

## ASSESSMENT OF TEACHER COMPETENCES WITH RESPECT TO THEIR LINGUISTIC VS NON-LINGUISTIC PROFESSIONAL ORIENTATION

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**Abstract:** The paper focuses on perception of teachers' professional competence assessment with regard to the variable linguistic professional orientation. The reason for identifying this sub-research issue within the research project APVV-14-0446 *Evaluation of teacher competences* is to develop a tool for evaluating teachers' professional competences. The variable professional orientation is differentiated in two-dimensional form as a completed foreign language education in combination with another subject in different field of science and completed education in various other subjects, i.e. teachers with linguistic and non-linguistic qualification. The aim is to find out the evaluation of which teachers' competences is perceived equally and differently, regardless of their professional orientation. We conducted a questionnaire survey evaluating teachers' competences with 730 respondents from among the primary and secondary school teachers from all over Slovakia. We found that there are differences in perceptions of competence assessment (in A, B and D competences) between language teachers and teachers of other subjects.

**Keywords:** teachers' professional competences, assessment of teachers' competences, linguistic and non-linguistic professional orientation, teachers' competence evaluation tool

### 1. INTRODUCTION

Teacher competence research from the point of view of teacher evaluation belongs to an insufficiently investigated area. These are primarily tools for assessing the quality and results of their educational and training activities, taking into account: pedagogical-psychological and subject-matter preparedness, ability to communicate, manage educational activities and class, diagnose and evaluate students, self-reflect their own activities, advice, cooperate, have consultations with parents of children, including their personal qualities. Current research focuses on supporting teachers' professional development and special professional knowledge and skills in the form of trainings for teachers (Schleicher, 2012; Kuhn, et al. 2016; De Wever et al. 2016 and others). Various studies have examined the determinants of developing professional competences (Helm, 2015). We follow the works

published within the research project APVV-14-0446 *Evaluation of teacher competences* (Fandelová, Gadušová, Lomnický, 2016; Gadušová, Hašková, 2016b; Gadušová, Vítečková, 2015; Stranovská, Lalinská, Bobořová, 2017; Stranovská, Lalinská, 2017; Lomnický et al., 2017; Bobořová et al., 2017), in which the issue of evaluation of professional competences of teachers was analyzed in the European and Slovak context, then the evaluation of teachers' competences was judged with respect to the length of their school practice, teachers' perception by their head teacher depending on oral and written evaluation, evaluation of teachers' leadership skills and others. We consider the process of evaluating teachers' competences and measuring them to be a key moment in the teacher's work, as it can contribute to the educational success of the teacher, their personality development, the prosperity of the school and, in

particular, the successful facilitation of pupil. Within the project, we strive to create a reliable and valid tool for evaluating teacher competences and to verify this tool. The process of creating the tool is incredibly complex because it involves taking into account many variables in the teacher's educational process as well as variables in terms of teacher and pupil personality. One of the variables that contribute to the design of the tool is also the variable teacher's professional orientation, which influences the development of the tool in the direction of the importance of the different competences to be evaluated in the self-assessment of the teacher. Every professional orientation requires different professional competences, so we consider it important to find out to what extent the professional focus can affect the assessment of competences. We distinguish linguistic focus, or focus on a foreign language and orientation on teaching other subjects. Foreign language education requires different competences than the education in other subject disciplines, because according to Müller (2013) several processes are carried out in parallel, it is not possible to separate low-level and high-level cognitive processes. According to Rübamer (2015), cognitive processes differ in individuals studying foreign languages. Differences can be seen in neuronal activity and brain plastics, neuronal interaction and their structure. There are many untouched areas in linguistic cognition because linguistic cognition represents the sum of the structures and processes of the human mind, the complexity, the abstractness, the openness and the activity of the human mind. Language behavior is based on a system of representations of language knowledge and operations with them (Müller, 2013; Höhle, 2012; Traxler, 2012; Rübamer, 2015; and others). Recent research on language and human cognition is carried out in the context of neuroscience and computer linguistics (Rübamer, 2015).

The aim of our paper is to identify the perception of the range of importance of professional competences by teachers with a professional focus on foreign language and teachers whose professional focus is on other subject fields. We detect in which competences their perceptions differ.

## **2. PROFESSIONAL FOCUS ON FOREIGN LANGUAGE, ASSESSMENT OF COMPETENCES AND ITS TOOL**

The professional focus on a foreign language has a varied character; it can be significantly different from other professional orientations. Cognitive processing of a foreign language triggers the activation of larger brain areas because it represents a complex and difficult process of speech comprehension. Thornbury (2006) says that to achieve success in a foreign language, all or most of the intelligence components must be involved in learning. According to Schwarzová (2009), it is possible to speak about foreign language knowledge in a sense as about a specific human mental ability that affects general cognitive abilities. The foreign language competence is not integral but consists of four special abilities (Stranovská, 2011): ability to code phonetically, grammatical sensitivity, ability to learn mechanically (memory capacity), ability to learn inductively (generalization, analytical ability, logical justification of structures and meanings). Carroll (1997: 122) differentiates these special abilities of individuals who focus on foreign language into the following segments:

- Segment I - "narrow" abilities, includes narrow specific abilities, such as speed of reasoning, spelling acquisition, sound recognition, and others,
- Segment II - "broad" abilities, includes a variety of abilities as fluid intelligence (speed and precision of reasoning) and crystalline intelligence (knowledge, rules and vocabulary), memory processes, visual and auditory perceptions, ease of thinking (verbal fluency) and the speed of information processing (speed and accuracy of the response),
- Segment III - "general" abilities, abilities at a general level, similar to the Spierman's g factor, which he called "mental energy".

On the basis of contemporary language and human cognition research in the context of neuroscience (Müller, 2013; Traxler, 2012; Bednářiková, 2013; Rübamer, 2015; and others), the acquisition of a foreign language positively influences the development of intellectual abilities and the personality of the individual, the

development of understanding of situations or the issues of others, the development of respect for different opinions and team work. Also, understanding and processes related to understanding are more developed and trained compared to other subject disciplines.

The professional focus significantly affects the personality of the teacher, or their way of perceiving competences important for the educational process. The perception of the importance of the teacher's competences is closely related to the perception of personal and professional proficiency. Judgment about you is a very strong regulatory factor that influences the assessment of competences. The assessment of teacher's competences presupposes defining performance criteria in terms of professional standards for different categories of teachers and the conditions of their work at school. The aim of the evaluation is to improve and develop the educational work of teachers, or their teaching success. The prerequisites for these goals are valid and reliable methods and tools for evaluating teacher competences. Evaluating their level is, however, difficult for several reasons (Frey, 2006; Philpott, Scott, & Mercier, 2014):

- a) The definitions and indicators of different competences are not clearly specified, different experts and different educational concepts use different competence models and emphasize different areas of competence.
- b) Different competence assessment tools usually cover only one of the content categories, or only one component of the competence, the competence profile of the teacher is then reduced and distorted.
- c) Quantitative (in particular questionnaire) tools, which, as in other areas and in the assessment of teacher competences, prevail; they have their limits and increase the risk that they will become a mechanical evaluation tool, which "quantifies quality", i.e. codes but does not penetrate deeper into the different characteristics and skills of the teacher and cannot capture the process of their change.

In our project, we strive to motivate teachers to evaluate their professional competences and to perceive

evaluation, or work with the assessment tool as part of their personal development, part of increasing their educational success and prosperity of the school.

### 3. DATA COLLECTION

Perception of the extent of importance of the teacher's professional competences with respect to their professional focus either on foreign language or on other professional orientation was investigated using the *Teacher's Competence Assessment Questionnaire*. The questionnaire can be considered to be the primary tool for measuring the perception of teachers' professional competence assessment and measuring the importance of different teacher competences in the Slovak educational context. This questionnaire was anonymous and we collected its completed copies from 730 respondents, primary and secondary school teachers. The aim was to get an image of the current status of teacher evaluation in Slovakia from the perspective of the evaluated. The questionnaire contained 11 items, which included the basic information about the teacher (e.g. teacher's gender, length of teaching at school, completed education/qualification, affiliation of the teacher to the type of school, and others), data on the level of importance of teachers' professional competences in terms of the success of their educational activities, ways and process of teacher evaluation. This research study deals with the statistical processing of the data related to the perception of the level of importance of professional competences by teachers who completed foreign language education and by teachers who completed their education in other fields.

Based on this focus, the variable professional orientation (field of the completed education), we have divided the variable into two groups - group 1 and group 2:

- Group 1: Teachers whose professional background is a foreign language in combination with different subject from another science field,
- Group 2: Teachers whose professional focus combines two different (non-linguistic) disciplines, subject fields.

The perceived level of importance of the teacher's professional competences for the success of their

educational activity was assessed by a number from 1 to 5 (1 = little important, 5 = very important), taking into account the following competences:

- A) can identify the developmental and individual characteristics of the pupil,
- B) can identify the psychological and social factors of pupil's learning,
- C) can develop the personality of the pupil and his / her competence,
- D) can create a positive climate in the classroom,
- E) is able to plan and realize their professional development,
- F) has mastered and can control the content and didactics of the subjects taught,
- G) can plan and design the teaching/educational process,
- H) can select and implement teaching forms and methods,
- I) can use the material resources in the teaching process,
- J) can evaluate the progress and results of the pupil's teaching and learning.

Research hypothesis: There are differences in the perception of the level of importance of professional competences oriented at pupil's personality in relation to the teacher's belonging to group 1 and 2 (according to their completed education)<sup>1</sup>.

This research hypothesis should be operationalized in order to clarify and specify the function of the individual variables. For the first (one-dimensional) variable, we consider the degree of importance of the above listed professional competences for the success of his educational activities. This variable ranges from 1 to 5. The second variable of the given research hypothesis has two levels, namely the respondent's belonging either to a foreign language professional group in combination with different subject from another science field, or to a group whose professional focus combines two different (non-linguistic) disciplines, subject fields. In order to identify a significant difference in the perceived importance of different competences in relation to the completed teacher education, we used the Man-Whitney U-test.

#### **4. RESULTS, ANALYSIS OF THE IMPACT OF THE OBSERVED VARIABLE**

In order to verify the stated research hypothesis, we apply the Wilcoxon double-choice test (Mann-Whitney U-test). Man-Whitney U-test allows testing the hypothesis about the compliance of two distribution functions. In our research, by these distribution functions, we understand the random selection from a core set of point assessment of the given competence by teachers from the group 1 - teachers who have a foreign language professional background in combination with different subject from another science field (choice 1) and teachers from the group 2 with the professional background which combines two different (non-linguistic) disciplines, subject fields (choice 2), while the number of values for both choices does not have to be the same.

This is our case as we have an unequal number of teachers in each group who answered the question in the questionnaire. Testing the null hypothesis  $H_0: f = g$  (differences in the perception of the importance of the given competence by teachers with regard to the group of teachers who have a foreign language professional background in combination with different subject from another science field and teachers who have the professional background which combines two different (non-linguistic) disciplines, subject fields are not significant compared to the alternative hypothesis  $H_1: f \neq g$  (differences in the perceived importance of the competence by teachers in relation to a group of teachers who have a foreign language professional background in combination with different subject from another science field and teachers who have the professional background which combines two different (non-linguistic) disciplines, subject fields are significant. The data were processed by SPSS program and they are presented in Table 1. The value of the test statistics is displayed in the table as Z.

From Table 1, we can see that for the chosen statistical significance level  $\alpha = 0.01$  (\*\*), resp.  $\alpha = 0,05$  (\*), we reject the tested  $H_0$  hypothesis in these cases, or the importance of the listed below professional competences the teachers in group 1 (combination with a foreign language) perceive differently: A) can identify the developmental and individual characteristics of the pupil, B) can identify the psychological and social factors

**Table 1**  
**Statistical indicators by Mann-Whitney test (SPSS output)**  
**Test Statistics<sup>a</sup>**

	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	<i>F</i>	<i>G</i>	<i>H</i>	<i>I</i>	<i>J</i>
Mann-Whitney U	2205.0	20950.5	23362.5	22211.5	22804.0	24458.5	22628.5	22833.0	24377.5	23873.5
Wilcoxon W	1018.0	10075.5	10316.5	10201.5	10260.0	32084.5	102428.5	102633.0	32003.5	103673.5
Z	-1.853	-2,651	-.978	-2.114	-1.264	-.076	-1.605	-1.403	-.120	-.569
Asymp. Sig. (2-tailed)	.044*	.008**	.328	.035*	.206	.940	.108	.161	.904	.569

<sup>a</sup> Grouping Variable: Completed education: 1-combination with a foreign language, 2-non-linguistic combination

A – J: professional competences of a teacher (see text/sub-chapter Data Collection)

Statistical significance on the level  $\alpha = 0,05$  (\*),  $\alpha = 0,01$  (\*\*)

of pupil’s learning, D) can create a positive climate in the classroom.

### 5. DISCUSSION AND CONCLUSIONS

The focus of the research was to identify perception of teachers’ professional competences in relation to the variable professional orientation on a foreign language and non-linguistic professional orientation. We expected differences in the perception of competences oriented on learner’s personality by teachers whose professional focus is a foreign language compared to teachers whose professional focus combines two different (non-linguistic) disciplines, subject fields. The reason for assuming differences related to the perception of competences oriented on learner’s personality is that a foreign language teacher focuses more on the individual characteristics of pupils, the factors of learning characterizing their different ontogenetic stages, because the theories of foreign language acquisition take into account age, individual, cognitive and affective aspects of learning.

We have found that there are statistically significant differences in the perception of the importance of the professional competences of teachers, depending on their professional background. They are the competences oriented at pupil’s personality: the teacher can identify the developmental and individual characteristics of the pupil the teacher can identify the psychological and social factors of pupil’s learning. We also identify differences in the perception of competence assessment in terms of professional focus as well as in competences focused on professionalism, professional development and

organizational competences related to the teaching process. It is the competence: the teacher can create a positive climate in the classroom. This means that in the educational process, foreign language teachers appear to be more sensible towards pupil’s personality, in particular, their developmental stage, the factors affecting pupil’s learning and professionalism related towards the positive climate in the classroom compared to the teachers of other subjects. For a foreign language teacher, it is more important to be aware of developmental and individual differences (special needs, talents, development of cognitive functions, and others), psychological and social factors of learning (motivation, feedback, learning time, inner and outer learning conditions, and others), have the ability to create a positive climate in the classroom in order to modify the teaching process to the specific needs of their pupils. We agree with Fiebach and Hermann (2007), who, on the basis of their research, point to two factors that greatly influence the functioning of the brain in the process of learning foreign languages. The factors are the age in which an individual learns another language and also the level of their linguistic competences. Foreign language professionals are concerned with the most effective language learning age and experience, which also affects foreign language teacher competences. Research in this area is scattered. The professional focus on foreign language can be distinguished from other professional orientations in the process of evaluating professional competences, because in the process of cognitive processing of a foreign language, activation of larger brain areas is involved. It is a difficult and complex process, involving special intelligence abilities, disparities in

neuronal activities, brain plasticity and neuronal interaction (Carroll, 1997; Schwarz, 2009; Stranovská, 2011; Müller, 2013; Rübamer, 2015). Thornbury (2006) says that to achieve success in a foreign language, all or most of the intelligence components must be involved in learning.

Based on the findings, it can be concluded that in developing tools for the assessment of professional competences it is necessary to specify several tools for different competences separately, for which the teachers of different subjects will have available selection of different tools for evaluation of teachers' professional competences, or a tool bank.

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