A Grounded Theory Approach on Professional Development of Vocational **Teachers**

Rita Mičiulienė Vytautas Magnus university Lithuania

Doi:10.19044/ejes.v10no1a1 URL:http://dx.doi.org/10.19044/ejes.v10no1a1

Submitted: 22 January 2023 Copyright 2022 Author(s)

Accepted: 14 March 2023 Under Creative Commons BY-NC-ND

Published: 31 March 2023 4.0 OPEN ACCESS

Abstract:

Professional development of vocational teachers is perceived as an integral part of their professional development of vocational teachers is perceived as an integral part of their professional activity. A lot of research has been conducted which has examined and evaluated the forms and strategies used to enhance vocational teachers' professional development, its performance and effectiveness in different contexts, mostly by applying quantitative research methods. A grounded theory approach was employed to develop a framework of the professional development process from the vocational teachers' perspective. The qualitative research design was based on five semi-structured group interviews with 48 vocational teachers from vocational education and training institutions in Lithuania. The findings show that vocational teachers feel the imperative for their professional development, which is caused by the progress of the technological and labour market, teacher generation change, and motivation. It occurs within the context of complicated financial distributions, careful planning and supervision, by adopting various means and forms for the PD (for example, occupation-related competence development). The learning strategies are influenced by the intervening factors such as the outdated training methods and the lack of continuity of the process. The main result of the PD of vocational teachers is sharing knowledge and helping colleagues.

Keywords: Vocational teachers; professional development; grounded theory

Introduction

Professional development (PD) of teachers in vocational education and training (VET) is recognized as important in the preparation of graduates for the labour market and thus meeting the new demands of economic development (Lloyd & Payne, 2012; Gurskey, 2009; Danasasmita, 2015; Serafini, 2018). The ways, the scope and the effectiveness of this process vary in each country depending on the socio-cultural traditions, policy environment and other contextual factors (Andersson & Köpsén, 2015). In Lithuania, conditions have been created for professional development of VET teachers: the legal framework has been provided, the funds have been allocated. In addition, a few projects devoted to the development of VET teachers' occupational competence were carried out with the support of the EU structural funds. However, the desired results were not achieved – the vocational teachers' competences still need improvement (Žilionis

et al., 2013). In recent years, several studies have been published (Serafini, 2018; Andersson & Köpsén, 2015; Bound, 2011; Garet et al., 2001; Brazienė et al., 2014) in which different national initiatives and programmes on the PD of teachers were explored and evaluated focusing on its forms, strategies, and effectiveness in different contexts. As Kennedy (2011) observed, the dominant global discourse promotes instrumental, managerial approaches to the "measurement" of effective professional development. Therefore, the attitudes and understanding of policymakers and educational managers on what the teachers' PD is and how it should take place were presented usually in scholarly articles. This study investigates how current professional development strategies support the improvement of vocational school teachers. Of particular interest is the use of teachers' perception to generate theory for future practice. A better understanding of the teachers' actual thinking and a continuous process of assigning meaning to the perceived and experienced reality subsequently allows a better grasp of the ongoing processes and the causes of failure. Therefore, a grounded theory approach was taken in order to produce a reliable interpretation of teachers' perception by presenting the theory that emerged from their data, rather than imposing the researcher's personal views upon the research setting. The study began with the following research question: How do current educational policy strategies support vocational teachers' professional development?

Literature review

There is a distinct lack of conceptual clarity in the research area of teacher PD (Evans, 2014). Atkins (2018) comments that the terminology itself has seen many iterations: in-service education and training, continuing professional development, training, professional learning, etc. Several authors equate professional development to all kinds of activities that are designed to develop teachers' skills, knowledge, expertise and any other characteristics that enhance their work performance (Caena, 2011; Gulamhussein, 2013; Seyoum, 2012) and that teachers do after initial training (Creemers & Kyriakides, 2013). Andersson et al. (2018) argue that due to the dual professional competence of vocational teachers, they must engage in professional development that involves not only the teaching competence, but also knowledge and skills in their initial occupation. The authors view this as a challenge for VET teachers in any national system. According to Laužackas et al. (2008), the goals of professional development are twofold: professional adaptation and professional growth. Professional adaptation is understood as formal response to changes in qualification requirements, when the contradiction between the increased requirements for the teacher and his/her preparation is resolved. Professional growth enables to move in a horizontal (activities related to professional mastery or excellence) or vertical (activities related to higher professional positions) career by acquiring additional knowledge and skills (Gedvilienė et al., 2010) and updating occupational competence. Hence, professional development, as growth, results in teachers' transformative practice, in specific changes in professional knowledge, skills, attitudes, beliefs or individual endeavours (Rhodes & Beneicke, 2003).

According to recent research (Li & Dervin, 2018; Fullan & Hargreaves, 2012; Postholm,

According to recent research (Li & Dervin, 2018; Fullan & Hargreaves, 2012; Postholm, 2012; Whitehouse, 2011; Guskey & Sparks, 2004), the following factors have the strongest and direct impact on the quality of teacher professional development: content characteristics (subject-specific and pedagogical content knowledge); learning design and implementation (types of professional development activities, forms and methods of how the activity is carried out); support and sustainability (sufficient time and duration of professional development, availability of resources, and supportive and engaged leadership in schools and at the system level); collective participation (interaction between teachers during learning sessions, value of practice related

discussion, peer support, etc.).

A number of elements of teacher professional development shine out from the literature. One of them is professional development as a continuous process. As Hardy (2010) noticed, professional development is not simply an activity to be completed, but rather a lifelong process of continual self-improvement. Schwille et al. (2007) suggest that teachers' professional development should proceed throughout their active professional life, starting with initial education, continuing with the first independent steps in school and further learning, overcoming the initial challenges of with the first independent steps in school and further learning, overcoming the initial challenges of teaching and gaining experience. Professional development as the occurrence of change means that this process brings transformation of existing teachers' practice: a new approach, teaching technique or tool to support classroom practice (Atkins, 2018). Guskey (2009) stresses that change is believed to begin with teacher beliefs and attitudes. However, changes generally involve risk, and sometimes fear. Collinson et al. (2009) note that the risk for members of the education profession is particularly strong. Professional development is also viewed as intricately connected to the specific and broader social settings and circumstances (Atkins, 2018). Middlewood et al. (2005) argue that professional development meets corporate, institutional and individual needs. Understanding the context and the individual teacher is key to understanding their individual orientation to learning (Opfer & Pedder 2011). In other words, the phenomenon 'teacher professional development' is twofold: in a more general meaning, the term is understood as a means for improvement of teaching practice and professional standards (for school improvement); in a narrow, specific sense, it means individual professional learning (Day, 2004). It is argued that there remains a tension between these two aspects of professional development: teachers' learning priorities might differ from those of the school (Daukilas et al., 2016; Day, 2004).

In overall, the process of professional development has been viewed as involving a myriad of dynamic contextual and political variations, tensions, negotiations, and social dilemmas, making it a highly situation specific endeavour (Jones et al., 2018; Thompson & West, 2013).

Context

In Lithuania, the teacher profession is regulated by the state, with legislation defining the qualification requirements for teachers, their training and professional development. A fairly clear and coherent system for professional development of teachers, which consistently extends their initial pedagogical preparation, has been created in the country. In Lithuania, as in many countries, vocational teachers acquire formal teacher qualifications via in-service training in the form of part-time participation in teacher training programmes (Bound, 2011; Daukilas et al., 2016), because they, foremost, are expected to have work experience and to be qualified within their vocational teaching subject (Andersson et al., 2018; Grollmann, 2009). As they proceed through their careers, teachers must develop teaching competence and competence related to a specific work-life vocational practice (Andersson & Köpsén, 2015). According to the Lithuanian legislation, the professional development of all kind of teachers is mandatory, and its duration, possible forms, funding sources are established as well as various methods and forms of professional development, process participants and their functions, responsibilities are described in the Law on education (2011). Vocational training institutions have an obligation to provide conditions for teachers and other persons to participate in the professional training process. The aspiration to ensure harmony between individual, institutional and national needs is emphasised in the *Conception of teachers' professional development* (2012). professional development (2012).

Since 1990, national needs, or strategies, for teachers' PD were closely related to the restructurisation of the VET system and went through the key critical junctures such as post-

communist transformation, access to the EU and the global economic crisis of 2008–2009 (Tūtlys et al., 2022). These factors promoted a more holistic attitude towards VET system regarding skill formation and qualifications, and enabled more systemic attention to the professionalisation and qualifications of VET teachers (Winterton et al., 2008). Digitalisation of work processes, competence and professional standard based reforms of VET curricula, development of work-based learning approaches, leadership and effective education of VET students with different educational needs – all theses national strategies increasingly require VET teachers in Lithuania to develop their academic knowledge, professional know-how and competencies (Tūtlys et al., 2022).

Currently, a decentralized system of professional development of teachers functions in Lithuania. This means that, on the one hand, accredited institutions for teacher professional development at local and national levels offers various professional development programmes. On the other hand, decentralisation means that the priorities for improving teachers' competences are determined at the school level, after teachers have assessed their individual development needs (Analysis of the educational problem, 2015). Although such a teacher PD system is treated

(Analysis of the educational problem, 2015). Although such a teacher PD system is treated positively, its negative aspects are also identified, especially for VET teachers. It has been observed that when planning teacher training at the school level, the needs of the economic sectors at the national level are often ignored. Institutions offering teacher training courses give priority to pedagogical and general competences, but not occupational. Also it is difficult to involve companies in the teachers' occupational competences development at the school level (Žilionis et al., 2013).

At the national level, the ESF-funded project was launched with the aim to create a system that would enable vocational teachers to acquire necessary technological competences, get familiar with the organization of technological processes in business entities, and have knowledge of the latest technological developments (Andriušaitienė, 2014). During the project, about 100 most recent teacher occupational competence improvement programs were prepared in 12 sectors of the economy, more than 600 vocational and college teachers participated learning to work with the modern technological equipment. The project was well-received, but after funding ran out, it was discontinued. The schools themselves take care of developing the occupational competences of teachers by initiating and implementing projects together with foreign partners. The national initiative for VET teachers' professional development raised new questions, and the study presented here to examine VET teachers' standpoints to PD activities was launched.

Methods

Methods

The grounded theory (GT) approach was applied in order to disclose the study aim. Punch (2013) defined the grounded theory approach as a method, an approach, a strategy, while Charmaz (2014) added that grounded theory is focused on inductive strategies for data analysis. In this study, grounded theory is used to analyze semi-structured interviews. The GT is useful for exploring how participants in the research process respond to different conditions and the consequences of their actions (Corbin & Strauss, 1990) and interpret their own reality. The purpose of the GT is thus to generalize explanation of conditions, meanings and significances, as well as procedures that influence people in different situations and areas of their active construction of the world and to offer insight, enhance understanding, and provide a meaningful guide to action (Strauss & Corbin, 1998). Gray emphasized that the inductive process may still have some pre-existing theories or ideas when approaching a problem. Nonetheless, it does not pursue to approve or negate the existing theories, but endeavours to create outlines, stabilities and significances by collecting data (Gray, 2021). In the case of this study, the researcher had an awareness of an area of vocational

teachers' professional development that required deeper exploration.

The grounded theory approach has been adopted in recent research (e.g., Perini & Pentassuglia, 2018; Grollmann, 2009; McGavin, 2013; Martino & Lasonen, 2018) to investigate VET teachers' concerns and experiences. A few studies based on grounded theory approach explored the professional development of secondary school teachers (Atkins, 2018; Valmori & De Costa, 2016) or higher education teachers (Rapley, 2017). A grounded theory approach was used by Teräs and Kartoğlu (2017) to examine how professional learning takes place in an online professional development programme designed and implemented according to the principles of authentic e-learning, as well as to understand the impact of the authentic learning design on the professional learning experience of the participants. However, no studies were found that examine the professional development of VET teachers from a grounded theory perspective. By employing a grounded theory approach in this study, the endevours were made to consider common trajectories and issues in the professional development process that participants of this study articulated. A comparative and interactive analysis of interview data (axial coding) enabled to enhance the researcher's understanding of the process of teachers' engagement in their continuous development, and to build a proposed framework of the phenomenon as an interpretation of an underlying structure in the data. Following Bryant (2013), this does not claim to be a criterion of truth, but rather envisage the possibility of changes in practice.

Data collection. The qualitative research design was based on semi-structured group interviews. The interview questions invited the participants to reflect on and describe their experiences of professional development while working at a vocational school. The questions addressed the following: the methods and forms of the CPD, frequency of activities, strengths and weaknesses of the CPD. During the interviews. T

experiences.

Participants. The criterion sampling was used to select the VET schools: big/medium/small, from the city/ countryside. Before paying a visit to the VET educational institutions, the schools' administrators were asked to form separate groups of vocational teachers based on their positions in the school, qualification categories, subjects, age, and work experience. The researchers met with five groups of teachers. The group sizes varied from 8 to 14 members. The total sample size of the research was 48 vocational teachers. All participants of the study had experiences related to continuing professional development, and the research sought to explain the process (Creswell, 2007).

Data analysis. The analysis followed the coding procedures described by Corbin and Strauss (2008). In grounded theory, data collection and analysis are interrelated processes (Corbin & Strauss, 1990): the analysis started with the first interview and guided the next steps in data collection. Such sequential data collection and analysis allowed the researcher to identify related concepts that were explored further in subsequent interviews. After the group interviews were completed, they were transcribed verbatim, the transcripts were read through repeatedly. While analyzing the research data, first, open coding was conducted (Corbin & Strauss, 1990). The overall goal of open coding is to develop a wealth of codes with which to describe the data (Teräs & Kartoğlu, 2017). An effort was made to generate codes that would capture what essentially was going on with regard to professional development. The researcher, guided by the methodological instructions, while performing open coding, wrote a memo in which all ideas that arise while working with the data, about relationships with categories were marked.

The next stage, according to Strauss and Corbin (1990), axial coding is needed to investigate the relationships between concepts and categories that have been developed in the open coding process. To work out the relations between the categories, Strauss and Corbin (1990) suggest examining the data and the codes based on a coding paradigm that focuses on and relates causal conditions, context, intervening conditions, action strategies, and consequences. These perspectives on the data help to detect relations between concepts and categories in order to relate them on a meta level (Khan, 2014). Finally, selective coding shapes the interaction of all categories from axial coding with the chosen core category. The core category describes the central phenomenon around which all the other categories are reviewed and integrated (Strauss & Corbin 1990). As Teräs and Kartoğlu (2017) noticed the central category, must also appear in the data so frequently that, in almost all cases, there will be indicators pointing to that concept. The central category that emerged from the data in this study was "imperative improvement." The result of the process of data collection and analysis is a practical level theory that the researcher creates close to a specific problem or group of people, process or activity (Strauss & Corbin, 1990). The final theory is limited to categories, their properties, and the relationships between categories.

Trustworthiness or truth value of qualitative research and transparency of the conduct of the study are crucial to the usefulness and integrity of the findings (Connelly, 2016). The major research trustworthiness criteria: credibility, dependability, transferability and confirmability were applied for this study (Sikolia et al., 2013).

applied for this study (Sikolia et al., 2013).

applied for this study (Sikolia et al., 2013).

Credibility. Through the process of data collection and analysis, and the favoured analytical approach of constant comparison within the grounded theory approach, data collected within each participant group was compared and reviewed against that previously collected. Also, memos were written throughout the research process. Transferability. The data highlighted that whilst each participant group has its own unique context, the issues faced in relation to the PD of teachers were common across all groups. The quotations used to illustrate the themes within the data were taken from the full range of sources. Dependability. Attention was continuously paid to ensure the consistent application of the chosen grounded theory strategy and the collection and analysis of the research data in accordance with methodological requirements. Careful examination of processes of data collection and analysis by colleague, who did not took part in this research, ensured the reliability of the findings. The criterion of confirmability shows whether the study could be repeated and similar findings and conclusions could be obtained and whether another researcher who conducts a similar study would confirm the findings of this study. Holton and Walsh (2017) emphasize that the grounded theory cannot be tested in the same way as in the case of other research approaches - it can neither be right nor wrong, neither confirmed nor rejected. However, it can be modified by analyzing it with other theories and scientific data.

Findings

After conducting the first interviews and starting the data analysis, the necessity to be upto-date was the most important concern of vocational teachers of this study. Through further refining and selective coding "professional development as a constant imperative" (imperative improvement) emerged as a core category and as a key to the challenge to be up-to date constantly. Other sub-categories that emerged from the data were related to the central category, either as causal conditions, contextual conditions, consequences, or strategies, explained in further detail in the following section and presented in Figure 1.

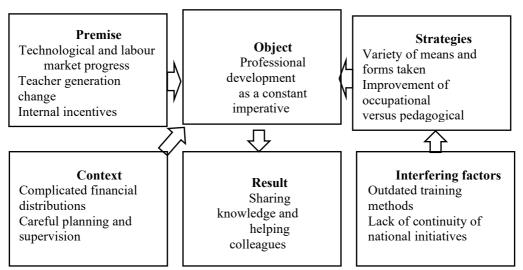


Figure 1. A framework of professional development of vocational teachers

Professional development as a constant imperative

The process of imperative improvement of teachers ("We must constantly improve ourselves" R2) is an ongoing and forms an integral part of the VET system. This imperative is so natural and so common to the participants of the research that no one could even imagine that it could be different or non-existent.

This development is affected by both external and internal factors. As far as external factors are concerned, the following instances of technological and labour market progress have forced teachers to change and renew their competences: introduction of new programmes ("A new fishery programme has been introduced" R43), re-qualification is required ("For example, I have a management course this year, and I need to prepare" R4), installation of new advanced equipment at schools ("Sectorial training centres possess the equipment; however, there is a lack of teachers who could operate that equipment" R35), increasing requirements in the labour market ("Highscale operations have been included in the graduate's speciality. These certificates are required for everyone in the construction sector" R5).

Other important factor is generally related to the turnover of teachers at vocational schools. New teachers are required when new programmes are introduced ("We have new specialities this year: massage specialists, logistics specialists" R4) or there is a natural turnover ("When someone retires, there is a need for a new teacher" R46). Some schools attract new young teachers, who come to these schools themselves ("A young female teacher will be employed at our school" R44), while other schools are looking for new teachers themselves ("Young teachers are not coming and do not offer themselves up for work. We are looking for new teachers" R35) or "raise" new teachers from former pupils ("Some pupils have finished this school, continued their studies and returned to this school for work" R25). New teachers must quickly grasp the peculiarities of vocational teaching, while those who have come from the business sector and are working as vocational teachers need to acquire pedagogical knowledge ("College education is enough for a vocational teacher. Additionally, minimal pedagogical-psychological courses are necessary for them." R12).

teaching, while those who have come from the business sector and are working as vocational teachers need to acquire pedagogical knowledge ("College education is enough for a vocational teacher. Additionally, minimal pedagogical-psychological courses are necessary for them." R12).

In terms of internal factors, the incentive to improve is more a matter of the teachers' inner need, perhaps driven by the motives for choosing the profession itself ("The very nature of work [at school] is interesting to me. I can realize my ideas here" R33). Meanwhile, older teachers have a pragmatic motivation ("We need to learn for these hours") as the government has established the

procedure for the improvement of teachers' qualification. As far as the financial aspect is concerned, qualification improvement is not beneficial ("If there was a really significant [salary] fluctuation then the situation would be completely different" R16).

Contextually and situationally, improvement of teacher qualification is determined by its funding ("Now, every course costs, and quite a lot" R44). All schools have a certain amount of funds for qualification improvement, but these funds are used differently. Larger schools "do not calculate precisely if the competencies need to be improved" ("If you really need your qualification to be improved, you will go to the director and he/she will definitely find an opportunity" R4). Meanwhile, other schools "estimate approximately" ("If we hold seminars at our place and they cost approximately 11 euros, then about 70 euros will be allocated per teacher annually just for his/her training" R22), whereas others "periodically" consider and calculate. Professional development courses are expensive; therefore, some teachers partially pay for these courses themselves ("We are looking for a compromise that we would not "waste" money of other teachers" R26). The teachers also must frequently cover the travel and other expenses ("You have to pay for your trip and the way home" R44). Thus, there is not too much money in the study "basket" of teacher qualification; therefore, other professional development funding is being sought. sought.

The funding for the improvement of teacher qualification is related to precise planning and supervision. This function is usually performed by the deputies for education in smaller schools ("I am the administrator and I am also responsible for" R12), and by the assigned person in larger ones ("We have a methodologist who is constantly looking for the courses and offers them to us" R2). That person tries to find out the needs of teachers and is in charge of coordination ("A survey is conducted first. We identify what we want the most" R20); that person looks for interesting lecturers, analyses proposals from the training organizations; verifies their status in order to be accredited ("[...] the institution from which we are buying must be accredited" R12), organizes public procurements related to training ("We have to buy every seminar" R12), follows the daily limit for each teacher's learning ("They know that this is obligatory for 5 days a year [...] We follow this" R12), plans the distribution of funds, etc.

Various qualification improvement strategies are applied: teachers attend courses and do

Various qualification improvement strategies are applied: teachers attend courses and do internships ("Teachers are doing a lot of internships abroad: no one can outmatch them there" R1), invite lecturers to schools ("We choose and invite lecturers" R12), organize internal training ("We organize local training; teachers prepare programmes themselves, [...] we teach each other" R12), receive distance education and go (together with pupils) to exploration tours in the companies ("You arrange it with the company personally and then go. You take the pupils and show them everything" R44) or participate in training courses organized by the companies ("We cooperate with traders, participate in trainings in the companies" R6).

with traders, participate in trainings in the companies" R6).

The teachers see greater need for and benefit from improvement of vocation-based skills rather than pedagogical ones ("I think the most effective [training] is the kind which is organised in a specific workplace, where a teacher of an occupation can get a sense of both the pace of work and the requirements for the job" R35). In all of the researched schools, the prevalent view is that the pedagogical training courses are sufficient while the occupational training is especially needed when switching to a modular learning system ("so that he [trainer] would be provided an opportunity to work with modern technology: with welding machines, with state-of-the-art lathes or wood processing" R35). The teachers were pleased about the completion of the national project for the development of trainers' occupational competences, during which they had improved themselves comprehensively ("for a month, [they] worked, lived and learned in the best hotels [...]

the mechanics worked in Vilnius, [...] went through all of those areas" R12). Not everyone who wanted to could undertake traineeships ("we had signed up to go to several places [...], and one teacher went" R36), because the demand was higher than the amount of possibilities to satisfy it. The methods for the improvement of pedagogical and occupational competences are different. As mentioned before, in order to save money and time, pedagogical seminars and other training sessions are usually organised at the schools themselves, after determining the teachers' needs beforehand. Meanwhile, occupational competences are improved abroad, in cooperation with colleges and business partners, by participating in national projects, or by finding specialized training online or in the market.

colleges and business partners, by participating in national projects, or by finding specialized training online or in the market.

The outdated training methods and the lack of continuity of training were named as interfering factors of PD. The teachers are particularly dissatisfied with centralized training activities on pedagogical competencies under various projects, including the national ones ("Itook part in such projects, where entrepreneurship training was discussed. So all of those projects had the same lecturers and the same methods [...] I come there, and the lecturer says: "You again". I came because the project's title was completely different" R4). The teachers hope to gain actual benefit in the form of various methods and practical knowledge, but sometimes they have to face disappointment ("Everything was known from ages ago, the title is different and it's presented like a new thing [...]" R16). As is widely known, distance learning saves money, but even this learning method often does not meet the teachers' expectations ("Over the last five years, I have attended about 10 such courses. Out of all of them, where I participated, just one was useful, all the others were because those certificates were needed. They're absolutely useless" R39). Though an opposing view has been expressed by other teachers ("The Simulith Centre organises [it] for us [...] they truly are great courses R38). Thus, there are contrasting experiences of participation in projects and courses, but the negative ones shape the opinion that the courses are organised "in order to earn money" (R17) while the projects are usually "gaining and laundering money" ("You launder the money and it's over" R16). For this reason, schools tend to write the projects themselves or cooperate with other schools in project-based activities. All participants of the study admit that such projects satisfy their needs the most and provide the greatest benefit ("We choose responsibly, based on the specially those that are conducted at the national le

Discussion

The focus of this qualitative study was on the perceived professional development of VET teachers in the Lithuanian context. This focus is consistent with assumptions of grounded methods used to generate a theory that "evolves from the study of a phenomenon situated in one particular situational context" (Strauss & Corbin, 1990, p.174). This study utilises the experiences and opinions of vocational school teachers in order to generate a grounded theory of the conditions in which teachers' professional development occur.

Vocational teachers perceive professional development more as an external construct, or, as Kennedy (2011) explains – "policy construct". As teachers talked about the preconditions for the PD, they reported external factors such as changes in the business-world or within the organization. The older teachers in particular treated this process as enforced externally, unavoidable, and regulated. This gives the impression of professional development as professional adaptation (Laužasckas et al., 2008) seeking formally to respond to changes. Only a few of teachers spoke about an internal aspiration for improvement. It seems like external norms and regulations are so internalized in the career path that they become matter-of-course, internal, and indisputable for the teachers.

The study participants highlighted sharing of knowledge and helping colleagues as the key result (or outcome) of professional development. Even though the academic literature emphasises that continuous development of teachers influences the pupils' results (Anderson et al, 2018; Guskey, 2009), the existing reality was far from these. The participants pointed out that it is important to teach the pupils what the syllabus demands, and there is simply no time left in the lesson for pedagogical innovations. This simply confirms once again that they treat PD as an external factor, which exists outside of their activities. If we agree with Fullan that actual practice in the three dimensions — in materials, teaching approaches, and beliefs,— is essential (Fullan, 2007, p. 37) to reforming vocational education and training, then we must admit that the teachers' approaches to teaching undergo the most minimal changes.

2007, p. 37) to reforming vocational education and training, then we must admit that the teachers' approaches to teaching undergo the most minimal changes.

The VET teachers paves the way for "collaborative learning" (Kennedy, 2011) or the development of "a learning school" (Fullan, 2007). As in many countries, VET teachers take part in several activities that they perceive to be valuable for PD (Köpsén & Andersson, 2018). In Lithuania, they employ various forms and methods of non-formal and informal learning: day trips, learning from one another etc. There has been a noticeable shift in the teachers', especially the older ones, learning needs and requirements for the training itself. They no longer find it sufficient to use the conventional, traditional teaching forms and the repetitive topics. There is ever-growing talk about the necessity for teacher training to involve "mastery of the craft". All the more so because the teachers' attitude towards PD is very practical: they are more appreciative of occupation-based training because it provides them with specific skills and abilities that are required in their professional activities. This is absent from pedagogical training. The qualitative findings presented here confirm that VET teachers in small schools are more likely to learn from each other, while in large schools they are used to buy external training programmes. But overall, a tendency can be observed that there is no dominant form of PD but rather various combinations of PD strategies are used. of PD strategies are used.

Both, the national and the local socio-economic context, affect the process of the professional development of VET teachers. The institutional (local) context, while different in schools that are large and small, in the cities and in the villages, generally is favourable to the process of the PD of vocational teachers. The larger schools, which have more pupils, which also

means more financial resources, can allocate more funds to training; the smaller schools have to "calculate it carefully". As schools have an obligation to develop their staff, they do so by clearly planning, monitoring and controlling processes.

The more complicated processes take place in the interactions with the outside or in the national context. The programmes and projects that are funded by government agencies are sporadic and short-lived. This causes teachers to feel uncertain about the continuity of the processes, it even seems to result in hopelessness because they feel particularly dependent on external forces that are beyond their control. Köpsén and Andersson (2018) stress that national policy factors and the relationships with the VET institutions and teachers are important conditions for the potential offered for PD. For example, while analysing vocational teachers' participation in a Swedish national initiative, an increase in participation over the first 2 years was indicated. The initiative was highly appreciated since it recognises vocational teachers' dual professionalism, as it is rare for vocational teachers to be offered opportunities for professional development that suits them and their special needs (Andersson & Köpsén, 2015).

The problem of interaction between the local and the national is also reflected in the

The problem of interaction between the local and the national is also reflected in the perception of PD phenomena. The following quote by Fullan seems like the most accurate description of the emergence of divergent views: "The difficulties in the relationship between external and internal groups are central to the problem and process of meaning. Not only is meaning hard to come by when two different worlds have limited interaction, but misinterpretation, attribution of motives, feelings of being misunderstood, and disillusionment on both sides are almost guaranteed" (Fullan, 2007, p. 100). This is not a minor issue. In the modern pluralistic world, unified, schematised, and authority-based prerequisites of professional development are no longer valid.

Limitations and implications

It should be acknowledged that the aim of this research, to investigate how current educational strategies support the development of vocational staff professional development, was best approached through qualitative means. Only the experiences and knowledge of practising teachers could shed light on the processes, successes and complications associated with PD. Therefore, this study, being an entirely qualitative, is subjective and open to interpretation.

In terms of the generalisability of the research, the results of this study may not be applicable to all vocational teachers because of the limited number of participants found within interviewed groups. However, it should be recognized, that the schools within this study are not significantly unique from others across the country. Specifically, an effort was made to select the most typical schools in different regions of the country. The use of semi-structured interviews to collect data limited the amount of in-depth exploration that individual interviews could have provided. If participants had sensitive or threatening input, they may have been hesitant to share their perspective with their peers in a group setting. In future studies, the use of individual interviews may elicit more in-depth information from the interview content. Additionally, further research into various issues of professional development of VET teachers would therefore be in place. place.

Conclusions

In relation to the research question that investigated the VET teachers' professional development experiences reinforced by educational policy strategies, a framework to advance an understanding of the underlying mechanisms of teachers' engagement in maintaining their

proficiency was developed. It was done in accordance with the grounded theory parameters that

proficiency was developed. It was done in accordance with the grounded theory parameters that influence the process of continuing professional development.

There are three key features in the professional development of VET teachers that may inform educational policy strategies development and implementation. First, within the theoretical framework that was developed in this study, the VET teachers feel a permanent imperative for their professional development. Mostly, external forces, the most important of which are social and economic changes, determine this imperative. Second, in order to change outdated and ineffective teaching methods, vocational teachers are offered the same traditional and ineffective learning and training strategies. Overall, though centralised national programmes have been perceived as the most useful avenue of teachers' professional development, for the most part, they are not able to meet the needs and interest of vocational teachers because of their short-term nature. Third, the professional development of VET teachers' could be characterized as collaborative learning, since the process of PD results in sharing knowledge and helping colleagues.

References

Analysis of the educational problem]. LR ŠMM Švietimo aprūpinimo centras (2015). Kaip mokosi Lietuvos pedagogai? *Švietimo problemos analizė 18*(142). Retrieved from: problemos

https://www.smm.lt/uploads/lawacts/docs/575_2e542b56374b59db1243003bccab175f.pdf
Andersson, P., & Köpsén, S. (2015). Continuing professional development of vocational teachers: participation in a Swedish national initiative. *Empirical Research in Vocational Education and Training, 7*(1), 1-20.

Andersson, P., Hellgren, M., & Köpsén, S. (2018). Factors influencing the value of CPD activities among VET teachers. *International Journal for Research in Vocational Education and Training* (IJRVET), 5(2), 140-164.

Andriušaitienė, D. (2014). Model of organization of VET teachers' technological competences development – The lesson of social partnership. *Procedia-Social and Behavioral Sciences*, 110, 647-657.

Atkins, L. (2018). Exploring teachers' professional development and digital literacy: A grounded theory study. (Doctoral dissertation) De Montfort University, United Kingdom. Bound, H. (2011). Vocational education and training teacher professional development: tensions and context. Studies in Continuing Education, 33(2), 107-119.

Brazienė, R., Aidas, U., & Žukauskas, M. (2014). Inovatyvių pedagogų kvalifikacijos tobulinimo

ataskaita. Retrieved tvrimo

http://www.upc.smm.lt/projektai/pkt/rezultatai/Inovatyviu_pedagogu_kvalifikacijos_tobulinimo_ formu tyrimas.pdf

Bryant, A. (2013). The grounded theory method. In A. A. Trainor, & E. Graue (Eds.), *Reviewing qualitative research in the social sciences*. New York: Routledge.

Caena, F. (2011). Literature review: Quality in teachers' continuing professional development. The European Union. https://goo.gl/2eNfaS

Charmaz, K. (2014). Constructing grounded theory. Sage.
Collinson, V., Kozina, E., Kate Lin, Y. H., Ling, L., Matheson, I., Newcombe, L., & Zogla, I. (2009). Professional development for teachers: A world of change. European Journal of Teacher Education, 32(1), 3-19. https://doi.org/10.1080/02619760802553022
[Conception of teachers' professional development]. Lietuvos Respublikos švietimo ir mokslo ministro 2012 m. gegužės 30 d. įsakymas Nr. V-899 Dėl pedagogų kvalifikacijos tobulinimo

koncepcijos patvirtinimo.

Connelly, L. M. (2016). Trustworthiness in qualitative research. MedSurg Nursing, 25(6), 435-437.

Cope, D. G. (2014, January). Methods and meanings: Credibility and trustworthiness of qualitative research. In *Oncology nursing forum* (Vol. 41(1), 89-91). Corbin, J. M., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative

criteria. Qualitative sociology, 13(1), 3-21.

Corbin, J., & Strauss, A. (2008). Basics of qualitative research: techniques and procedures for developing grounded theory. Los Angeles, SAGE Publications.

Creemers, B. P., & Kyriakides, L. (2013). Improving quality in education: Dynamic approaches to school improvement. Routledge.

Creswell, J. W. (2007). Qualitative inquiry and research design: Choosing among five approaches. Sage Publications.

Danasasmita, E. K. (2015). Continuing Professional Development for the Personnel of Vocational School in Indonesia. In 3rd UPI International Conference on Technical and Vocational Education and Training. Atlantis Press.

Daukilas, S., Mičiulienė, R., Kovalčikienė, K., & Kasperiūnienė, J. (2016). Profesijos pedagogų veiklos turinys: Profesinis tobulėjimas, identitetas, ugdymo turinio metodologija ir kokybė: Kolektyvinė monografija. Aleksandro Stulginskio universiteto Leidybos centras.

Day, C. (2004). A passion for teaching. London and New York. Routledge.

Evans, L. (2014) Leadership for professional development ir learning: enhancing our understiring of how teachers develop. Cambridge Journal of Education, 44(2), 179-198. Fullan, M. (2007). The new meaning of educational change. Routledge. Fullan, M., & Hargreaves, A. (2012). Reviving teaching with 'professional capital'. Education

Week, 31(33), 30-36.

Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S. (2001). What makes professional development effective? Results from a national sample of teachers. American educational research journal, 38(4), 915-945. https://doi.org/10.3102/000283120380049 Gedvilienė, G., Laužackas, R., & Tūtlys, V. (2010). Mokytojų kvalifikacijos tobulinimo poreikiai.

Mokslo studija. VDU leidykla.

Gray, D. E. (2021). Doing research in the real world. Sage.

Grollmann, P. (2009). Professionalization of VET Teachers and Lecturers and Practices in TVET Institutions in an International Perspective. In: Maclean, R., Wilson, D. (eds), International Handbook of Education for the Changing World of Work. Springer, https://doi.org/10.1007/978-1-4020-5281-1 78.

Gulamhussein A. (2013). The Core of Professional Development. American School Board Journal, 197(1), 22-6.

Guskey, T. R. (2009). Closing knowledge effective professional the gap on development. Educational horizons, 87(4), 224-233.

Guskey, T. R., & Sparks, D. (2004). Linking professional development to improvements in student learning. Research linking teacher preparation and student performance, 12(11).

Hardy, I. (2010). Critiquing teacher professional development: teacher learning within the field of teachers' Education, 51(1), 71-84. work. Critical Studies in https://doi.org/10.1080/17508480903450232

Holton, A. J. & Walsh, I. (2017). Classic grounded theory. Applications with qualitative and quantitative data. Sage Publications.

Jones, W. M., Hope, S., & Adams, B. (2018). Teachers' perceptions of digital badges as recognition

of professional development. *British Journal of Educational Technology*, 49(3), 427-438. https://doi.org/10.1111/bjet.12557

Kennedy, A. (2011). Collaborative continuing professional development (CPD) for teachers in Scotland: Aspirations, opportunities and barriers. *European Journal of Teacher Education*, 34(1), 25-41. https://doi.org/10.1080/02619768.2010.534980

Khan, S. N. (2014). Qualitative research method: Grounded theory. *International journal of business and management*, 9(11), 224-233.

Köpsén, S., & Andersson, P. (2018). Boundary processes in connection with students' workplace learning: Potentials for VET teachers' continuing professional development. *Nordic Journal of Vocational Education and Training*, 8(1), 58-75. DOI: https://doi.org/10.3384/njvet.2242-458X.188158

Laužackas, R., Gedvilienė, G., Tūtlys, V., & Juozaitienė, D. (2008). Mokytojų kvalifikacijos tobulinimo poreikiai. *Pedagogika*, 89, 29–44.

[Law on Education of the Republic of Lithuania]. Lietuvos Respublikos švietimo įstatymas. Valstybės žinios, 2011, Nr. 38-1804

Li, Y., & Dervin, F. (2018). *Continuing Professional Development of Teachers in Finland*. Springer International Publishing AG part of Springer Nature.

Lloyd, C., & Payne, J. (2012). Raising the quality of vocational teachers: continuing professional development in England, Wales and Norway. *Research Papers in Education*, 27(1), pp.1-18. https://doi.org/10.1080/02671522.2010.483524

Martino, L. M., & Lasonen, J. (2018). The future of CTE teacher preparation programs in Florida's universities. *The CTE Journal*, 6(2), 15-30.

McGavin, E. (2013, January). Identity on the edge: The impact of risk, compliance and performativity on VET practitioner identity. In *AVETRA 2013: VET research at the edge–training for diversity and change*. Proceedings of the Australian Vocational Education and Training Research Association 2013 conference.

Middlewood, D., Parker, R., & Beere, J. (2005). *Creating a Learning School*. Paul Chapman Publications.

Opfer, V. D., & Pedder, D. (2011). Conceptualizing teacher professional learning. *Review of educational research*, 81(3), 376-407. https://doi.org/10.3102/003465431141360
Perini, M., & Pentassuglia, M. (2018). One step forward: advancing knowledge on Italian VET-

Perini, M., & Pentassuglia, M. (2018). One step forward: advancing knowledge on Italian VET-laboratory in-structional practices. In *Trends in vocational education and training research*. Proceedings of the European Conference on Educational research (ECER), Vocational Education and Training Network (VETNET).

Postholm, M. B. (2012). Teachers' professional development: A theoretical review. *Educational research*, 54(4), 405-429.

Punch, K. F. (2013). Introduction to social research: Quantitative and qualitative approaches. Sage.

Rapley, E. (2017). "Taking the path of least resistance": A constructivist grounded theory of HE teacher practice enactments at a UK landbased college. (PhD thesis). University of Bedfordshire, United Kingdom. http://hdl.handle.net/10547/622834

Rhodes, C., & Beneicke, S. (2003). Professional development support for poorly performing teachers: challenges and opportunities for school managers in addressing teacher learning needs. *Journal of in-service education*, 29(1), 123-140.

Schwille, J., & Dembélé, M., & Schubert, J. (2007). Global Perspectives on Teacher Learning: Improving Policy and Practice. International Institute for Educational Planning (IIEP) UNESCO.

https://eric.ed.gov/?id=ED496753

Serafini, M. (2018). The professional development of VET teachers in Italy: participation, needs quantifications benchmarking barriers. Statistical and and in an international perspective. Empirical Research in Vocational Education Training, 10(1). and https://doi.org/10.1186/s40461-018-0064-9

Seyoum Y. (2012). Staff Development as an Imperative Avenue in Ensuring Quality: The University. Experience Adama Education Research of International. 7. https://doi.org/10.1155/2012/624241

Sikolia, D., Biros, D., Mason, M., & Weiser, M. (2013). Trustworthiness of grounded theory methodology research in information systems.

Strauss, A. L., & Corbin, J. M. (1990). *Basics of qualitative research: Grounded theory procedures*

and techniques. Sage Publications.

and techniques. Sage Publications.

Strauss, A., & Corbin, J. (1998). Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory (2nd ed.). Sage Publications.

Teräs, H., & Kartoğlu, Ü. (2017). A grounded theory of professional learning in an authentic online professional development program. International Review of Research in Open and Distributed Learning, 18(7). DOI https://doi.org/10.19173/irrodl.v18i7.2923

Thompson, L. J., & West, D. (2013). Professional development in the contemporary educational context: Encouraging practice wisdom. Social Work Education, 32(1), 118-133.

Tütlys, V., Vaitkutė, L., Bukantaitė, D. (2022). Development of Competencies and Qualifications of the VET Teachers and Trainers in Lithuania. In: Bünning, F., Spöttl, G., Stolte, H. (eds). Technical and Vocational Teacher Education and Training in International and Development Co-Operation Technical and Vocational Education and Training: Issues, Concerns and Prospects. Operation. Technical and Vocational Education and Training: Issues, Concerns and Prospects, 34. Springer, Singapore. https://doi.org/10.1007/978-981-16-6474-8_21. Valmori, L., & De Costa, P. I. (2016). How do foreign language teachers maintain their

proficiency? grounded theory investigation. System, 57, A

https://doi.org/10.1016/j.system.2016.02.003
Whitehouse, P. (2011). Networked teacher professional development: The case of Globaloria. *Journal of Interactive Learning Research*, 22(1), 139-165.
Winterton, J., Bukantaitė, D., & Tūtlys, V. (2008). Historical development of vocational education and training in Lithuania and its implications for designing and implementation of regional VET partnerships. *Vocational training: research and realities*, (16), 180-191.
Žilionis, S., Rožnienė, D., Andriušaitienė, D., & Kavaliauskas, V. (2013). Profesijos mokytojų rengimo galimybės, jų kvalifikacijos tobulinimas. *Švietimo problemos analizė*, 15(101).

Acknowledgments (optional)

This study was part of the broader project on vocational teacher activities conducted by the Department of Philosophy, Psychology and Vocational Educology at Aleksandras Stulginskis University (Lithuania). Study conception, material preparation and data collection were performed by the research team of this Department. RM realized the study design and analysis. The author would like to thank the colleagues for their precious advice and feedbacks on the research procedures and final manuscript, as well as all vocational teachers that took part in the project.

Conflicts of interest. Please select one of the following statements (and delete the other one):

The author of this paper certifies that she has NO affiliations with or involvement in any organization or entity with any financial or non-financial interest (such as honoraria; educational grants; membership, employment; affiliations, knowledge or beliefs) in the subject matter or materials discussed in this manuscript.