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Changes in the professionalism of vocational teachers as viewed through the experiences of long-serving vocational teachers in Estonia

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Abstract

Background: Since the restoration of independence in Estonia in 1991, much has changed with regard to vocational education and training (VET). Radical social and economic developments took place in the early 1990s and in subsequent years, VET was significantly influenced by the educational policy of the European Union (EU). VET teachers are viewed as key actors in implementing changes, solving problems and achieving goals in vocational education. The focus of this research is how VET teachers themselves experience and interpret changes in their work and how they cope with changes. A qualitative research strategy is adopted along with a phenomenological approach. Semi-structured interviews were conducted with nine long-serving VET teachers.

Results: In the study, eight main themes of change and various activities for coping with change were identified. One of the most significant changes relates to the students.

Conclusion: We can conclude that the work of Estonian VET teachers has become increasingly complex, as the variety of tasks and what is required of them primarily relates to growing societal changes. To some extent, the tendencies that can be observed among Estonian VET teachers are also observable internationally in countries with different historical backgrounds. Although the sample is limited and we cannot generalise the results for all Estonian VET teachers, the emerging pattern of professionalism indicates some substantial trends. In addition, these findings can help inform future research in or contribute to comparisons with different countries.

Keywords: Changes in vocational education, VET teachers' experiences, Professionalism, Professionalism, Coping activities

Background

It has been acknowledged worldwide that the work of teachers is becoming increasingly complex. Traditional boundaries in educational fields between occupations/vocations, institutions, work roles and duties—being of great importance in the determination of professionalism in teaching—are being reconstructed, blurred and even disappearing. At the same time, new boundaries in professional fields are emerging. Furthermore,

globalization and Europeanization create integrative trends that influence the work of teachers and manifest themselves through the “global governance of teacher professionalism”, as well as through standardized policy instruments, implemented through national education policies, and comparative data sets (Seddon et al. 2013) among others.

Growing cultural diversity is creating differentiation tendencies at the micro level that become obvious in the case of students, as well as teachers. The manifestation of growing differentiation in student populations can be seen in terms of their learning motivation and skills, socio-economic background, age and previous education (e.g. Ümarik and Rekkor 2013; Cort and Rolls 2010; Kats et al. 2010; Susimetsä 2010). At the same time, one can see differentiation tendencies in teacher communities in terms of their reactions to policy regulations in the context of VET. For example, VET teachers respond to policy regulations differently and they have various attitudes towards the change process (Rekkor et al. 2013; Vähäsantanen and Eteläpelto 2009; Ümarik and Rekkor 2013; Tafel-Viia et al. 2012). Therefore, four different types of professionalism can be observed in Estonia in terms of whether they perceive their professionalism as including/not including care (for children) functions (Loogma et al. 2010).

VET teachers in different countries have perceived their teaching profession as being subject to pressure. On the one hand, what societal actors expect from teachers has been growing and expanding considerably. The professional roles of teachers have expanded and new roles such as supervisor, mentor, counsellor, adult trainer and, in some cases, “a substitute for parents” or even “social worker” have been assigned to them (Cort and Rolls 2010; Hughes and Attwell 2010; Kats et al. 2010; Susimetsä 2010; Tutschner 2010; Loogma 2010). This trend has followed the demand for new competences and can lead to the transformation of the professional identity of teachers (Ümarik and Rekkor 2013; Vähäsantanen and Eteläpelto 2009). Furthermore, the requirement for more communication and cooperation with colleagues and communities, including companies and other societal institutions and actors (e.g. Kats et al. 2010; Susimetsä 2010; Tutschner 2010; Vähäsantanen and Eteläpelto 2009) is growing substantially. Teaching methods have changed and transformed to become learner-centred, and the learning environment has widened to include e-learning, virtual learning and work learning (Cort and Rolls 2010; Hughes and Attwell 2010; Susimetsä 2010). VET teachers in some countries are faced with an increasing scope of learning, social and behavioural problems faced by their younger students and the teachers often deal with the students’ social, psychological and personal problems (Cort and Rolls 2010; Kats et al. 2010; Susimetsä 2010). In some cases, teachers are not ready to cope with these problems (Cort and Rolls 2010). On the other hand, some teachers perceive a decreased level of independence and autonomy because they have to follow educational policy standards and requirements (Müller et al. 2010; Goodson et al. 2006). For example, teaching performance has become highly visible (Müller et al. 2010), classroom work is inspected (Hughes and Attwell 2010) and teaching has to be strictly based on the national curriculum (Müller et al. 2010; Goodson et al. 2006). Some teachers work under a tight regime of accountability for improving the academic results of students (Müller et al. 2010). This is followed by growing educational bureaucracy and increased administrative burden (Hughes and Attwell 2010). It has been argued that the abovementioned global trends, like GERM (Global Educational

Reform Movement), described by Sahlberg (2011), generally tend to merchandise or de-professionalise (Hargreaves 2006) and cut down the professional autonomy and power of teachers (Hoyle and Wallace 2009).

VET teachers have contradictory positions in the implementation of VET reforms (Cedefop 2012), being simultaneously a subject and an object of the changes arising from the reforms. As subjects of change, vocational teachers are the agents who carry out changes in VET. As objects of change, vocational teachers have to continuously improve their knowledge and skills to meet the expectations that stem from the changes in VET (Singh 2011) and its context. As a consequence, teachers feel that they are over worked and their work has become more stressful (Cort and Rolls 2010; Susimetsä 2010).

Recent studies of Estonian VET teachers have yielded similar results and shown similar tendencies. They indicate the relevance of the changes in areas such as networking and cooperation between local and international partners, enterprises and other schools. Their methods in the classroom have changed because of new technology and the implementation of e-learning (Loogma 2010). Changes in teaching, emerging from new target groups and the growing diversity of student populations (e.g. increasing numbers of students with special needs), have also brought new roles as shown in other studies (Ümarik and Rekkor 2013; Loogma 2010). Teachers have to support these students in the learning process in ways that differ from the support they offer other students in order to make sure the students stay in school (Espenberg et al. 2012). VET teachers have had different experiences and attitudes regarding the national curriculum development and implementation process in their work. Therefore, some teachers have adopted the changes more easily than others (Rekkor et al. 2013). Furthermore, Estonian VET teachers have realised that their work requires better professional, pedagogical, social and computer skills (Loogma 2010).

Against the background of continuous change, the work of vocational teachers has become increasingly more complex, coupled with growing societal demands and expectations upon them. On the one hand, this requires a transformed/modernised understanding of professionalism and professionality among teachers. On the other hand, in order to cope with the changing nature of the work in a changing context, teachers have to apply various (effective) coping activities. Sometimes the professional capacity of teachers is not in accordance with the changing demands on their work and they may lack the resources to cope with changing expectations. In addition, it is less known what the redefinition of the concepts of professionalism and professionality is leading to in terms of the kinds of practical implications, such as changes in professional practice (Evans 2008). The abovementioned tendencies are characteristic of various groups of teachers, but although studies on teacher professionalism and professionality have mainly focused on general education as a context (Müller et al. 2010; Loogma 2014; Loogma et al. 2010; Hargreaves 2006), teachers working within the framework of VET have not been studied as thoroughly. Hence, this study focuses on the professionality of VET teachers.

The aim of this article is to understand what kinds of meanings VET teachers attribute to the multiple changes that have occurred in VET over the last two decades, how they have responded to them (which activities they have implemented to cope with changes) and what are/have been the consequences for teacher professionality.

The following research questions will be discussed in the article:

- How do VET teachers themselves experience and interpret changes in their work?
- How do they cope with changes and what kinds of implications have the changes had on their professionalism?

Focusing on the changing legal regulations for teaching work in VET

In Estonia, numerous changes have taken place in VET at multiple levels. Dramatic developments accompanied Estonia's transition from the Soviet regime to become a democratic society, and therefore, the professionalization of VET teachers took place in the context of a very dynamic transition.

The entire institutional infrastructure of VET had to be rebuilt from an almost "empty space" after 1991. The previous Soviet VET system was highly centralised and closely linked to the planned industrial system, which in a very short time became school-based. In addition, the system of practical training was weakened and changed considerably by the comprehensive restructuring during the reorientation from Eastern to Western markets and the privatisation process. The state was too weak to support reforms in VET (Loogma 2010). The development of VET did not keep pace with the rapid change in society, and therefore, foreign experts and foreign funded projects played a significant role in re-building the Estonian VET system.

However, after the restoration of independence in the Republic of Estonia in 1991, reforms in general education began immediately. The main aim was to de-ideologize the curricula. This innovation did not involve vocational schools and teachers. Therefore, at the beginning of the 1990s, there was a liberal adjustment within vocational schools to respond to the changes taking place in the labour market and the economy.

The following is an overview of the periods of change, which have been introduced on the basis of VET regulations and development plans over the last 20 years. The changes in terms of both the development plans and the standardisation of the Estonian VET system and regulations for VET teachers are described in chronological order.

Changes from 1995 to 2000: the concept of a VET teacher emerged

The reform of vocational education began with the EU (PHARE) programmes in 1995, which initiated the development of modular curricula and in-service training of curricular developers (Loogma 2010; Rekkor 2014). In 1995, the Vocational Education Institutions Act was approved. This considered more the administrative side of school management (Kutseõppeasutuse seadus 1995). Then the Vocational Teacher Statute was adopted, introducing for the first time the term "vocational teacher" and eliminating separate teachers positions for teaching theory (previously known as professional teacher) and practical application (previously known as training master). This document also established the pedagogical requirements and work content for vocational teachers, which for many teachers meant in-service studies or studies in vocational pedagogy at degree level (Kutseõpetaja statuudi kinnitamine 1995). In 1996, the requirements for the qualification of vocational teachers and their verification procedures were introduced. According to the pedagogical qualifications, there were now separate professional levels—young teacher, teacher, senior teacher and teacher-educationalist (Kutseõppeasutuse

pedagoogide atesteerimine ja kutseõppeasutuse ning rakenduskõrgkooli töö tasustamine 1996). Also during the same year, the reorganization of the vocational school network was launched, which meant consolidating schools into VET centres to provide better quality and more effective use of resources in VET. In 1998, the conceptual bases of VET were approved, which established certain purposes and activities for VET development and the Vocational Education Institutions Act was improved (Haridusministeerium, Kutsehariduse ja Tööhõive Seirekeskus 2001). In the same year, the new general qualification attestation stipulation and the procedure for pedagogues were adopted, and the content of the new regulation was the same as in the previous document in 1996 (Pedagoogide atesteerimise tingimused ja kord 1998). In 2000, the Professions Act provided the basis for the development of professional qualification requirements and set out the conditions and procedures for the assessment and awarding of professional qualifications (Kutseseadus 2000). Consequently, at the end of the period, the development of professional standards and national curricula for professional areas began (Rekkor 2014).

Changes from 2001 to 2004: teacher qualification requirements established

In 2001, the Development Plan for the Estonian VET System 2001–2004 was adopted. The purpose of this plan was to prepare a competitive workforce for Estonian and international labour markets while providing every young person both social and professional readiness to work. The system was also designed to develop an attractive, flexible, accessible, modern, efficient and high-quality VET system. The development of the curricula and the reorganisation of the network of VET institutions continued. Attention turned to modernization of initial and continuing VET teacher training (Haridusministeerium 2001). In 2002, the new Requirements for Teachers' Qualifications were introduced and pedagogues' verification stipulation and procedure were supplemented. There were requirements that each VET teacher had to have a higher education and to acquire pedagogical skills by the 31st of May 2003 (Pedagoogide kvalifikatsiooninõuded 2002).

Changes from 2005 to 2008: VET teachers' professional standard was adopted

In 2005, the second development plan for the Estonian VET system 2005–2008 was passed. This was based on national and EU regulations and set the following key objectives: VET corresponds to the needs of the labour market, the quality of VET increases, and therefore, the image of VET improves. To achieve the objectives of the development plan, several European Social Fund projects were launched (Estonian Ministry of Education and Research 2005). In 2006, the Professional Standard for Vocational Teachers was adopted, which determined three professional levels (VET teacher III, IV and V) with detailed descriptions of the tasks, educational requirements and professional skills (Kutsekoda 2006). The Vocational Education and Training Standard was also adopted and this document contained general requirements for vocational training (Kutseharidusstandard 2006). In 2008, a new eight-level professional qualifications system was created, which was consistent with the European qualifications network (Kutseseadus 2008). Significant progress was made in aligning the final exams of VET institutions with professional examinations. The system of skill competitions was developed and Estonia joined the international organisations (*WorldSkills* and *EuroSkills*) for vocational competitions (Estonian Ministry of Education and Research 2009).

Changes from 2009 to 2013: VET teacher qualification evaluation according to professional standards

The third development plan for the Estonian VET system was adopted for the years 2009–2013. The key priorities for that period were adopting a learner-centred approach, high quality, timeliness and an appreciation of VET. The development plan emphasised the need for good teachers, curricula and teaching materials as well as efficient collaboration with the world of both work and social partners. Another major concern was that the population of vocational teachers was not regenerating sufficiently and the average age was too high. Significant attention had to be paid to the dropout rate in VET and to the development of learner key competences to ensure their readiness for lifelong learning. Professional standards were updated causing changes in the VET curricula, which had to be aligned with the national curriculum and outcome-based learning, and the volume of teaching was recalculated from the study week system to the VET credit point system (ECVET) (Estonian Ministry of Education and Research 2009). In 2010, the Requirements for Teachers' Qualification expired and the Professional Standard for Vocational Teachers became the basis for assessing the qualification of vocational teachers. In 2013, the new Vocational Education Institutions Act was adopted, leading to the introduction of several new regulations (Vocational Educational Institutions Act 2013).

In 2014, the Estonian Lifelong Learning Strategy (2020) was adopted, which serves as a basis for further activities in VET. The main focus is on increasing learner-centredness and diversifying the VET target group.

According to the changed legal regulations for VET in post-Soviet Estonia, there are two main tendencies. First, the work of VET teachers has become standardized and regulated by the state, and secondly, it has become more complex and includes various duties, requirements and responsibilities.

Theoretical framework

Scholarly discussions on professionalism, professions and professionalism, especially in the context of teaching work, have constantly been in the spotlight since changes in society and in education have led to a rethinking of the meanings of previously held concepts (Hoyle 1974; Hargreves and Goodson 1996; Clow 2001; Goodson 2003; Ruler 2005; Loogma 2014; Noordegraaf, 2007; Evans 2008; Evetts 2009). Traditionally, occupational groups like lawyers, doctors, priests and others have been considered the “real” professions. They have been referred to as clear/pure and strong, as well as real professions, since the features of these professions are more clear-cut (Noordegraaf 2007). The teaching profession, however, has been viewed more as a semi-profession (Antikainen et al. 2009) and there have been doubts about whether it is justified to consider it a profession (Clow 2001) because it does not comply with the requirements that describe a real profession. Freidson (2001) represents a widely accepted position that the main characteristic features of professionalism as the attributes of a profession, leading to enjoying a higher status in society are: self-regulation of a professional group (autonomy and control over their own work, control over entrance into the professional group) guided by a specific professional ideology; science-based education; and a strong institutionalization of the professional group. This approach to professionalism has also been viewed as an expression of a professional culture (Evans 2008, 25).

During discussions about the concept of professionalism, many scholars have emphasised that the concept is socially constructed, depending much on the social and historical context, and therefore, is contested (Evans 2008; Evetts 2009). The emergence of the ‘new professionalism’ in various occupational fields must involve a change of professional practice, and hence also, the professional development of teachers (Evans 2008).

However, professionalism is directly related to the concept of profession, which determines what kinds of activities belong to the responsibilities of the specific occupational/professional group and what do not. The concept of professionalism embeds two distinctive aspects of the professional lives of teachers—social and individual—along with professionalism and professionality (Hoyle 1974). Teachers’ professionalism as a sociological concept concerns the occupational group of teachers, being related to the status of the teaching profession in society and the ability of the occupational group to self-regulate and the strategies and rhetoric employed by members of an occupation to improve status, salary and conditions (Hoyle 2001). Professionality can be viewed as an individual aspect of the work of teachers, related to such elements of their work as knowledge, skills, procedures, and how they implement them in their practice (Hoyle 1974; Evans 2008). Therefore, professionalism is concerned with the profession as well as the practice of teaching and the best ways teachers pursue “...the art and craft of teaching” (Goodson 2003, 126).

Furthermore, two models of professionality can be distinguished: *restricted* and *extended*. A “*restricted*” professional is guided by a narrow, classroom-based perspective, which is related to the day-to-day practicalities of teaching. They are mainly based on experience and intuition. The “*Extended*” professional model has a much wider vision or understanding of what education is and involves valuing the theoretical principles and knowledge of pedagogy, working creatively and taking care of students (Hoyle 1974, 2008). VET teachers may have a different orientation of professionality on the “restricted-extended” continuum. For example, the following essential aspects pertain to teacher professionality: pedagogical beliefs, classroom teaching practices, cooperation, class and school climate, occupational commitment and general work-related attitudes, self-efficacy and job satisfaction, but also motivation, knowledge, skills, and the procedures teachers implement in their practical work (Evans 2008; Loogma et al. 2009; Lepik et al. 2013; Canrinus et al. 2011). Furthermore, Hoyle (1974) provided an analytical framework for analysing teacher professionality on the scale of “restricted-extended” professionality and the following features have been attributed to it: skills derived from experience vs. those derived from a mediation between experience and theory; perspectives limited to the classroom context vs. perspectives embracing the broader social context of education; workplace events perceived in isolation vs. workplace events perceived in relation to policies and goals; introspective with regard to methods vs. methods compared with those of colleagues and with reports of practice; value placed on autonomy vs. value placed on professional collaboration; limited vs. high involvement in non-immediate professional activities (e.g. networks, research, professional associations); professional development limited and confined to practical courses vs. considerable involvement in professional development that includes learning of a theoretical nature; work seen as an intuitive activity vs. work seen as a rational activity.

Taking the above into consideration, vocational teacher professionalism has to be regarded from two interconnected perspectives. On the one hand, requirements and external control (e.g. vocational teachers' professional standard and other standards) are increasing. On the other hand, it is important to understand, how vocational teachers themselves perceive the changes in their daily work, what is essential for them and how they cope with the changes. These personal aspects of vocational teacher professionalism are the focus of this study.

Methods

This study applies a qualitative research strategy, based on a phenomenological approach, relying upon Husserl's view that all knowledge is based on personal experience (Smith et al. 2009; Moustakas 1994), objective knowledge can be found in experience, and that subjective experience is the source of truth.

To collect the data, a semi-structured interview guide was developed that contained six main topics: becoming a vocational teacher and including the duties of a vocational teacher; major changes in VET over the last two decades as seen by vocational teachers; the effect of the changes on the work of vocational teachers; necessary competences for vocational teachers to cope with the changes and their work; vocational teachers' strategies for coping with the changes; vocational teachers' vision of their work as a vocational teacher in the future.

To find interviewees we contacted seven different VET schools via email. After introducing the aim of the study we asked permission to interview experienced VET teachers at the school. The schools then sent the contact details of those teachers that agreed to participate in the study. The sample consisted of VET teachers with more than 20 years of pedagogical experience (between 23 and 39 years). This was the main criterion used for construction the sample in order to understand the long-term effect of the changes on VET teacher professionalism. Nine VET teachers were interviewed (until saturation had been reached) between the ages of 52 and 66; three of them were men. The interviewees were teaching in different curriculum groups (clothes processing, food processing, agriculture, hairdressing and beauty treatment, forestry, building and construction, wood processing, environmental protection). Eight teachers were teaching both post-basic school and post-secondary school groups. Two teachers only taught post-secondary school groups. Seven vocational teachers worked in urban and two in rural vocational training centres. Eight teachers started to teach in the VET school during the Soviet era and one of them in 1991. Six of them were directed to work in the school after graduating from their professional training, two were called to teach by other teachers and one lived in the area where the school was and she got this job. Five VET teachers had a higher professional education and had passed pedagogical training, while the other teachers had a higher pedagogical education and had passed professional training. When starting to work in the VET school, five teachers taught only theoretical subjects and the others practical application.

The interviews were conducted individually with each interviewee in 2014, and lasted from 1 to 2 h. The data-driven thematic analysis process was used to analyse the data which included six phases (Braun and Clarke 2006). First, all recorded interviews were transcribed, read and initial ideas noted. Next, initial codes were generated regarding the

phenomenon of changes and coping. In the third phase, the different codes were sorted into potential sub-themes and themes (categories). Subsequently, the content of the created sub-themes and main themes were checked. In the fifth phase, all sub-themes and main themes were refined and named. In the last phase, the final analysis was written. To ensure validity, triangulation was used to analyse the interview data (Creswell 2009). Two researchers analysed the data separately and later worked together to adjust the sub-themes and main themes.

Results

This section explains how experienced VET teachers perceived changes in their work and professionalism, and explores what activities they engaged into cope with these changes.

Changes to the work of VET teachers and their professionalism

The analysis of the interviews revealed eight main themes in the changes with sub-themes (Table 1) to which VET teachers had attributed different meanings.

In the following, the main themes of changes are described individually.

VET teachers’ daily duties

While talking about changes in VET teachers’ daily duties the teachers interviewed highlighted four aspects:

- *More administrative work* New time-consuming duties have been added to the teaching work. The excessive amount of new computer-based administrative work

Table 1 Main themes and sub-themes that constitute the pattern of meanings the teachers attributed to the changes

Main themes of changes	Sub-themes of changes
1. VET teachers’ daily duties	More administrative work More variety in the duties of the group supervisor Preparing students for skills competitions Increased independent student work
2. Teaching process	Complex content of teaching Changed teaching strategies Work habits no longer developed
3. Student population in VET	Weakened family support for students Diversified student population Changed student attitudes
4. Learning environment in VET schools	Modernized physical environment Improved e-learning environment
5. Communication and cooperation	Improved cooperation Changed personal communication
6. Organisational changes	Reorganised school networks Changed support systems
7. Curricula	Confused about professional standards Confused about curriculum changes
8. Status of VET	Unchanged position of VET Diminished status of VET teachers

takes too much attention and time and requires better computer skills. Teachers have to use an electronic study information system to draw up work plans, e-courses and so on. Some teachers perceive that a disturbing amount of administrative work has been added and they perceive that teaching has become of secondary importance.

./.../I don't have enough time to spend with the students doing their work practice anymore because I have to leave a resource for myself to be able to sit at the computer after the practice finishes and dive into filling out the e-school, completing all sorts of learning programmes, well, there's an awful lot of things that have been added. (VET teacher of wood processing)

- *More variety in the duties of the group supervisor* Teachers noted that the work of a group supervisor has become more time-consuming, since the volume of such tasks as monitoring student absences, interacting with students and their parents, making academic progress shortlists, and informing students about the different grants and benefits have considerably increased. For that reason teachers need to have up-to-date information about various social benefits, to be able to communicate with different parents, and when necessary, take over the parenting role.

./.../this class supervising work is the biggest work./.../filling in all those papers and all that./.../all those benefits, drawing up the shortlists and all, then you have to chase them./.../what's the reason for your absence (VET teacher of clothes processing)

- *Preparing students for skills competitions* Preparing students for skills competitions at the national and/or international level (*Worldskills, Euroskills*) is also a new responsibility for VET teachers and the amount of time and work required to accomplish this task is difficult to measure. VET teachers often do it on a voluntary basis and get paid a bonus only if the student achieves a high ranking or recognition.

./.../they didn't achieve a high place, they didn't come... and they were among the highest eight, but they didn't come first or second or third and you just do./.../ (VET teacher of food processing)

- *Increased independent student work* The proportion of independent student work has increased, which requires more work from teachers in the preparation of tasks and giving feedback. However, the amount of time this work requires has not been planned into the professional duties.

Teaching process

While speaking about changes in the teaching process over the last 20 years, teachers highlighted different aspects and three sub-themes were identified:

- *Complex content of teaching* While talking about the changes in the content of teaching, teachers emphasised three tendencies: first the content of teaching has become more integrated, secondly it is more complex, and thirdly more oriented towards learning outcomes. The redefinition of the VET teaching profession has meant the elimination of separate positions for teaching theory and practice. Therefore, the teaching of theoretical topics and practical skills has become more integrated and

understandable for learners and has facilitated the teachers' work. In addition, the teaching has become more goal-oriented and more stringent, because it must be based on the curriculum.

When one and the same teacher started teaching it [theory and practice] all. And of course it was easier for the work practice, since as I had taught the theory I knew exactly what I was going to demand in practice and I had a clear picture of what each of them knew and was able to do and how. This way it was a move to the better (VET teacher of clothes processing)

- The content of vocational training has become more complex due to the rapid development of technologies and tools, information overload, which is also due to the demands of the labour market, and pressure from employers. Now, teachers believe that the content of training is better aligned to the work done in companies. Teachers understand their responsibility in ensuring that their students are able to meet their employers' expectations.

.../now it [vocational training] has kind of levelled off, meaning that it's the same at school as it is in the companies/.../ (VET teacher of agriculture)

- *Changed teaching strategies* VET teachers talked about the changed teaching strategies they use. They apply more inclusive methods that better involve, activate and motivate students, encourage cooperation and help develop general competences in students. Some teachers have perceived that there is an increased need to explain and illustrate the educational content. If possible, teachers teach new specialist knowledge through practical tasks and activities, which ensure that the students understand the material they learn better.

.../if it's about processing a pocket or a knot, I'll give them a hand-out and then we'll discuss it and do it, if the practice classroom is free, we immediately perform it. This works best, especially for manual activity. (VET teacher of clothes processing)

- However, some teachers have argued that teaching has not inherently changed much. One teacher emphasised that in pedagogy, greater changes have happened on paper because more attention is paid to how to "write things down". Great changes have taken place in the technology and equipment used for teaching.

Come to think of all those tools, I mean technology, and those technologies, how things are done, there have perhaps been more of those actual changes than in pedagogy, but the verbal, the outer expression is bigger in pedagogy (VET teacher of agriculture)

- *Work habits no longer developed* Some interviewed teachers have noticed that during and shortly after the Soviet period and also a little later the development of work habits at vocational schools has disappeared. Before, students were engaged in housekeeping tasks at school (e.g. wiping the board, putting desks and chairs in order, etc.).

.../schools don't teach students to work/.../they seem to mind being on duty, as if they shouldn't be allowed to work while being on duty/.../. If we don't teach it at school, it won't come from anywhere else. (VET teacher of environmental protection)

Student population in VET

All the interviewed VET teachers emphasised that the student population has changed a lot in VET and that has had an effect on teacher professionalism. During the analysis, three sub-themes were created: weakened family support for students, diversified student population and changed student attitudes.

- *Weakened family support for students* The students' social/home background has changed. The internationalisation of the economy and the free movement of labour within the EU have, according to the vocational teachers, had an effect on the students' home background. Many students come from broken families, parents are working abroad and often there is no active parenting and support. Often parents are not interested in their child's studies. The shortcomings of the homes have to be compensated for by VET teachers. Communicating with parents, who work abroad and are indifferent to their child's academic progress, has become an unpleasant obligation for teachers, requiring both good social skills and extra time. There are few parents who communicate with teachers or are interested in their child's progress.

.../one [parent] works or both work in Finland and a grandmother is raising the child here.../are from broken families, incomplete families, there's often no support from the family.../The mother doesn't even know what the boy is doing here. (VET teacher of environmental protection).

- *Diversified student population* The student population has diversified by age, level of education, motivation, existing experience, learning skills and capabilities. The number of motivated older students has increased.
- An important differentiation exists between adult and post-basic school learners. Teachers have argued that adult learners are more motivated, knowledgeable, self-managing and they expect their teachers to give them a more comprehensive, specialist education and guidance towards the acquisition of further career related knowledge and skills. Most teachers have positive attitudes toward adult learners, compared with post-basic school learners. However, the adult learners have commitments to work and family duties and for those reasons the number of absences has increased. Furthermore, the diverse student population complicates the work of VET teachers because learning is affected by age differences, as well as by the existing knowledge base, which requires additional time to fill in the "gaps".

.../the older one, she doesn't maybe grasp things as fast as a younger one does.../the younger one has understood everything and done the work, while the older one still needs further explanations and assistance.../. (VET teacher of clothes processing)

- At the same time, teachers have perceived that the post-basic school students are rather problematic; they are generally immature and poorly motivated. Therefore, VET teachers try to motivate the students through their own professional role modelling and making the learning process interesting. But sometimes, unmotivated students may decrease the teachers' motivation and desire to work in this profession.

.../what affects this motivation most is just the students' attitude.../to get this positive one.../you keep hoping to get it, but there's always that.../they don't submit their

assignments, they don't attend/.../if you can see the sparkle in their eyes, you really feel like teaching/.../if you get this attitude, it really makes you think, that/.../Do I really need this? (VET teacher of food processing)

- The teachers explained that the levels of basic knowledge and elementary working and learning skills among post-basic school vocational students have weakened considerably. Many students are unable to independently plan their learning and time, and have problems focusing their attention. Also, the functional reading skills have declined and the proportion of students with special educational needs has increased. Referring to the low level of knowledge one teacher explains:

/.../half of my class don't know the times table by heart, you know, this is a kind of an indicator, isn't it/.../it's very weak. (VET teacher of wood processing)

- Oral and written self-expression and communication skills in post-basic school students have deteriorated and they are afraid of direct interaction with teachers and prefer using passive channels for communication (Facebook, e-mail, messaging). Nevertheless, VET teachers feel responsible for the development of student communication skills during the learning process because, when students have their internship in companies, they must be able to interact with their colleagues.

/.../they're shy or afraid of such closer interaction./.../maybe it's related to the computer world, that if they don't want to communicate, they use the delete button and the peace is restored/.../ (VET teacher of agriculture)

- Although today's students are skilled in using digital devices, but these skills are not applied to learning. Students do not utilize the web-based learning environment or learning materials on e-learning environments.

They can have a computer but they don't use it for their professional studies/.../they get trained on computer skills in the basic school/.../they don't apply these skills when they're acquiring this field of study. (VET teacher of wood processing)

- *Changed student attitudes* One teacher emphasized that students have become more tolerant of and attentive to students with special needs, they help and support each other. However, there are also VET teachers who have experienced the opposite and have had to deal with teaching students to be more tolerant of other members of their study group in the first years of study.
- Teachers have understood that general societal changes have affected younger students and they are more indifferent and lazy. They lack a sense of duty and discipline, which is expressed by not adhering to the established attendance times and assignment deadlines. VET teachers also feel that they have few options for disciplining them or supporting changes in their behavioural patterns.

They have seen it by now, that how I punish them when they're late for my lessons? I can't leave them in the corridor because then they'd just walk away. In the Soviet time, damn it, I lined them up, so they'd know they'd been late. (VET teacher of wood processing)

One teacher noted that before, students were physically more active and that was promoted by the school requirements. Other teachers mentioned that students are tired and their

primary needs (sleep, food) have not been fulfilled, which reduces their performance both academically and physically.

Learning environment in VET schools

Talking about the learning environment in VET schools, the teachers interviewed have noticed changes in the physical and e-learning environment.

- *Modernized physical environment* The VET schools have been modernized (renovated facilities, modern equipment). In some fields there is more modern equipment in the training workshop than in private companies which enhances the teacher's ability to teach current professional skills.

.../a business, it saves money, they don't have such spacious rooms, they don't have all of them so cool, that's what. Students come back and say that they were sorry to leave, that there's no such.../that here there was everything they needed. So this is positive. (VET teacher of clothes processing)

- *Improved e-learning environment* There are many new electronic materials and devices that simplify the teachers' work. Also, there is an increase in pressure to utilize e-learning environments, which supports student learning. Teachers have observed that students are reluctant to adjust to a computer-based experience and students prefer traditional instructional materials on paper. Students use various social networking environments (Facebook), but they do not visit the web-based environments that support their learning. Teachers are frustrated with their inability to do anything about this situation.

.../for a long time already they haven't visited the e-school [e-learning environment]..../ if I want them to definitely read them, I'll put them on the Facebook. (VET teacher of agriculture)

Communication and cooperation

VET teachers have noticed that the patterns of cooperation and communication with companies, the school management, colleagues and students have changed.

- *Improved cooperation* Cooperation between enterprises and schools has improved. There were times when companies jealously guarded their business and specialist technological practices, and these were not even shared with the schools educating and training the workforce.

.../before it really used to be that you didn't get any technology or any information from the company. (VET teacher of clothes processing)

VET teachers' involvement in solving their school's learning-related problems has grown and their suggestions are taken into consideration. Curriculum reforms have caused more work-related cooperation between schools and teachers in the same field. For example, VET teachers share their compiled teaching materials more with other teachers.

- *Changed personal communication* After-work communication and interaction with colleagues has decreased due to the increased demands on their time and large VET centres, where different fields have converged.

But now there are very many fields of specialisation together, people come from completely different places, have different training, generally differently minded people/.../and that's why now there seems to be less socialising with each other (VET teacher of agriculture)

Interpersonal interaction between VET teachers and students has become less structured and restricted which some students may abuse and this requires the VET teachers to improve their assertiveness skills.

/.../these days students are like, teachers may also be a bit like friends, anyway, it's different. Earlier, the teacher used to be special and strict, but today it's not the case (VET teacher of hairdressing and beauty treatment)

Organisational changes

Over the last 20 years, the vocational teachers interviewed have experienced changes in the schools networking and support systems.

- *Reorganised school networks* Teachers have had different experiences from the reorganisation of the school network. Some teachers have been affected by this change and felt insecure because of the uncertainty regarding the future of their school and job.

But this search, this slight feeling of insecurity, who will be merged with whom/.../. Whether the school will survive, whether the school is going to be merged with another school/.../whether somebody else will be merged with that other school? (VET teacher of agriculture)

- *Changed support systems* The teachers emphasised that there were times when VET did not have support staff (medical support, catering, activity leaders, social pedagogues, psychologists). Although various support staff have been employed, group supervisors still have a major role in supporting students and many teachers feel that they are left with the duties of a social pedagogue. One teacher also commented that a negative change in VET was the degradation of the system of career counselling, which to this day has not yet been restored to the former level of services. Therefore, students are not making well-informed choices regarding their further studies.

At the beginning of the 1990s, when the system of career counselling was abolished/.../. That was the greatest blunder (VET teacher of environmental protection)

- Some teachers have experienced positive changes related to the emergence of the young teachers' mentorship system and some long-serving teachers see it as their duty to support novice VET teachers.

.../it would be beautiful to think, actually, that I would take someone by my side, a young one, and together we would teach, I'd observe him/her, supervise, guide, politely of course! (VET teacher of agriculture)

Curricula

All the VET teachers interviewed have experienced curriculum changes, which have deeply depended upon changes in professional standards.

- *Confused about professional standards* Generally, the introduction of professional standards has created a common understanding of professional training. The latest changes in professional standards in their specialist field, which were caused by the establishment of the eight-level professional qualification system, have remained unclear to the teachers. They cannot see any substantive changes merely in the wording. The earlier standards were sufficient and had just been fully understood when they were replaced by the new ones. The same cannot be said about the professional standard for VET teachers, because most of teachers interviewed have not even read it, since this has not been a requirement.
- *Confused about curriculum changes* Both positive and negative aspects can be observed in the curricula-related changes. Positively, the learning content of the curricula has been harmonised, thus ensuring comparability and transparency and allowing students to move easily between schools.

.../such proper national curricula that were completed a couple of years ago, which made schools teach in the same way, understand things in the same way, because before things had been, kind of, very chaotic (VET teacher of building and construction)

- On the negative side, the teachers experienced initial difficulties in understanding the last phase of curricular changes, and they were implemented with excessive haste. Changes were noticed in the wording and form rather than the content. The VET teachers also felt that the curriculum development has become project-based, concentrated in the hands of too small a group of people, and the new curricula are not sufficiently tested.

At one stage the curriculum is the same, then something has to be reformulated, the content is the same, but all the waffle about how it looks, well that's the thing that seems to be constantly changing. (VET teacher of agriculture)

- Due to curriculum development, the length of study has shortened and the volume has increased. This has influenced the formation of professional skills in VET, especially in the post-basic school training programmes.

I liked the period when it was 4 years after basic school.../in the fourth year you finally felt that now work can start in earnest.../that improved their experience improved their speed.../. (VET teacher of wood processing)

Status of VET

All teachers interviewed emphasized their status in society and the position of VET.

- *Unchanged position of VET* Long-serving teachers perceived that the status of VET in society has not changed in spite of years of active work going on to improve it.

.../it's still low, the popularity of vocational education./.../we all keep saying that we/.../need workforce, but when someone goes to a VET school, then it's like, like something second-rate. (VET teacher of building and construction)

- *Diminished status of VET teachers* In addition, some of the teachers interviewed believe the status of VET teachers in society has diminished compared to the teachers of the more prestigious general education. At the end of the Soviet period, VET teachers had more rights and there was a greater respect for their job. Now, VET teachers must have assertive personalities in order to be respected by their students.

.../well, in the Soviet times a teacher was a king because of the job title, today its really .../.../this self-assertion/.../is more important, actually, than in the olden days. (VET teacher of agriculture)

Activities among VET teachers for coping with change

It may be concluded from the analysis of the interviews with experienced VET teachers that their work has been affected by the changes that have taken place at different levels within the VET system in Estonia. These changes require vocational teachers to cope in different ways. In the following, an overview will be given of the activities (Table 2) that experienced teachers reported using over the years to cope with the changes.

In the following, these coping activities will be introduced individually.

Table 2 Activities for coping with change

Main coping activities	Sub-coping activities
1. Activities that help teachers cope with stress	Recreation, doing work at home and looking for help from close friends Giving up Positive thinking
2. Activities for acquiring new knowledge and skills	Learning from students Learning from previous experience Learning from examples Acquiring work experience in the professional field Acquiring new knowledge in training
3. Cooperating with colleagues	Exchanging experiences with colleagues Sharing teaching materials
4. Implementing a student-centred approach	Activities that support students Rethinking their role as teachers New ways to interact with students
5. Coping with the low status of VET	

Activities that help teachers cope with stress

The interviewed teachers have described how they managed the stress caused by changes and diversified daily duties. They have used the following activities:

- *Recreation, doing work at home and looking for help from close friends* Teachers highlighted activities such as playing sport, walking in the evenings, talking about their problems with friends or close colleagues, and taking time off or just staying away from work. One of the most frequently mentioned opportunities for restoring one's strength was the official long summer holiday.

When I feel tired and fed up/.../I'd just say that I'm going now/.../home. I'd be at home for three days, walk at the seaside and rest and see and then come back as a completely changed person. (VET teacher of agriculture)

- Sometimes, in order to cope with all the tasks, teachers reported taking work home and doing it in their free time. When the need arose, they also asked their families for help in fulfilling administrative duties.

/.../how will I manage to cope/.../let's say, you'll leave the school and then, at home, you'll start working again, this way/.../ (VET teacher of building and construction)

- *Giving up* There have been situations, where younger teachers, who were unable to cope with the administrative tasks, have chosen inappropriate activities (e.g. drinking alcohol), which resulted in them leaving the teaching profession.

And a couple of youngish guys, real jacks-of-all-trades, have simply left because there's been so much of this paperwork, that there's this pressure on the one hand, and on the other hand, and men simply leave/.../ (VET teacher of wood processing)

- *Positive thinking* It was important for the teachers to maintain an optimistic state of mind and find something important and positive in every change. Otherwise, the interfering aspect may be the teacher's negative mentality and attitude towards work.

/.../the thing that may interfere is what I have here, between my two ears. If you keep thinking/.../I cannot do it, I'm not able to, I don't want to./.../The only thing that you focus on; and the thing you don't focus on is, well, aha, so this is what I should be doing now. (VET teacher of food processing)

Activities for acquiring new knowledge and skills

Teachers noted that fulfilling various duties at work requires a whole set of different competences and skills, such as rational time planning, an increasingly greater demand for foreign language proficiency (especially those who prepare students for international competitions), IT competence, communication skills, and general educational knowledge. To acquire such different competences the teachers use the following activities:

- *Learning from students* Yet another method vocational teachers have used to improve their professional knowledge is independent learning based on information received from their students.

They [students] have also left behind very many different websites, that is how these things have been collected/.../I have improved my own knowledge as well with them/.../ well, by using the self-study method/.../ (VET teacher of wood processing)

- *Learning from previous experience* Coping with different tasks also greatly depended on what tasks the teacher has fulfilled before or is fulfilling at the moment. Similar previous experiences simplify the completion of a task and decrease the resistance to change.

I've done this professional standard before/.../I'm in a favourable situation, I've already seen it, like from aside, like what's about to come or so, for me there are no surprises. (VET teacher of building and construction)

- *Learning from examples* To cope with curriculum changes some teachers have relied on the examples given in the textbooks and have adapted these to their own situation.

And finally, some textbooks were published by INNOVE [about curricula development], and there were some publications, and I looked at the examples given in those and then, then it helped me to find associations (VET teacher of forestry)

- However, VET teachers noted the fact that in the implementation of changes there are no overarching agreements that have created a situation where vocational teachers fill in the required documents according to the given guidelines and it appears that the format does not suit other officials.

/.../that from above new requirements keep coming, the same with the curricula/.../it currently feels like, you send your implementation plan to one person, and this person says, very good, super, and then another person says it's good for nothing. (VET teacher of building and construction)

- *Acquiring work experience in the professional field* Teachers have improved their professional knowledge and skills in an official practical placement in a company or by watching professional TV-programmes. Some teachers have been working part-time in the field that they teach.

I have actually done it [practicing] for years... worked in Sadolin, trained likewise, and in Capron for a year, in the same field ... all of it in my professional field, and in Germany, improved my knowledge/.../(VET teacher of building and construction)

- *Acquiring new knowledge in training* The interviews with teachers revealed that based on the needs or justified wishes of vocational teachers, the schools have organised or provided different pedagogical as well as professional training, which support the VET teachers' ability to cope with new challenges.

Cooperating with colleagues

To cope with the changes the interviewed teachers exchanged experiences and shared their teaching materials.

- *Exchanging experiences with colleagues* There were teachers who had acquired new professional and pedagogical skills from colleagues through the exchange of best practices during events specifically organised for that purpose or just when communicating with each other. Generally, colleagues at school are helpful and support each other in fulfilling new tasks.

./.../how we refresh our knowledge or so, this happens here in collaboration with each other. Meaning, that if I don't understand./.../I'll go to a colleague and tell her, listen, let's figure it out together how and what. (VET teacher of clothes processing)

- *Sharing teaching materials* To manage time the mutual sharing of teaching materials between colleagues has increased, which reduces the time required for planning lessons.

Right now we have achieved here quite good cooperation./.../I give you, you give me. I have those lecture materials, I give these to you. What will you give me? In a word, we share teaching materials with each other and this makes it much easier. (VET teacher of food processing)

Implementing a student-centred approach

The diversified student population has meant that the teachers have to implement various activities in the learning process.

- *Activities that support students* Some teachers said that coping with students of various ages required them to prepare a selection of different teaching materials and individual tasks within the lesson when the need arises.

*That means that you have to be prepared to give her the next task, and if the older one then stays behind, then you'd give her the task and explain her once again and this way./.../ (VET teacher of clothes processing)*The poor reading skills and understanding of the text among post-basic school students has resulted in some VET teachers conducting special sessions to improve student reading skills.

I train them especially in reading, in the sense that there's a lot of knowledge in the books, we read something./.../so that in his fourth year he already begins to understand what the book says. (VET teacher of agriculture)

- Poor communication skills in the students have required teachers to use different approaches in the teaching process to develop the necessary communication skills in students.

./.../you just wouldn't leave them alone in the lesson, well, see, now we're going to do this, now you'll speak./.../now we'll all speak together, that is, now I've noticed that this has to be done more often./.../ (VET of agriculture)

- The limited knowledge base of post-basic school students has required vocational teachers to explain more when teaching them. One of the teachers believed that

there is no point in repeating an explanation more than ten times because at some point you have to accept that the student is not able to understand what is being taught. In addition, two wood processing teachers emphasised that the weaker independent learning abilities of post-basic school students have required the use of traditional methods in the learning process.

I'll.../give a task there and then, that thing now, solve it. Nobody will take it apart, there's no.../, that he comes here, takes his notebook and I let him write down these most important sentences, black on white, so that he at least would know this. (VET teacher of wood processing)

- *Rethinking their role as teachers* A VET teacher in building and construction stated that occasionally, VET teachers should take on the role of a student, because this would help them to better see and interpret the role of a teacher in the learning process and gain a better understanding of its effect on students. Teachers should also be motivated and inspired by their students' achievements.

For a teacher to be back at school [as a student], it's very refreshing, the fact that you'll look at yourself from a distance because there's another teacher in front of you, you'll look at yourself from a distance and think.../, do I also make the same mistake? (VET teacher of building and construction)

- *New ways to interact with students* Interactions with students have made vocational teachers explore better ways of making contact with their students. For that purpose, teachers have to be in the social networking environments that young people use, and communicate with them on an equal footing.

I was looking for and—phoned, phoned the boy, phoned his home number, nobody answered.../Well, I wrote directly on the Facebook.../everybody who was there, who I sent the message to, responded! (VET teacher of agriculture)

Coping with low status of VET

The low position of VET and the low status of teachers have changed teacher behaviour and they try to show their professionalism in a positive and proud way. The low status of teachers in society demands a stronger and more self-assertive character.

The more it is being criticized, the more I straighten myself and tell them that this is where I come.../ (VET teacher of building and construction)

Discussion

The aim of this study was to understand the meanings VET teachers have attributed to the changes that have occurred in VET in Estonia over the last two decades, and to understand how VET teachers have experienced and responded to the changes in their work and how the changes have affected teacher professionalism—the beliefs, procedures, methods, work practices and other attributes of their professionalism.

The results of the study show that in the patterns of VET teacher professionalism, eight main themes (categories) can be identified: VET teachers' daily duties, teaching process, student population in VET, learning environment of VET schools, communication and

cooperation, organisational changes, curricula and the status of VET. To cope with these changes, VET teachers used different activities.

Despite having a different historical and educational background the pattern of Estonian teacher professionalism has some similarities with international tendencies revealed in previous studies: (1) VET teachers perceive their work as complex and time consuming work (Cort and Rolls 2010; Hughes and Attwell 2010; Kats et al. 2010; Susimetsä 2010; Tutschner 2010; Loogma 2010; Ümarik and Rekkor 2013; Vähäsantanen and Eteläpelto 2009), and at the same time, experienced teachers feel a deep concern that teaching itself is increasingly of secondary importance in their professional life. (2) Teachers experience an additional role that they refer to as “social worker” or the need to take over a parenting role. This relates to the need to take much more care of the students. However, teachers generally resist this new role (Cort and Rolls 2010; Hughes and Attwell 2010; Kats et al. 2010; Susimetsä 2010; Tutschner 2010; Loogma 2010; Ümarik and Rekkor 2013). Nevertheless, it emerged that mentorship has been perceived as a positive change and experienced teachers are ready to fulfil it. (3) The learning environment and teaching strategies have changed a lot (also Cort and Rolls 2010; Hughes and Attwell 2010; Susimetsä 2010). The teachers in this study emphasized that the better learning environment and new teaching equipment/materials have facilitated their work. (4) The diversified student population has change teaching (Cort and Rolls 2010; Kats et al. 2010; Susimetsä 2010; Ümarik and Rekkor 2013). Experienced teachers said that support from home for the students has decreased and often parents do not care about their child’s progress in school and those students could easily drop-out. Furthermore, the teachers felt negatively that they have to teach knowledge to younger learners, which should have already been achieved in basic school, and sometimes the teachers lack the knowledge to handle these situations. (5) The VET teachers in this study feel positively that professional cooperation with different parties has increased (Kats et al. 2010; Loogma 2010; Susimetsä 2010; Tutschner 2010; Vähäsantanen and Eteläpelto 2009) and they have to be more involved in solving learning-related problems at school. Conversely, after-work socialising at a friendship level has decreased because of the diversified and enlarged VET schools. (6) Standardisation of teaching work has increased (Müller et al. 2010; Goodson et al. 2006). The interviewed teachers have experienced that the content of VET has become more transparent and comparable because of the implementation of professional standards and national curricula. However, they generally acknowledged the change as a positive change in Estonian VET, but in spite of this, the most recent changes in professional standards and curricula (like implementation of outcome based learning) are not clear for VET teachers and they rather resist these changes.

The changes have introduced many challenges for the professionalism of VET teachers: (1) The VET teachers’ workday is hectic and more stressful. They endeavour to find a balance by using activities like recreation, doing work at home, looking for help from close friends and keeping a positive outlook. Acquiring new competences, learning from previous experience and cooperating with colleagues can also help them to cope in this situation. Sometimes young teachers just give up and leave the profession. (2) Another challenge is changes in the teaching process and the student population. The content of vocational training has become more demanding and the work of VET teachers is monitored according to student achievement in the national vocational exam. Moreover, adult

learners expect vocational teachers to teach at a high level of specialist knowledge and skill. Therefore, teachers constantly develop their professional knowledge and skills in a different way: learning from students, exchanging experiences with colleagues, acquiring work experience in the professional field or new knowledge through training. The vocational teachers in the study highlighted many negative changes in younger learners, which made their work more difficult. For example, the lack of motivation in younger learners, declining basic knowledge and skills (like functional reading, oral and written self-expression), poor direct communication and changed attitudes which interfere with teaching professional knowledge and skills. VET teachers have tried to compensate for these shortcomings by applying more student-centred activities and new ways to interact with students. Sometimes, in spite of these efforts, the teachers are not able to motivate learners, and this can result in a reduction of teacher motivation. Furthermore, conflict appeared over the fact that students do not want use e-learning environments and digital devices for the purpose of learning. But VET teachers are under pressure to improve the digital skills of students, which is one of the priorities in the Estonian Life-long Learning Strategy (2014). This requirement results in duplication in the teachers' work and takes more time (after preparing the e-learning environment for learning they have to prepare materials to hand out to students) and they do not know how to address this situation. (3) The internationalization of the work of VET teachers is manifested in preparing students for skills competitions, and this challenges their professionalism in many ways. First, this challenge requires professional skills at an international level and the ability to speak a foreign language. Secondly, it demands an extra contribution and high motivation to work because this is mostly done on a voluntary basis. Thirdly, this work helps to advertise the VET schools and adds value to and popularizes VET. (4) The teachers in this study stressed that the position of VET in society has not changed but their status has become even lower. This situation demands a strong character from teachers to demand respect.

Juxtaposing the pattern of teacher professionalism emerging in this study with the model of the "restricted-extended" continuum by Hoyle (1974), both restricted and extended features can be seen. First, some features of a "restricted" professionalism were revealed in activities like: learning more from practice than theory, desire to commit more to teaching, lack of time limits involvement in non-teaching professional activities. Secondly, the following features can be considered as characterising the "extended" professionalism of teachers: supporting and caring for their learners, better involvement in professional activities, wider contribution to VET education (e.g. preparing students for competitions, classroom events perceived in relation to VET goals, teaching seen as more goal-oriented and integrated), continuous professional learning (also at international level) and particularly, the increased professional collaboration with different parties. Based on this description, one can say that experienced VET teachers perceived their professionalism as being much wider than only the classroom-based perspective and their activities refer to professional collaboration. Therefore, changes and reforms in VET have inclined VET teachers towards the orientation described by Hoyle as extended professionalism. However, Hoyle (2008) stressed that although the reform movement has stimulated and required extended professionalism from teachers, this has caused the expansion of the teacher's roles and it has been difficult for them to ignore

these changes. All these aspects also emerged in the professionalism of the Estonian VET teachers. In addition, this pattern of changes has brought up new features, which Hoyle could not see in his early model, such as internationalisation, expanded cooperation outside the school, new roles, e-learning and so on.

Conclusions

The work of the VET teachers in this study includes various positive and negative time-consuming tasks, and the results indicated that additional duties have been added to their previous workload. Therefore, detailed workload assessments are missing to provide the ideal amount of time necessary for each task and reduce the risk of burnout. In addition, it is essential to develop stronger and more effective support systems for beginner VET teachers to prevent them from leaving the profession.

While implementing reforms it is also essential to involve more VET teachers in the entire change and development process, not just the implementation phase because a previous experience and knowledge of the planned changes helps them adapt to the new situation. Therefore, one can conclude that more participation and optimal time should be offered to VET teachers to understand and discuss questions that arise in the context of changes, as was emphasised by Vähäsantanen and Eteläpelto (2009).

It can be concluded that the changing requirements for professionalism demand that VET teachers also display particular personality characteristics like strong internal motivation, positive thinking, assertiveness, personal commitment and mission consciousness. According to the teachers in the interviews there is long list of knowledge, skills and competences that have become an essential part of their professionalism: comprehensive skills for using computers and other technical tools or equipment; better time management and work planning skills; foreign language skills; better general educational knowledge; good communication and cooperation skills with different parties (parents, students, colleagues, companies); better integration of theoretical and practical skills in teaching; implementation of learner-centred methods; knowledge to motivate younger students and to understand students of various age groups; knowledge and skills to manage and teach students that possess various levels of knowledge and experience in the same classroom. Furthermore, changes in the student population have created several difficulties for VET teachers, which demand more effort than only teaching. In particular, providing support and help so students can solve their personal problems has become one of the most important requirements and part of the professionalism of teachers. In spite of this, experienced VET teachers emphasize more continuous development in their specialist field, which is related to teaching their subject and also pedagogical skills.

The study findings have helped understand the factors that have changed the work of VET teachers and influenced their professionalism. It is not possible to generalise the results for all Estonian VET teachers because of the limitations of the sample, but these findings can indicate important trends in the changing professionalism of VET teachers and help inform future quantitative research on VET teachers. In addition, the result may also be interesting for those countries that have a similar historical background but have not joined the EU.

Authors' contributions

MS made substantial contributions to conception and design, collected the data, conducted the analyses and interpretation, wrote the first draft and processed changes to the manuscript. RL collected the data, conducted the analyses, and processed changes to the manuscript. KL contributed to the theoretical part of the article, revised the manuscript critically, suggested and made improvements to the manuscript. All authors read and approved the final manuscript.

Acknowledgements

This article was supported by the European Social Fund (Grant nr. 1.2.0401.09-0070).

The article is part of the national research project IUT18-2 "Teachers' professionalism and professionalism in changing context (1.01.2014–31.12.2019)", supported by the Estonian Research Council.

Competing interests

The authors declare that they have no competing interests.

Received: 12 April 2016 Accepted: 20 September 2016

Published online: 26 September 2016

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