# Exploring the relationship between teacher professionality and occupational experience

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**Abstract**

Professional development is a key process within the wider agenda of raising standards and increasing societal growth capacity by improving teaching policy and practice in education. Teacher professional development is a complicated, yet, inseparable part of the teaching process. It is important to monitor the teachers' development and to study how teacher's competency in combination with occupational standards work in the real teaching process. This research investigates how teacher professionalism and competencies are related with qualification frameworks and professional standards that operate as an instrument supporting the analysis and development of teachers' professional qualifications. The aim of the research was to explore the relations between teacher's professionality and occupational qualifications. 40 teachers were asked to estimate their pedagogical, core and holistic representation competencies. The correlation analysis was applied to investigate the relations between the length of employment and the competencies. The results indicated positive but weak correlations that suggest the relationship between learning gains and development need as well as between assessment and targeted feedback. A negative but still weak correlation was found between the length of employment and ensuring physical, mental and emotional wellbeing. Future work will focus on elaborating the instrument used in this study as well as the experimental setup in order to gain further insights and reliable results.

*Keywords*: professional development; occupational qualification; lifelong learning;

## 1. Introduction

Today, teachers are facing increasingly complex challenges, skills and competencies of the 21st century and the use of technology among them. As the modern global mankind is based on knowledge (OECD, 2013), we need professionals who are involved in lifelong learning in a wider context (Wastiau, 2014). Professionalism is closely linked with professional development (PD) and the changes in society (Guerriero, 2017). Highly qualified and experienced teachers are the basis of a well-operating education system – thus PD forms the foundation for the quality of education (Bolam & McMahon, 2004). PD, an inseparable part of teachers' work is difficult to assess as the competency is assured by obtaining new levels of qualification. PD is the key process of raising professional standards and social skills through educational policy and practice (Evans, 2008).

*1.1 Professionalism*

Professionalism can be viewed as professional values (Pratte & Rury, 1991), in education, also as developing the four stages of teachers' professionalism (the pre-professional age, the age of the autonomous professional, the age of the collegial professional and the age of the post-professional or postmodern professional), which in turn are supported by teachers' experience (Hargreaves, 2006). Teaching on traditional basis and dependence on standardized programs characterize the pre-professional era. The consciousness of the subject was fundamental. Practical training was generally applied under skilled teachers' supervision. During the autonomic professionalism period, teachers participated in development, which was accompanied with professional dignity. The present period is defined by teachers' professional individuality. Different reformations occured in the period of collegial professionalism, which caused rearrengements in teachers work. Several different teaching methods were applied, teachers faced new responsibilities. Besides teaching, they became social supporters. The increase in the numbers of the students with special needs additionally influenced teachers work. During the post-professionalism period school's functions changed. On the one hand, teachers' rights to determine diminished, but on the other hand, the responsibility relating to various educational problems increased, which additionally decreased teachers' autonomy. Hargreaves (2006) found that teachering profession must be based on scientific education, superior status in society and has to be

competitively remunerated. While describing the different periods, Hargreaves proceeds from the status of teaching profession in society (Ibid).

Originating from the model of professionalism, Hoyle (1974) disserted teachers' professionalism on two perspectives – restricted and extended professionalism. A restricted professional is an autonomous teacher who relies on his own experiences and teaching practices in his day-to-day work, however an extended professional possesses broader comprehension about education, the role in society, collaboration and appreciates theoretical knowledge. The given experience-based professionalism in the above division could be viewed together with the stages of teachers' qualification.

Evans (2013) observed professional improvement on microlevel as a reorganisation of knowledge which means integrating and bonding new attainments. However, the aggravating circumstance is the multidimensionality of the professional improvement. Evans's (2012) multidimensional conception consists of behavioural, intellectual, and attitudinal components. Previously mentioned components may occur independently or reveal as the sum of the components but the real power and potential lies in interrelated relations (Sachs, 2010).

*1.2. Competency framework and professional standards*

Proceeding from the professional standards (PS), the pedagogical competencies, on the one hand, support success, develop effectiveness and help with development, and on the other hand, affect social changes in general (Figure 1). Pedagogical competencies are closely related to PD and social change.
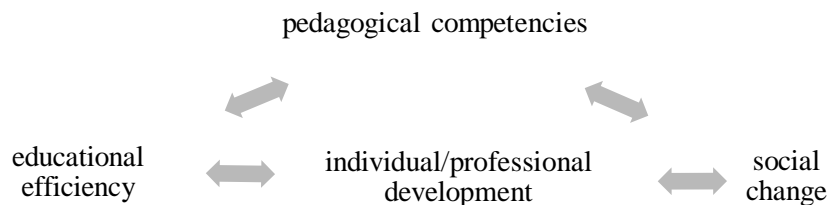


Figure 1. Pedagogical competencies in relation with PD and social change (Oser & Oelkers, 2001)

Pedagogical competencies are a set of potential behaviours or abilities that allow for effective development or a minimum professional standard that is prescribed by law and which professionals should reach (Ingvarson, 2002). "Competence" or " competency" are used equally as a definition of standard (CEPPE, 2013). Both terms (competence and competency) contain conceptual differences but are often used interchangeably (Haigh, Ell, & Mackisack, 2013; Winterton, Deist, & Stringfellow, 2006). According to Mansfield (2004), the competences are results (professional standards that describe what teachers have to do); tasks that people do (professional standards tell what is happening now); and personal characteristics (these describe what teacher like). Tigelaar (2004) formulated the concept of competence as "an integrated set of personal qualities, knowledge, skills and attitudes necessary for high efficiency in different teaching contexts". In many countries, the teacher's competencies are defined locally, based on internationally-defined competencies (e.g OECD). However, the competencies of the qualifications framework are quite similar from country to country, the main areas are defined as follows: (1) the knowledge teachers need to have (2) the skills teachers need to have (3) the attitudes and behaviour the teacher applies while using his knowledge and skills (Mohamed, Valcke & Wever, 2017). Qualification frameworks are mainly performance-based. Coles and Werquin (2009) have defined the main objectives of qualification frameworks:

1. Establishing knowledge, skills and national standards.
2. Promoting the quality of education and training rules.
3. Coordination and comparison of qualifications.

4. Promoting learning opportunities and learning.

In most cases, the competency framework supports teachers' PD based on competencies of licensing and certification, and evaluating professionalism and valuable activities (Darling-Hammond, 2006; Hayes, 1997; Korthagen, 2010). Teachers' competency model is the basis for teacher self-analysis and for teacher's in-service training (Merlecons, 2014). Teacher competency valuation is based on self-assessment, i.e. feedback and self-reflection (Yan, & Brown, 2016) while at the same time influencing the teacher's perception, affection and attitude, and supporting lifelong learning (Zhong, 2015). Self-reflection enables teachers to examine and restructurize their thoughts and practices related to educational theories. Additionally, reflective activities allow to investigate successful strategies and fields which need improvement (Zamor, 2009). The output of the reflection ability is the interaction between competencies and beliefs, i.e teacher can develop his competencies to have a greater impact on other people's learning (Korthagan & Vasalos, 2005). Self-evaluation or reflection on teaching activity, is part of professional development (Larrivee, 2000).

Competency is defined as a dynamic and progressive ability to meet the complex demands in context by mobilising holistic psychosocial resources like cognitive, functional, personal and ethical (Guerrero, 2017). This definition of competency is the key to professional standards.

*1.3. Qualification and professional standards*

Professional standards which are based on competencies are described as "what teachers need to know and be able to apply in practice" but also "how their assessment of knowledge is valued" (Guerriero, Toledo-Figueroa, & Révai, 2017, p. 83). Professional standards are based on specific quality requirements (Ibid), while also working as occupational indicators (The InTASC Model, 2013). The standard refers to the performance level of the criteria being evaluated (Ingvarson, 2002, p. 3). Teachers' PS and competency frameworks are considered to be instruments that help teachers to cope with challenging issues in order to promote lifelong teacher development (Toledo-Figueroa, Révai, & Guerriero, 2017).

Professional standards define the continuing improvement of competencies (knowledge, skills and attitudes) that may lead to (or not) additional formal results in the career of a teacher (e.g continuing professional development) (Guerrero, 2017). The PS reflects the level of teacher's competencies, which can be used to take up a profession in order to measure or evaluate pedagogical activity (Sachs, 2015), and to support the achievement of better results and the certification of teaching practices (Darling-Hammond, 2012; Kleinhenz, & Ingvarson, 2007).

Most of the professional standards promote active learning, focusing on both sides, teachers as well as students. All standards explicitly require teachers to have knowledge and understanding of learning and development. The standards share a few main components of teachers' pedagogical knowledge, although the specific elements of these components are described in different ways. Differentiated instruction, engagement, student feedback and classroom management are the most shared ones across the teacher professional standards analysed (Guerriero, 2017). Ingvarson and Kleinhenz (2003) recognize that the most sets of professional standards today share common structural functions, such as structuring at specific taxonomic levels.

Sachs (2010) has highlighted the need to establish professional standards and a list of the benefits of professional standards:

1. Professional standards (PS) should improve the perfomance of teachers.

2. PS will improve the state of teachers – they will enhance the status of the teaching profession and contribute to continuous professional development.

3. PS should support teachers on-going learning – self-development becomes an integral part of the teacher's work.

Different professional standards show that differentiated instruction, inclusion, student feedback and classroom management are the most important aspects of professional standards. Toledo-Figueroa and Révai (2017), analysing the frameworks of PS in different countries, concluded that PS are important for professional success because of:

1. substance and knowledge being related to cognitive competencies,

2. application skills being related to functional competency, necessary for the successful implementation of knowledge in practice,

3. professional standards also including value competencies and ethical competencies.

Drawn on the above, the teacher's professional judgment is based on theoretical knowledge and practical knowledge that he can understand from context-based experience (Shalem, 2014). Professional standards should also motivate teachers to perform as professionals, promoting the teacher's capacity of empathy and self-efficacy (Guerriero, 2017).

Professional standards can be used for competency assessment, including self-assessment and conformity assessment, career planning and lifelong learning basics, and identification of training needs. All parts of the qualification standards have been written down as competencies, the existence of which can be proven on the basis of the performance indicators given in the PS. In addition to the compulsory competencies, the PS also specifies the teacher's basic competencies.

The qualification standard refers to the performance level of the criteria being evaluated (Ingvarson, 2002). Teacher's PS and competency frameworks are the instruments that help teachers to cope with challenges in order to promote lifelong teacher development (Toledo-Figueroa, Révai, & Guerriero, 2017). PS reflects the level of teacher's competencies which can be used to measure or evaluate pedagogical activity (Sachs, 2015) and to support the achievement of better results and the certification of teaching practices (Darling-Hammond, 2012). One of the important goals of certification is the appreciation of teacher's work (Sachs, 2010), which creates an opportunity and provides an incentive to rise to higher standards proving that the teacher's profession meets professional values. The importance of the teacher's model of competency lies in the fact that it defines common principles for directing teacher development and makes the teacher's process of assessing pedagogical competencies transparent and unambiguous (Merlecons, 2014).

The aim of this research was to investigate how teacher professionalism and competencies are related with qualification frameworks and professional standards that operate as an instrument supporting the analysis and development of teachers' professional qualifications.

## 2. Method

The data were collected from 40 high school teachers with an average length of employment of 24.2 years (SD=13.27). We used an online questionnaire with 23 items where the teachers self-assessed (1) their pedagogical competencies, and (2) core competencies connected with occupational standards on planning learning and teaching activities, designing the learning environment, supporting learning and development, reflection and professional self-development, coaching and mentoring, and research and development. Teachers assessed their competencies on the 5-point Likert-type scale which described all competencies based on qualification standards.

For data analysis descriptive statistics and correlation analysis were applied. A Shapiro-Wilk's test did not reveal normal distribution in any of the competencies, therefore the non-parametric Spearman correlation analysis was implemented to explore the relationships between the length of employment and competencies.

## 3. Results

The analysis of teachers' assessment of their competencies revealed the highest mean values for completing and adapting study material for learners (M=3.26; SD=0.72), choosing study material (M=3.21; SD=0.73), compiling teachers' work plans (M=3.18; SD=0.64), and recurrent competencies (M=3.18; SD=0.56) (Table 1). Teachers are used to update their study materials regularly, they create digital materials to facilitate content acquisition and independent learning. At the same time, several teachers admitted they need support and guidance to create new digital materials. They also want to know more about innovative solutions in education.

Table 1. Mean values of teacher competencies (N=40)

| | Mean | SD |
|---|---|---|
| Completing and adapting study material | 3.26 | 0.72 |
| Choosing study material | 3.21 | 0.73 |
| Compiling teachers' work plans | 3.18 | 0.64 |
| Recurrent competencies | 3.18 | 0.56 |
| Councelling parents | 2.95 | 0.61 |
| Assessment and feeback supporting learning and development | 2.92 | 0.62 |
| Researching learning and teaching, and disseminating pedagogical knowledge | 2.82 | 0.51 |

The mode of teachers' self-assessment of competencies was predominantly 3 (on the 5-point scale). The lowest mean values were the scores for researching learning and teaching, and disseminating pedagogical knowledge (M=2.82; SD=0.51), assessment and feedback supporting learning and development (M=2.92; SD=0.62), and councelling parents (M=2.95; SD=0.61). Practising teachers who have no connection with universities and do not supervise student teachers, do not usually do any research. However, they lack the skills of supervising their students' studies and are ready to self-educate in this field.

We investigated the relations between the length of employment and the competencies using Spearman correlation analysis. The results indicated positive, however weak correlations between ascertainment of learner's learning and development needs (r=0.35*), and assessment, and feedback supporting learning and development (r=0.39*). The strongest positive correlation was revealed between teachers' length of employment and teacher-feedback in a process of student assessment (r= 0.43*). The quality of teachers' professional judgment depends on their theoretical knowledge and experience also regarding the specific situation and context (Shalem, 2014).

A weak negative correlation was found between the length of employment and ensuring physical, mental and emotional wellbeing (r= -0.35*). It means that teachers with longer period of employment pay less attention to maintaining their physical, mental and emotional wellbeing although they acknowledge and analyse the shortcomings in the above. Thus, the current study indicates that the length of employment is most closely linked to the teacher-feedback and assessment based on teachers' knowledge that is subject knowledge combined with pedagogical knowledge. However, there is a positive tendency of teachers willing to develop in the areas that are felt necessary for their self-improvement.

## 4. Discussions

This research looked how teacher professionalism and competencies are related with the qualification framework and professional standards. Thus, professional standards can be used as a tool for raising teachers' professional qualifications and also as a tool for self-analysis, as they both are based on specific quality requirements (Guerrero, Toledo-Figueroa, Révai, 2017) which also help teachers to cope with various complex challenges. Professional standards also demonstrate how the occupational qualification framework supports teachers' professional development and whether and how the teaching experience is reflected at the level of teacher qualification.

The teacher's professional experience is related to professional standards. Professional standards define the level of skills (knowledge, skills and attitudes) based on the teacher's self-reflection and give the teacher the opportunity to monitor his activities and draw conclusions. The quality of the teaching process depends on the scope of the teacher's knowledge and the competencies that are influenced by the teaching experience. Beginners and experienced teachers differ in their ability to apply their knowledge. Although teachers lack the skills of supervising their students' studies and creating digital material, they are ready to self-educate and improve their skills in these fields. Compliance or non-compliance with professional standards is the feedback resulting from teachers' self-analysis, which makes teachers do their work meaningfully and analyse why they are doing it and what the teachers need to do in order to develop further.

## 5. Conclusions

Professional standards define the level of skills based on self-reflection of the teacher and give the teacher the opportunity to monitor his activities and make field-based conclusions. The quality of the teaching process depends on

the extent of the teacher's knowledge and competencies that are partly related to the teaching experience. The importance of the teachers' competencies lies primarily in defining common principles for directing teacher development and making the teacher's pedagogical competency assessment process unambiguous (OECD, 2005).

Professional standards can be used for competency assessment, including self-assessment and conformity assessment, career planning and lifelong learning basis, and identification of training needs. In addition to the compulsory competencies, the professional standards also specify the teacher's basic competencies. The qualification standard refers to the level where the criteria are met. Teacher's professional standards and competency frameworks are the instruments that help teachers cope with challenges in order to promote lifelong teacher development. They reflect the level of teacher's competencies which can be used to measure or evaluate pedagogical activity and to support the achievement of better results and the certification of teaching practices.

In conclusion, the competency model supports the analysis of teachers' work and serves as the basis for their in-service training. However, the correlation analysis did not reveal many strong correlations which can be explained by the complexity of the questionnaire.

## 6. Recommendations / future directions

The future research should focus on elaborating the instrument used in this study as well as the experimental setup in order to gain further insights and more reliable results.

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