; self-development; knowledge, experience and skills acquired through professional practice as a teacher. Adamec (2019, p. 166) agrees when arguing that professional development is usually divided “into professional improvement through teaching practice, self-study, and further education”. The broad definition of the term allows for a variety of perspectives and “encompasses various forms of education and professional training for persons (youth and adults) who have already undergone some level of formal schooling” (Průcha et al., 2013, p. 43). Teachers “should be the first ones for whom the most optimal conditions should be created and for whom lifelong learning should become a necessity, a matter of course and a need”. Krojzlová (2007, p. 130). Thus, there is no doubt that teachers' continuing professional education, as well as their personal development, is an ever-present need, essential for the quality of education and upbringing. For Lazarova and Prokopova (2004, p. 261), further education is essential for continuing teacher professional development. It is linked to “the teacher's professional career but also the school's development, school policy and social development in general”. The professional development of teachers in the Czech Republic is based on the applicable legislation, according to which teachers, including school principals, are obliged to undertake further education during their teaching practice and thus continuously renew, maintain and supplement their qualifications. To this end, the law grants them a leave of absence for self-study of 12 working days per school year.

Further education is one of the main forms of professional development in the Czech Republic. This is generally defined as “the provision of organised programmes designed to support in-service teachers as one of several possible systematic steps that support teacher development” (Glatthorn & Fox, 1995 in Lazarová & Prokopová, 2004, p. 263). In the Czech Republic, in-service teacher education is a part of lifelong learning and the centre of teachers' professional development. This means that a teacher has both the right and the obligation to participate. This systematic and coordinated process builds on undergraduate education and accompanies the teaching staff throughout their professional career. It provides two core functions – standardisation and development. By fulfilling these functions, it ensures that the quality and level of the existing education system are maintained while supporting its

development and innovation (Toužilová, 2016, n. p.). Furthermore, only accredited educational institutions can educate teaching staff through accredited educational programmes. The Ministry of Education, Youth and Sports of the Czech Republic is currently responsible for granting accreditation. The following legislative norms regulate the issue of qualification requirements for the teaching profession in the Czech Republic and the methods of further education of teaching staff:

- Act No. 561/2004 Sb., on pre-school, primary, secondary, higher vocational and other education (i.e., the Education Act);
- Act No. 563/2004 Sb., on pedagogical staff and on amendments to certain acts;
- Decree No. 317/2005 Sb., on further education of pedagogical staff, accreditation commission and career system of pedagogical staff.

Decree No. 317/2005 Sb., on further education of pedagogical staff, defines, among other things, the possible forms of further education, which are mainly: study to meet qualification requirements, study to meet other qualification requirements and study to deepen professional qualifications (Czech Republic, 2005). The scope of further education activities can range from four hours to several semesters. There is a variety of forms of further education that can be organised both in and out of the school environment. The most common include courses, workshops, seminars, training, school exchanges, action research, project work, supervision, peer tutorials, discussion groups, studying texts and other documents from the Internet, discussion forums and e-learning, international visits, etc. There is no doubt that contextual or personal factors influence the teachers' choice of particular types of in-service training. Contextual factors include, but are not limited to, the culture, climate and objectives of the school; the voluntariness or obligation to participate; the organisation of the learning event; the formality of the learning event; the atmosphere of the learning event; the format and accessibility; and the financial possibilities. Personal factors include character traits, values, attitudes, expectations, needs and interests, previous experience, teacher age, career stage, education and approbation, psychological and health condition, family situation, workload, etc. (Lazarová & Prokopová, 2004, p. 264).

4 The Role of Innovation and Change in the Life of a Teacher

Research shows that teachers are “aware of the importance of education for the quality of their teaching work”, just as they are “aware of the importance of education for enhancing the prestige of their profession” (Havlik, 1999, p. 150). As in other professions, however, there are those among teachers who persistently resist such changes in their profession. Lazarová (2005, p. 102) describes a kind of defiance or resistance to change and professional development when she refers to “resistance to change”. The source of resistance maybe not

only their comfort, reluctance, or maladjustment, which are often the first things that come to mind, but also previously negative experiences, current personal problems, stress, frustration, burnout syndrome, little or no stimulation and support from superiors, or deficiencies in planning and implementing change. Thus, it may not always be the case that the teacher is a bad teacher, and with the proper guidance, it is possible to reverse this situation. At the same time, the resistance to change can highlight persistent problems that hinder the school's development and innovation. Kyriacou (1996, pp. 28-29) cites a change in their established approach to pedagogical skills that the new ways would require of them as one of the primary reasons that lead teachers to adopt a negative attitude towards particular innovations in educational projects and activities.

The teaching profession is threatened by occupational stress. Teachers face high demands related to conceptual changes in education, administrative burdens, the need to address pupils' educational problems and demand cooperation with their legal representatives. Teachers often act as counsellors and psychologists who are constantly available to their pupils. The need for continuous self-education to keep up with rapid developments, especially modern technology, brings additional value to the teaching profession and reduces mental resilience. These problems can lead to a drop-out of the teaching career, not infrequently by novice teachers. We must not forget the so-called institutional causes of workplace stress. Calabrese (1987 in Aišmanová & Novotná, 2009, p. 136) divided the most common stressors of the teaching profession into three areas – school administration, school organisation, and the classroom. Unfortunately, “many teachers are distrustful of change and are not easy to be convinced of the need to change education in light of a changing society” (Starý, Dvořák & Greger, 2012, p. 17). It is clear that “a teacher change, as a necessary consequence of effective professional development, is complex, difficult to predict, and dependent on prior experience (life and professional history), willingness, ability, social conditions, and institutional support” (Day, 1999 in Lucas, 2007, p. 366). Regardless of the impetus from which it stems, resistance is a natural human response to change. It is a psychological phenomenon that is desirable to understand and to influence positively. “It hinders the achievement of goals, disrupts plans and impedes development” (ibid.) (Lazarová, 2005, p. 103).

There are also cases where school management or teachers themselves encourage resistant behaviour. Supovitz and Zeif (2000 in Lazarová, 2005, p. 105) further investigated this phenomenon. They found that length of experience or age had a negligible effect on teachers' reluctance to participate in school innovations and summarised barriers to teachers' professional development into four groups: structural barriers (time and financial availability, time for work and family), content barriers (teachers' interests, matching teachers', and school needs); school barriers (school culture); and departmental barriers (school policy and its needs). Richardson (1997 in Lazarová, 2005, p. 107) provides specific explanations and divides the causes of resistance into just three levels. The first level represents resistance to change or a simple misunderstanding of the m second level (probably the most common); it is no longer resistance to change but its effect on people, who often feel threatened, suspicious, and unconsciously resist change. They fear that they are not counted on; will lose

respect, status, power, or control; and that change is the beginning of something bigger. The third level relates to the very essence of the institution's existence and the individuals within it, "where resistance to change is self-preserving". This is usually due to a conflict in the needs of management and the people directly affected by the change, a conflict of values, visions and needs, or a deep distrust across the organisation for the improvement of pedagogical competencies to achieve the desired results, in addition to the teachers' efforts, it is also essential that the school management supports them. The principal comes to the fore as both the pedagogical process leader and the school's main managerial element. Their task is to ensure that the staffing conditions for implementing education align with the school's needs, considering each teacher's specific needs and interests. At the same time, it creates an environment for sharing experiences and, in doing so, provides adequate support for novice teachers.

"Teacher development and the whole process of teacher development is an essential part of the work of a good school. It is up to the principal to set optimal rules, use existing resources and convince their teachers that they can stand still in no area." (Trojan, 2012, p. 94)

5 Survey Methodology

The following text aims to present the survey results that focused on teachers' attitudes towards professional development, further education, and innovation. A particular vocational secondary school in South Moravia in the Czech Republic, focusing on gastronomy, was selected for the research. The aim was to answer the following research questions:

- What are the preferences and attitudes of teachers in further education?
- What motivates teachers to further their education and their professional development?
- What is the attitude of teachers towards innovation?
- Are there any differences in opinions between practical and theoretical teachers?

The survey was conducted via an electronic questionnaire and was a part of the bachelor thesis project (Vymazalová, 2022). In agreement with the principal, the composition and wording of the questions were designed so that the survey results could also serve as a basis for further school management and staff development planning.

The questionnaire was created on the Survio platform and was communicated via Microsoft Teams to all teachers in the school. A total number of 178 teachers were offered the opportunity to complete the questionnaire, including 102 theoretical teachers and 76 practical teachers. Data collection took place in the first half of April 2022. Fifty practical teachers and 67 theoretical teachers responded to the questionnaire. The overall return rate was, therefore, 65.7%.

5.1 Structure of Respondents

The youngest respondent from the teachers of practical teaching was 27 years old, and the teachers of theoretical teaching were 35 years old. The oldest respondent from the group of practical teachers was 65, and the group of theoretical teachers was 64. The average age of the practical teaching respondents was 47.3 years, and that of the theoretical teaching respondents was 52.4 years. Among the respondents, there were 93 females (79.5%) – of which 43 were practical teaching and vocational training (PTVT) teachers, 50 were vocational subjects (VS) teachers, 24 males (20.5%) – of which 7 were PTVT teachers, and 17 were VS teachers. A more detailed structure of respondents is given below. The most represented group among the respondents were teachers aged between 46 and 55. Half of the teachers of vocational subjects represented a similar age group—it could be said that among the respondents, $\frac{3}{4}$ were above 46.

Age	PTVT		VS		Total	
up to 35 years	7	14.0%	1	1.5%	8	6.8%
36 – 45 years old	13	26.0%	9	13.4%	22	18.8%
46 – 55 years old	19	38.0%	33	49.3%	52	44.4%
56 and over	11	22.0%	24	35.8%	35	29.9%
Total	50	100.0%	67	100.0%	117	100.0%

Table 2: Age structure of respondents

Among the teachers of theoretical vocational subjects, no one had less than a master's degree; one respondent even mentioned a doctoral degree. Among teachers of practical subjects, only about $\frac{1}{4}$ of the respondents had a master's degree and about $\frac{1}{3}$ had a bachelor's degree.

Education	PTVT		VS		Total	
VC (vocational cert.)	7	14.0%	0	0.0%	7	6.0%
Secondary school (school-leaving cert.)	16	32.0%	0	0.0%	16	13.7%
University (Bachelor)	16	32.0%	0	0.0%	16	13.7%
University (Master)	11	22.0%	66	98.5%	77	65.8%
University (Doctoral)	0	0.0%	1	1.5%	1	0.9%
Total	50	100.0%	67	100.0%	117	100.0%

Table 3: Highest educational attainment of respondents

Teachers of vocational subjects and teachers of practical teaching differed by the education they had acquired as part of their teaching qualifications. While teachers of theoretical subjects acquired their teaching qualification as part of their university education (86.6%),

teachers of practical subjects most often acquired their qualification for teaching through a further education course (68%).

	PTVT		VS		Total	
Master's degree in teaching from a faculty of education, philosophy, or science	15	30.0%	58	86.6 %	73	62.4%
pedagogy studies or studies in the field of education. sciences as part of lifelong learning	34	68.0%	9	13.4%	43	36.8%
I have not yet graduated or started studying	1	2.0%	0	0.0%	1	0.9%
Total	50	100.0%	67	100.0%	117	100.0%

Table 4: How did you qualify as a teacher?

In terms of length of teaching experience, the group with more than 20 years of experience was the most represented overall. The structure of the respondents from the two teacher groups differed from each other. More than two-thirds of the vocational subject teachers had more than 20 years of experience, while the practical teachers represented 42% of this group.

Length of experience	PTVT		VS		Total	
less than five years	13	26.0%	1	1.5%	14	12.0%
5 – 9 years	9	18.0%	1	1.5%	10	8.5%
10 – 14 years	1	2.0%	11	16.4%	12	10.3%
15 – 19 years old	6	12.0%	8	11.9%	14	12.0%
20 years and over	21	42.0%	46	68.7%	67	57.3%
Total	50	100.0%	67	100.0%	117	100.0%

Table 5: Length of experience of respondents

Interestingly, almost 3/5 of the teachers of theoretical vocational subjects entered the teaching profession immediately after graduating from university (58%), in contrast to the teachers of practical teaching, who most often entered the teaching profession after more than ten years in vocational practice (36%).

Start of the teaching career	PTVT		VS		Total	
immediately after graduation	2	4.0%	39	58.2%	41	35.0%
after 1 – 3 years of practice	8	16.0%	7	10.4%	15	12.8%
after 4 – 6 years of practice	14	28.0%	6	9.0%	20	17.1%
after 7 – 10 years of practice	8	16.0%	2	3.0%	10	8.5%
after more than ten years of practice	18	36.0%	13	19.4%	31	26.5%
Total	50	100.0%	67	100.0%	117	100.0%

Table 6: After how long in practice did you choose the teaching profession?

Vocational subjects (VS) teachers are likely to be very loyal employees, as 90% of them reported that the school they work at is the first in their teaching experience. Among vocational theory teachers, this school is first for only 25.6%.

School ranking in practice	PTVT		VS		Total	
first	45	90.0%	24	35.8%	30	25.6%
second	5	10.0%	22	32.8%	15	12.8%
third	0	0.0%	13	19.4%	7	6.0%
fourth	0	0.0%	7	10.4%	3	2.6%
fifth	0	0.0%	1	1.5%	2	1.7%
Total	50	100.0%	67	100.0%	117	100.0%

Table 7: Ranking of schools during teaching practice.

6 Survey results

6.1 Attitudes and Preferences in Further Education

The survey respondents were unanimous in that further education is essential for teachers. Only two vocational subjects (VS) teachers expressed the opposite view.

	PTVT		VS		Total	
yes, I consider further education to be an essential part of the teaching profession	48	96.0%	67	100.0%	115	98.3%
No, I do not think a graduate teacher needs further training	2	4.0%	0	0.0%	2	1.7%
Total	50	100.0%	67	100.0%	117	100.0%

Table 8: Do you consider further education to be important for teachers?

Overall, nine out of ten teachers responded that they were willing to further their education. A difference in reluctance was found between the two types of teachers, with 16% of practical teachers (PTVT) unwilling to undertake further training as opposed to 3% of vocational subjects (VS) teachers.

	PTVT		VS		Total	
Yes	42	84.0 %	65	97.0%	107	91.5%
No	8	16.0 %	2	3.0%	10	8.5%
Total	50	100.0 %	67	100.0%	117	100.0%

Table 9: Are you willing to further your education?

Approximately 36% of the respondents from among the teachers of vocational theoretical subjects (PTVT) participated in further education once in the past school year. In contrast, the same number of teachers of practical education participated in further education twice in the past school year. Similarly, 30% of the teachers of practical subjects declared that they had participated in training activities four times or more in the past school year, in contrast to only 15% of the teachers of theoretical subjects who declared participation in this volume. Teachers of vocational subjects did not participate in further training in 24% of cases, in contrast to teachers of practical subjects, where only 10% did not participate.

	PTVT		VS		Total	
1 x	4	8.0%	24	35.8%	28	23.9%
2 x	17	34.0%	10	14.9%	27	23.1%
3 x	9	18.0%	7	10.4%	16	13.7%
4 or more times	15	30.0%	10	14.9%	25	21.4%
at all	5	10.0%	16	23.9%	21	17.9%
Total	50	100.0%	67	100.0%	117	100.0%

Table 10: How many times did you participate in further education during the 2021/2022 school year?

Almost all respondents from the PTVT group (96%) consider non-formal types of education (courses, seminars, workshops, mentoring, etc.) the most beneficial. Teachers of vocational subjects considered this type of education as the most beneficial only from $\frac{3}{4}$; on the other hand, $\frac{1}{4}$ of the VS teachers also considered self-study beneficial.

	PTVT		VS		Total	
Other types of training (courses, seminars, etc.)	48	96.0%	49	73.1%	97	82.9%
Formal education (e.g., further education)	0	0.0%	2	3.0%	2	1.7%
Self-study	2	4.0%	16	23.9%	18	15.4%
Total	50	100.0 %	67	100.0 %	117	100.0 %

Table 11: Which type of further education do you find the most beneficial?

Both PTVT and VS respondents were basically in agreement about the preference for further education that is delivered outside the school premises. Overall, 78% of respondents expressed this view.

	PTVT		VS		Total	
Education outside school (lecture, seminar, workshop, round table, internship)	37	74.0 %	54	80.6 %	91	77.8 %

Training within the school (instruction, assisting, assignment, job rotation, mentoring, coaching, consultation)	13	26.0 %	13	19.4 %	26	22.2 %
Total	50	100.0 %	67	100.0 %	117	100.0 %

Table 12: Which method do you prefer in further education?

The face-to-face, i.e., in-class form of further education, is preferred more by teachers of practical education (82%) than by teachers of vocational subjects (72%). On the other hand, the distance form of further education is preferred by teachers of vocational theoretical subjects.

	PTVT		VS		Total	
distance	9	18.0%	19	28.4%	28	23.9%
F2F / in-class	41	82.0%	48	71.6%	89	76.1%
Total	50	100.0%	67	100.0%	117	100.0%

Table 13: Which form of further education do you prefer?

6.2 Motivation for Further Education

The two groups of teachers do not differ in their approach to seeking out professional development and training activities. Perhaps it could be stated that PTVT teachers are more passive and content with their employer's offer.

	PTVT		VS		Total	
Yes, I have selected quality providers	10	20.0%	16	23.9%	26	22.2%
Yes, because the employer's offers are insufficient	4	8.0%	5	7.5%	9	7.7%
I look for something now and then	21	42.0%	31	46.3%	52	44.4%
No, if I am to further my education, the employer must provide the offers	0	0.0%	1	1.5%	1	0.9%
No, because the employer's offers are sufficient	15	30.0%	14	20.9%	29	24.8%
Total	50	100.0%	67	100.0%	117	100.0%

Table 14: Do you search for offers for your own professional development?

Both groups of teachers agree that they are most motivated to further their education by the opportunity to learn something new. Practical teachers, however, are much more motivated by the opportunity to discuss practice problems with experts.

	PTVT		VS		Total	
The opportunity to discuss practice issues with experts	10	20.0%	4	6.0%	14	12.0%
Possibility of teaching another subject	2	4.0%	2	3.0%	4	3.4%
The possibility of employer reimbursement of training fees	2	4.0%	4	6.0%	6	5.1%
The opportunity to gain new insights into problem-solving when working with pupils	11	22.0%	14	20.9%	25	21.4%
The opportunity to learn something new in general	25	50.0%	43	64.2%	68	58.1%
Total	50	100.0%	67	100.0%	117	100.0%

Table 15: What would motivate you to participate in further education?

With minor differences, the two types of teachers do not differ in their view that the motivation of all staff in their workplace is at a medium level. However, many more PTVT teachers believe they are systematically motivated to perform better than VS teachers, who only share this view minimally.

	PTVT		VS		Total	
Motivation has a system that leads employees to high commitment	8	16.0%	1	1.5%	9	7.7%
Staff motivation is minimal	8	16.0%	11	16.4%	19	16.2%
Staff motivation is at a good level	11	22.0%	23	34.3%	34	29.1%
Staff motivation is on a medium level	21	42.0%	32	47.8%	53	45.3%
No importance is attached to staff motivation	2	4.0%	0	0.0%	2	1.7%
Total	50	100.0%	67	100.0%	117	100.0%

Table 16: How do you perceive the issue of employee motivation in your workplace?

Practical teachers are more likely (26%) than vocational teachers (15%) to believe that professional development is a matter for the teacher. On the other hand, 84% of VS teachers (as opposed to 74% of PTVT teachers) believe that professional development is a common concern of the school and the teacher.

	PTVT		VS		Total	
schools	0	0.0%	1	1.5%	1	0.9%
teachers	13	26.0%	10	14.9%	23	19.7%
teachers and schools	37	74.0%	56	83.6%	93	79.5%
Total	50	100.0%	67	100.0%	117	100.0%

Table 17: Do you think the teacher's professional development matters for the teacher or the school?

6.3 Innovation in Education

Respondents differed in their views on the school management's support of innovation among teachers. PTVT teachers declared twice as much (48%) that innovation is supported by the school management if necessary, as opposed to VS teachers (24%). The teachers of vocational theoretical subjects expressed that 72% believe management highly values innovation. PTVT teachers shared this opinion only 42%.

	PTVT		VS		Total	
Innovation is only encouraged by management when necessary	24	48.0%	16	23.9%	40	34.2%
The school management highly values innovation	21	42.0%	48	71.6%	69	59.0%
The school is a leader in innovation thanks to its leadership	5	10.0%	3	4.5%	8	6.8%
Total	50	100.0%	67	100.0%	117	100.0%

Table 18: In your opinion, to what extent does the school management encourage innovation among teachers?

The attitudes of vocational and practical teachers are relatively similar in their approach to innovation in teaching. There was no significant difference between the responses to this question. More than half of the respondents believe that innovation is possible and desirable.

	PTVT		VS		Total	
Innovation is needed everywhere I look	8	16.0%	12	17.9%	20	17.1%
I am convinced that innovation is not only possible but desirable	29	58.0%	36	53.7%	65	55.6%
I do not bother whether innovation comes along, I adapt	12	24.0%	14	20.9%	26	22.2%
I am not in favour of introducing "novelties"; I stick to traditional methods	0	0.0%	5	7.5%	5	4.3%
changes are, in my opinion, unwanted, unnecessary and often dangerous	1	2.0%	0	0.0%	1	0.9%
Total	50	100.0%	67	100.0%	117	100.0%

Table 19: What is your attitude towards innovation in teaching?

7 Summary and Conclusion

The paper aimed to identify and describe the differences between the two groups of teachers who most often work in secondary vocational schools in the Czech Republic. Our research has shown differences between teachers of vocational theoretical subjects and teachers of practical teaching in terms of initial formal education and ways of obtaining a teaching qualification, as well as in attitudes and preferences related to their professional development and further education. While teachers of vocational subjects almost always have a master's degree, which includes a teaching qualification, teachers of practical teaching most often have a bachelor's degree or less. They had obtained their teaching qualification through courses. Czech legislation allows both options. Practical teachers are relatively more reluctant to undertake further training. However, on the other hand, they were twice as likely to have received training during the last school year than teachers of theoretical vocational subjects. Both groups of teachers considered non-formal training (courses, seminars) conducted outside the school premises more beneficial. Teachers of vocational subjects preferred self-study and distance learning to a much greater extent. Practical teachers were much more motivated than vocational teachers to further their education by the opportunity to discuss their problems with practice experts. Unlike their colleagues, the vocational teachers felt that no system in their school motivated them to work harder. On the other hand, vocational subject teachers were significantly more optimistic about the support for innovation from the school management.

The attitudes of both groups of teachers focused on their approach to innovation, e.g., in teaching, was almost identical – more than half of the respondents declared that innovation was possible and desirable. Although the survey was conducted in only one school and the sample exceeded one hundred respondents, we believe the results provide an exciting starting point for further exploration of this issue, as teaching staff in vocational education deserve their attention and support.

References

- Adamec, P. (2019). Vztah a motivace učitelů odborných předmětů k dalšímu vzdělávání [Attitude and motivation of teachers of vocational subjects towards further education]. *Pedagogika*, 69 (2), 165-184. <https://doi.org/10.14712/23362189.2018.862>
- Aišmanová, A., & Novotná, L. (2009). Analýza zátěžových faktorů v učitelské profesi [Analysis of stress factors in the teaching profession]. In J. Miňhová (Ed.), *Psychologie ve vzdělávání učitelů a v jejich profesní činnosti* [Psychology in teacher education and professional activity] (pp. 136-137). Plzeň: Západočeská univerzita v Plzni.
- Czech Republic. (2004). Zákon č. 563/2004 Sb., o pedagogických pracovnících a o změně některých zákonů [Act No. 563/2004 Sb., on pedagogical staff and on amendments to certain acts]. www.msmt.cz
- Czech Republic. (2005). Vyhláška č. 317/2005 Sb., o dalším vzdělávání pedagogických pracovníků, akreditační komisi a kariérním systému pedagogických pracovníků [Decree No. 317/2005 Sb., on further education of pedagogical staff, accreditation commission and career system of pedagogical staff]. www.msmt.cz
- Eggert, M. (2005). *Motivation* [Motivace]. Praha: Portál.
- Havlík, R. (1999). Profesní „kariéra“ a další vzdělávání v názorech a postojích učitelů [Professional “career” and further education in teachers’ opinions and attitude]. *Pedagogika*, 49 (2), 147-155. <https://pages.pedf.cuni.cz/pedagogika/>
- Kohnová, J. (2012). Modely dalšího vzdělávání učitelů v historii českého školství [Models of teacher training in the history of Czech education]. In J. Kohnová, et. al. *Profesní rozvoj učitelů a cíle školního vzdělávání* [Professional development of teachers and the goals of school education] (pp. 21–36). Praha: Fakulta pedagogická, Univerzita Karlova.
- Krojzlová, H. (2007). Problematika DVPP – problém nás všech [DVPP – a problem for all of us]. In J. Kohnová, & Macháčková, I. (Ed.). *Další profesní vzdělávání učitelů a jeho perspektivy* [Further professional education of teachers and its perspectives]. Proceedings of the conference on the 60th anniversary of the Faculty of Education, Charles University (pp. 129-130). Prague: Faculty of Education, Charles University.
- Kyriacou, Ch. (1996). *Klíčové dovednosti učitele: cesty k lepšímu vyučování* [Essential teaching skills: pathways to better teaching]. Praha: Portál.
- Lazarová, B. (2005). Psychologické aspekty profesionálního rozvoje učitelů: Resistence vůči změně. [Psychological Aspects of the Professional Growth of Teachers: Resistance to Change]. *Pedagogika*, 55 (2), 102-118. <https://pages.pedf.cuni.cz/pedagogika/>
- Lazarová, B. (2011). Učitelé v pozdní fázi kariéry – z výzkumných dat [Late-career teachers – from research data]. In B. Lazarová et al. *O práci zkušených učitelů* [On the work of experienced teachers] (pp. 107-148). Brno: Paido.
- Lazarová, B., & Prokopová, A. (2004). Učitelé a jejich další vzdělávání: k některým psychologickým aspektům [Teachers and Their Further Education: Certain Psychological Aspects]. *Pedagogika*, 54 (3), 261-273. <https://pages.pedf.cuni.cz/pedagogika/?p=1812&lang=cs>
- Lukas, J. (2007). Vývoj učitele: Přehled relevantních teorií a výzkumů (1. část) [Teacher development: a review of relevant theories and research (part 1)]. *Pedagogika*, 57 (4), 364-379. <https://pages.pedf.cuni.cz/pedagogika/>

- Maršíková, M., & Jelen, V. (2020). *Hlavní výstupy z Mimořádného šetření ke stavu zajištění výuky učitelů v MŠ, ZŠ, SŠ a VOŠ* [Main outputs of the exceptional inquiry into the state of teaching provision by teachers in kindergartens, primary secondary schools]. Praha: Ministerstvo školství, mládeže a tělovýchovy ČR. <https://www.pedagogicke.info/2019/05>
- Průcha, J. (Ed.). (2009). *Pedagogická encyklopedie* [Pedagogical encyclopedia]. Praha: Portál.
- Průcha, J., Walterová, E., & Mareš, J. (2013). *Pedagogický slovník* [Pedagogical dictionary]. Praha: Portál.
- Rabušicová, M., Rabušic, L., & Šedřová, K. (2008). Motivace a bariéry ve vzdělávání dospělých [Motivation and barriers in adult education]. In Rabušicová, M., & Rabušic, L. (Eds.). *Učíme se po celý život?: o vzdělávání dospělých v České republice* [Learning throughout life?: on adult education in the Czech Republic] (pp. 97-112). Brno: Masarykova univerzita.
- Spilková, V. (2010). Kvalita učitele a profesní standard [Teacher quality and professional standards]. In V. Spilková et al. *Kvalita učitele a profesní standard* [Teacher quality and professional standard]. (pp. 21-56). Praha: Pedagogická fakulta, Univerzita Karlova.
- Starý, K., Dvořák, D., & Greger, D. (2012). *Profesní rozvoj učitelů* [Professional development of teachers]. Praha: Karolinum.
- Světlík, J. (2006). *Marketingové řízení školy* [Marketing management of schools]. Praha: ASPI.
- Toužilová, M. (2016). Co to vlastně je DVPP? [What is DVPP?] <https://epale.ec.europa.eu>
- Trojan, V. (2012). Ředitel školy – Rozhodující činitel v procesu rozvoje učitelů School [Principal – A decisive factor in the process of teacher development]. In J. Kohnová. (Ed.). *Profesní rozvoj učitelů. Sborník příspěvků z konference* [Professional development of teachers. Proceedings of the conference] (pp. 90-94). Praha: Pedagogická fakulta, Univerzita Karlova.
- Vránová, Š. (2013). Motivace učitelů – vysokoškolsky vzdělaných zaměstnanců v neřídících pozicích [Motivating teachers University-educated employees in non-managerial posts]. <https://docplayer.cz>
- Vymazalová, Z. (2022). *Profesní rozvoj učitelů praktického vyučování* [Professional Development of Teachers of Practical Teaching]. Mendelova univerzita v Brně. <https://is.mendelu.cz/zp/>