Pedagogická orientace

Journal of the Czech Pedagogical Society

Štefan Porubský, Marian Trnka, Vladimír Poliach, Radka Cachovanová Curricular Reform in Slovakia Regarding the Attitudes of Basic School Teachers

Kateřina Vlčková, Jan Mareš, Stanislav Ježek

Adaptation of Teacher Power Use Scale to Lower Secondary Students and Student Teachers

Pedagogická orientace, 2015, Vol. 25, No. 6, Date of issue: 31. 12. 2015

Journal of the Czech Pedagogical Society

Editor-in-chief: Petr KNECHT (Masaryk University)

Editorial team: Eva MINAŘÍKOVÁ, Masaryk University (Associate Editor), Tomáš JANÍK, Masaryk University, Lenka KAMANOVÁ, Masaryk University, Kateřina LOJDOVÁ, Masaryk University, Jana MAJERČÍKOVÁ, Tomas Bata University in Zlin, Jana POLÁCHOVÁ VAŠŤATKOVÁ, Palacký University, Jan SLAVÍK, University of West Bohemia, Petr URBÁNEK, Technical University of Liberec, Marta RYBIČKOVÁ, Masaryk University (Administration)

Postal address: Pedagogická orientace, Institute for Research in School Education, Faculty of Education of Masaryk University, Poříčí 31, 603 00 Brno, Czech Republic, e-mail: knecht@ped.muni.cz, telephone +420 549 494 298

Editorial Board (Czech Edition): Tomáš ČECH, Masaryk University, Jana DOLEŽALOVÁ, University of Hradec Králové, Jana DVOŘÁČKOVÁ, Masaryk University, Petr FRANIOK, University of Ostrava, Peter GAVORA, Tomáš Baťa University in Zlín, Marcela JANÍKOVÁ, Masaryk University, Hana KASÍKOVÁ, Charles University in Prague, Dana KNOTOVÁ, Masaryk University, Ondrej KAŠČÁK, University of Trnava, Jana KOHNOVÁ, Charles University in Prague, Tomáš KOHOUTEK, Masaryk University, Milan POL, Masaryk University, Jiří PROKOP, Charles University in Prague, Karel RÝDL, University of Pardubice, Irena SMETÁČKOVÁ, Charles University in Prague, Vladimír SPOUSTA, Independent Expert, Iva STUCHLÍKOVÁ, University of South Bohemia, Jiří ŠKODA, Jan Evangelista Purkyně University in Ústí nad Labem, Vlastimil ŠVEC, Masaryk University, Vojtěch ŽÁK, Charles University in Prague

International Editorial Board (English Edition): Inger Marie DALEHEFTE, University of Agder, Norway, Michaela GLÄSER-ZIKUDA, University of Nürnberg, Germany, Patricia HOFFMEISTER, TU Dortmund University, Germany, Ondrej KAŠČÁK, University of Trnava, Slovakia, Christine WINTER, The University of Sheffield, United Kingdom

Journal profile: Pedagogická orientace is a peer-reviewed scholarly journal which aims to support the development of pedagogical thinking. It comprises articles on current issues in theory and practice in education, curriculum and instruction, educational psychology, educational research, educational policy, and teacher education. The Journal provides a forum for distinguished authors as well as young researchers from within the Czech Pedagogical Society as well as from outside. Pedagogická orientace is an open access journal which means that all content is freely available at https://journals.muni.cz/pedor.

Instructions for authors: Pedagogická orientace publishes four types of articles; theoretical papers, research papers, review papers (ca 36 000 characters), letters (ca 18 000 characters), conference and other reports and book reviews (ca 9 000 characters). The articles should have the following structure: abstract (max 1 200 characters), key words, introduction, state-of-the-art, method, results and interpretations, discussion, conclusion and short information about the author/authors. Prior to publication, each paper (excluding discussion papers, reports and book reviews) is judged by the Editor and double-blind peer-reviewed by two anonymous experts. More detailed author guidelines and the information on the peer review process are available at https://journals.muni.cz/pedor.

The Journal accepts previously unpublished papers only.

Pedagogická orientace adheres to the principles outlined by COPE – Committee on Publication Ethics (http://publicationethics.org/), the Ethical Code of the Czech Pedagogical Society, and the Ethical Code of the Czech Educational Research Association.

Pedagogická orientace (ISSN 1211-4669 print; ISSN 1805-9511 on-line; reg. No. MK ČR E 20166) is published by the Czech Pedagogical Society, Poříčí 538/31, 639 00 Brno, IČ 00444618, in cooperation with Masaryk university. Subscription orders: https://journals.muni.cz/pedor.

Pedagogická orientace is published bimonthly. Typeset Mgr. Monika Foltánová, print: Papír a tisk, s. r. o., Čechyňská 18, 602 00 Brno.

The publishing of the journal is supported by the Council of Scientific Societes of the Czech Republic. **Pedagogická orientace has been listed in following academic databases:** ERIH (NAT), DOAJ, Educational Research Abstracts Online (Taylor & Francis), EBSCO Education Source, CEJSH, ProQuest.

Contents 773

Contents

Editorial: Going global or going local? (Eva Minaříková)	775
Articles	777
Štefan Porubský, Marian Trnka, Vladimír Poliach, Radka Cachovanov Curricular Reform in Slovakia Regarding the Attitudes of Basic School Teacl	
Kateřina Vlčková, Jan Mareš, Stanislav Ježek: Adaptation of Teacher Power Use Scale to Lower Secondary Students and Student Teachers	798
Report	822
The Czech Pedagogical Society in 2015 (Tomáš Čech, Miroslav Procházka, Miluše Vítečková)	822

774 Obsah

Obsah

Editorial: Globálně nebo lokálně? (<i>Eva Minaříková</i>)	775
Studie	_777
Štefan Porubský, Marian Trnka, Vladimír Poliach, Radka Cachovanová: Kurikulární reforma na Slovensku v pohledech učitelů základních škol	. 777
Kateřina Vlčková, Jan Mareš, Stanislav Ježek: Adaptace dotazníku Teacher Power Use Scale na žáky druhého stupně základních škol a studenty učitelství	. 798
Report	_822
Česká pedagogická společnost v roce 2015 (<i>Tomáš Čech, Miroslav Procházka, Miluše Vítečková</i>)	822

Editorial: Going global or going local?

The world is swayed by trends. It is trendy to go global – to expand, to travel, to think outside your national/cultural box, to share news, technologies, knowledge with as many people as possible as quickly as you can. Needless to say, new technologies and social media play a big part in this. On the other hand, it is also trendy to go local – to care for your local community, to support the local shops and craftsmen and to eat locally sourced produce. It is a global trend to go local.

Trends are not unknown in research, too, educational research being no exception. The trend used to be *publish or perish*, later upgraded to publish more or perish. Nowadays, the trend seems to be rather publish internationally and "impactfully" or else... This does seem to make sense. What is the use of research that does not bring new knowledge to and impact as many people/situations/etc. as possible. On the other hand, the trend is (especially in the social sciences) to acknowledge that social practices are embedded in specific contexts that are (among other things) culturally bound. We could thus ask of how much interest is knowledge of specific local community to the "global" person. It might be, for various reasons. But such knowledge must be presented to the global reader in a very specific form, taking into account their (lack of) background knowledge. Many interesting findings must be omitted in order to leave space for explanation of the local context (as, of course, you do not want to exceed the word limit) or simply because they would not make sense globally. And the whole message of the paper must be re-thought in order to be relevant globally¹. This knowledge, however, might be of high relevance to the local research community. It is my belief that despite the internationalisation trend, good research must be maintained locally, talked about, written about, argued about. And then, and only then, should it be "abstracted" and re-thought to bring relevant knowledge to a global audience.

This is where local academic journals come into play. They are the places for presenting new concepts, research projects and findings. This is where local researchers get feedback first from the local editorial board that is familiar with the context, then from local reviewers and later from the local audience,

Not to mention the language change. Writing about local knowledge, local concepts with local tradition that is specific to and researched in a non-English speaking community in a global language (i.e. mostly English) is a challenge to say the least.

776 Editorial

who is – again – acquainted with the local perspective. However, the "go global" trend is omnipresent and pushes local journals to initiate English issues (the reason being usually that the journal needs to be accepted by international databases in order to act as a valuable publication platform for the authors who are forced to "publish internationally and impactfully"). The question is, what should be the content of these English issues. Should the journal invite foreign experts? Or should local researchers publish in "their" local journal in a different language? Why? If I go through the effort of translating my research (not only in terms of language) for the global audience, why should I not publish in "proper" international journals?

Unfortunately, I do not have a ready-made answer to this. So far, it seems that local authors find reasons to do so (as evident in the fact that the English issues of Czech educational science journals are growing in number). My interpretation is that the local editorial boards can approach their papers with the knowledge of both the local and the global context, which is something the editors of many international journals simply cannot do.

So, I would like to thank the authors who have submitted their research papers to the English issues of Pedagogická orientace, both the present issue and the past ones. Thank you for helping us go global with the local still in mind.

Eva Minaříková

Curricular Reform in Slovakia Regarding the Attitudes of Basic School Teachers ¹

Štefan Porubský ^a, Marian Trnka ^b, Vladimír Poliach ^c, Radka Cachovanová ^d

^aMatej Bel University in Banská Bystrica, Faculty of Education, Educational Research Center ^bMatej Bel University in Banská Bystrica, Faculty of Education, Department of Elementary and Preschool Education

^cMatej Bel University in Banská Bystrica, Faculty of Education, Department of Psychology ^dMatej Bel University in Banská Bystrica, Faculty of Education, Department of Elementary and Preschool Education

Received 6 October 2015; final version received 29 December 2015; accepted 29 December 2015

Abstract: In 2008, a curricular reform was begun in Slovakia. It focused on introducing a two-level model of curriculum at pre-primary, primary and secondary schools. The reform has been met with mixed reactions from teachers and school administration staff. Our paper provides brief information on the nature of this reform, the content of the reform curricular documents and some of the results of a questionnaire survey regarding the attitudes of teachers in basic schools (primary and lower secondary level of education) towards the reform. Their ratings are examined in three areas: satisfaction with the development of the Slovak school system in the last six years, the importance of curricular changes and the effect of these changes.

Keywords: educational policy, curricular reform, teacher attitudes, basic school

The early 21st century could be described, from a certain point of view, as an era where global trends are a key factor of development. In the sphere of education such a global trend is a phenomenon called curricular or school reform. In spite of the fact that the reform processes can have a regional or local character, Cuban (2008) identified three phenomena that occur regardless of these possible geographical, cultural and historical particularities: a market-inspired definition of the educational problem; a common theory of change driving the solution to the market-inspired problem; and school and classroom outcomes (both anticipated and unanticipated) of these ambitious

DOI: 10.5817/PedOr2015-6-777

¹ This work was supported by the Slovak Research and Development Agency under the contract No. APVV-0713-12.

efforts. These are the global motivation factors for a curricular reform with global features related to the preferred key values, functions and structures (Sahlberg, 2009). Slovakia is no different from other countries, as in 2008 the country underwent a principal curricular reform that should bring the Slovak schooling system in line with the global system of education.

In this paper, we present the results of a questionnaire survey on the attitudes of basic school teachers in Slovakia towards the curricular reform initiated in 2008 and their experience with the implementation of this reform. At first, we will outline the social and political context of the curricular reform in Slovakia, present the two-level curriculum system as a result of this reform and describe the course of the reform, which represented a contextual framework to shape the attitudes and experience of teachers. After that, we will describe the methodology and the outcomes of the questionnaire survey and we will interpret relevant findings.

1 Curriculum reform in Slovakia

For several centuries, Slovakia was an integral part of Hungary within the Austro-Hungarian Empire under the Habsburg dynasty. It was a state with a strong tendency for centralization of public administration, including the educational system. It had two typical features: a centralized, generally binding curriculum used as a tool of the state educational policy and the teacher implementing the state educational policy through the application of this curriculum. Those features also set the long-term historical path of education in the former Czechoslovakia and then in the Slovak Republic after its establishment in 1993.

In 1989, the change in the political situation allowed for major changes in education, schooling and the curriculum. The major turning point in the national curricular policy (systemic reform) that came in 1989 as a consequence of political changes was only truly felt in 2008. This was the introduction of a system with a two-level curriculum at pre-primary, primary and secondary schools. It was set as a generally binding standard by the *2008 Education Act*.

The system of the two-level curriculum is represented by two key curriculum documents – the national curriculum titled *The State Educational Programme* representing the nationally binding curriculum and the school curriculum titled *The School Educational Programme* serving the autonomy of a particular

school. By this political act, the Slovak educational system should become a part of what Sahlberg (2009) refers to as the Global Education Reform Movement – GERM. GERM represents a global phenomenon of transforming the efforts of developing educational systems through structural reforms towards higher quality and relevance (Hargreaves & Goodson, 2006). Thus, the global priorities of educational reforms include categories such as curriculum development, school evaluation, evaluation of teachers, integration of ICT technologies into the education process, acquiring key competences, as well as literacy in natural sciences and mathematics (Sahlberg, 2009).

The State Educational Programme was developed as a set of curricular programmes on a national level for each type of school following the same general goals oriented towards the development of key competencies. A guarantee of educational quality at a generally accepted level is provided by the Educational Standards. These represent the requirements of the state for the educational outcomes at each level of education. The Framework Study Plan defines the minimum obligatory amount and structure of instruction in different types of school as well as the number and extent of obligatory subjects per week for each school grade.

The School Educational Programme contains detailed educational programmes based on the national curriculum developed by every school according to local conditions and specific orientation of each particular school.

Formally, this system of the two-level curriculum created the conditions necessary to to move the entire process of transformation within education towards real improvements of its quality:

However, it turned out that policy makers were not able to overcome the limits of the historically centralized mindset related to the changes they initiated. According to these traditions, the introduction of the two-level curriculum model was not seen as a process with actual processual phases (Janík et al., 2010a). Instead, it was seen as a one-off political act that used the teachers to implement it at schools². Creating a school educational programme required a high level of decision-making autonomy for teachers, but they proved to be ill prepared for this task. Schools and their teachers got into a situation

² The Education Act was adopted in May 2008 and schools were obliged to implement the twolevel curriculum model preparing their school educational programs for September of that same year, without any prior preparation.

that Hargreaves (2008) describes as a consequence of insufficient time to reflect and plan, understand the curriculum, learn how to implement it, and catch up with professional literature. It proved that teachers feel the need to change, but become resistant to changes that are introduced in this fashion. As it has already been pointed out by many authors (Kirk & McDonald, 2001; Hargreaves, 2008; Fullan, 1991), teachers are the key to curricular reform.

2 The attitude of teachers towards curriculum reform

The idea of a teacher-proof curriculum has long become obsolete (Stenhouse, 1975; Brundrett, Duncan, & Rhodes, 2010; Priestley, 2011; Mutch, 2012). Many researches prove that teachers are the key protagonists of the whole process (Mutch, 2012). The attitude of teachers towards changes directly affects the level of their implementation into practice. It has been proven that subject expertise (Pimley, 2011), support of teacher development in terms of values, beliefs and competencies (Anderson, 1995) improve the motivation of teachers to participate in the decision-making process of the curriculum. According to the analytical framework created by Ho (2010) for participative decision making in the curriculum and pedagogy, both a high level of desired participation and a high level of actual participation of the teachers are the preferred conditions for success.

As pointed out by Kennedy & Kennedy (1996) a curriculum reform based on the introduction of a two-level model, especially in the case of a decentralized process like in Slovakia, brings a host of potential problems. This is because teachers are not only being asked to change their roles and take on more responsibility, but they are also being asked to change previously held attitudes and beliefs. Decentralisation, in opposition to centralisation, is commonly characterised as leading to participation, relevance, ownership and (hence) increased commitment and motivation from those implementing the change, in our case, teachers (Kennedy, 1996). According to several authors (Brown, 1980; Haney, Czerniak, & Lupe, 1996; Levitt, 2001), unless teachers' attitudes are compatible with the aims of the reform, they become resistant to the changes required. Teachers are not passive recipients of change even though the centuries of centralist traditions in Slovakia could suggest it. Many studies (Anderson et al., 1994; Connelly & Clandinin 1988; Van Driel, Beijaard, & Verloop, 2001) show that the experience, beliefs and attitudes of teachers crucially determine the ways to implement the required

changes within curricular reform. If this experience, beliefs and attitudes in the process of curriculum reform are ignored, the implementation phase will most likely prove unsuccessful (Brown & McIntyre, 1993). It is proven that when teachers are involved in the process of innovation from the initial idea to its implementation and review and if they receive the trust and respect from the leadership team, the chances for successful implementation of changes are much higher (Brundrett & Duncan, 2011). If teachers were offered an opportunity to develop materials, plan together and share ideas with one another, then they would reform their teaching (Anderson, 1995). School values and teacher autonomy are significant predictors for motivation to change teaching methods (Wu, 2015).

3 Research problem, objectives and questions

Slovakia, in contrast to the Czech Republic (e.g. Janík et al., 2010b) has so far not carried out research that maps the experience, beliefs and attitudes of teachers regarding the implementation of the curriculum reform in 2008, even though seven years have elapsed since its introduction. For this reason, there is virtually nothing known about what the views of teachers are on the value of the reform, design of the curriculum content, implementation process, interaction with management and executive actors, or even the most important contextual aspects of the reform. This is what motivated the creation of a research project whose main objective is to find out as much as possible about what teachers of basic schools (primary and lower secondary level of education) in Slovakia think about the aforementioned topic.

This research project had three main objectives and they were formulated as follows:

- (1) The first objective was to find out the level of teacher satisfaction with the development trend of the reformed education system for the last six years. This objective focused on the important time and value dimensions of the reform. It was further translated into the following research questions:
 - (1.1) In the respondents' view, is education getting importance in society?
 - (1.2) Do the respondents see positive changes in the school system?
 - (1.3) Do they consider the reform efforts comparable internationally?
 - (1.4) Are the respondents inclined to continue with the reform?

- (2) The second objective was to determine how urgent the respondents see the need for change in selected areas of the curriculum that was in force before the reform. This objective focused mainly on the motivation and values of curriculum innovation with reflection of the past. In order to achieve this objective, it was necessary to deal with the following questions:
 - (2.1) Did the respondents feel the need to change the objectives, content, methods and outcomes of education?
 - (2.2) Did the respondents feel the need for decentralization of power?
 - (2.3) Did the respondents feel the need to make the curriculum centered more on the student and the class as a group?
- (3) The third objective focused on what the respondents consider as benefits of the curricular reform for their school. This objective was achieved through answers to the following questions:
 - (3.1) How do the respondents see the benefit of the reform specified for their school?
 - (3.2) How do they see the benefit of the reform for the working conditions of the teachers at their school?
 - (3.3) How do they see this benefit for the public acceptance of their school?
 - (3.4) How do they see the benefit of the reform for the effectiveness of education in their school?
 - (3.5) How do they see the benefit of the reform for their students?

4 Method

4.1 Research plan and variables used

The presented study is a part of a more complex project which takes the form of exploratory research ex post facto, based both on a relatively extensive questionnaire administered to a representative sample and on qualitative research and analysis of documents. In this paper, we present only part of the results of the questionnaire survey.

We operationalised the research questions into the form of measurable variables, whereby several of them were created for each research question (not always the same number). The variables were grouped into three sets analogous to the three research objectives. The first group "Satisfaction with the state of education" had 6 variables, the second group "Need to change the curriculum" had 6 variables and the third group "Benefits of the reform" had 21 variables.

In order to obtain a more comprehensive evaluation describing the essence of each of the objectives, we calculated the averages across the groups of variables that we called indices. So there were three evaluation indices: *Index of satisfaction with the development of education* (abbreviated *Satisfaction index*), *Index of urgency of curricular changes* (abbreviated *Urgency index*) and *Index of the benefits of the reform* (abbreviated *Benefit index*). The Index is an aggregation of several subjective respondents, not objective reality of the school system.

4.2 Procedure

As a tool for the detection of all these variables, we constructed our own exploratory questionnaire IKR-2014, which functions under the principle of rating of each item. In this paper we build on the initial analysis of the first three groups of items (33 in total). All the items of one group have the same common initial instruction/statement or question (e.g. "I feel we need to change the curriculum in these areas"), which is subsequently specified in the form of a simple inventory with the associated rating scale (e.g. "1 Curriculum and teaching content, 2 Objectives and learning outcomes, etc.). It uses a four-point Likert scale without the middle range (e.g. definitely agree, somewhat agree, somewhat disagree, strongly disagree). The completed questionnaires were transcoded to a format of electronic datasets for MS Excel (and subsequently for SPSS) for processing. The quantitative processing was performed in stages, gradually going more in depth; at the time of writing of this paper, the initial stages had been completed.

4.3 Population, sample, administration

The target population consists of basic school teachers who have experience with the 2008 implemented curriculum reform. As such, we define the core set as all teachers in the state basic schools in Slovakia who were participating in the implementation of the curriculum reform in 2008.

The research sample was selected through proportional stratified sampling. As the main criterion of stratification we chose the region (Slovakia has 8 regions) where the respondent worked during the period of the study. The respondents were sampled in compact groups. For each stratification group a list of all basic schools in the region was compiled. These lists were arranged according to a list of random numbers. For the sample 10% of schools from each stratification group were chosen. In total, we selected 63 schools.

We sent the questionnaire to all selected schools in April 2014. The time for the response was three months. The response rate was 76%, which represents 954 respondents. Some more details about the sample are presented in Table 1 (the table only contains those characteristics of the respondents that are related to this paper).

Table 1
Research sample characteristics

Research sample charateristics		Primary level	Lower secondary level	Both levels	No level indicated
		N	N	N	N
Current	Administration staff*	33	47	4	5
position	Teacher	304	434	54	28
Years of	Up to 5 years	65	114	28	13
experience	6-10 years	52	112	4	4
	11-15 years	76	92	15	10
	16-20 years	68	61	6	4
	21-25 years	43	39	2	3
	26-30 years	33	38	1	4
	30 years and more	14	33	2	2
	Not stated	8	3	1	4

^{*} Administration staff are school principals and their deputies (they are teachers with a reduced teaching load, exercising management of the school within a defined period. For the purposes of this paper, we will not evaluate them separately).

5 Results

None of the distributions of the indices or sub-variables in the next three subsections met the criteria of normality (Shapiro-Wilk in Lilliefors modification) and therefore, it has no further significance. That is why

the descriptive statistics indicates the parametric (average AM, standard deviation SD and confidence interval Clam) as well as the non-parametric measures (median MED, interquartile range IQRng a confidence interval for the median Clmed). Likewise, we used mainly non-parametric procedures of inferential statistics.

5.1 Satisfaction with the recent overall development of education

Table 2 presents an overview of the descriptive and statistical data for a group of variables designed to assess the overall state of education in recent years. We used a four-point rating scale, where the values mean: 1 = strong dissatisfaction, 2 = moderate dissatisfaction, 3 = moderate satisfaction, 4 = strong satisfaction. In the first row of the table, the "Satisfaction index" is given as a calculation of the average of the partial variables scores (taking into account item polarity).

Table 2 Variables evaluating "satisfaction with the development of education"

	AM	SD	CIam	Med	IQRng	CImed
Index of satisfaction with the development of education	2.05	0.53	2.01-2.08	2.00	1.00	2.00-2.00
106r – the reform of the educational system should be abandoned and we should go back to the state prior to 1989	2.65	0.98	2.57-2.72	3.00	1.00	3.00-3.00
105 – so far, the situation is not very satisfying, but the reform endeavors should continue	2.55	0.85	2.49-2.62	3.00	1.00	3.00-3.00
104 – until now, the state of our educational system is not satisfactory, but all is on the path to improvement	1.83	0.69	1.78-1.88	2.00	1.00	2.00-2.00
103 – our reform in the educational system is comparable to neighboring countries	1.83	0.70	1.78-1.88	2.00	1.00	2.00-2.00
101 – the quality of citizen education has become a priority in our society	1.82	0.80	1.76-1.88	2.00	1.00	2.00-2.00
102 – there is a significant positive change in our educational system	1.71	0.69	1.66-1.77	2.00	1.00	2.00-2.00

Note. AM = arithmetic mean, SD = standard deviation, CI = 95% confidence interval for AM, Med = median, IQR = interquartile range, CIm = confidence interval for median

The content inside of the analysed variables shows a relatively satisfactory Cronbach's alpha of 0.736. Although the individual variables were not

considered part of one construct, but two related constructs at the beginning of the scale development, they have all been included in the calculation of the summarizing "Satisfaction index". Originally, we considered them to be two triads, i.e. the three variables (101, 102, 104 as a factor of the "system") related rather to a wider educational context of the reform and the three variables (103, 105 and 106 as a "reform" factor) directly concerning the reform itself. Exploratory factor analysis also roughly revealed this structure (the factors explaining 41% and 24% of the variance), except for variable 103, which is empirically related rather to the wider context (although the wording of this item contains the term "reform"). The non-parametric version of variance analysis for repeated measures (Friedman) also confirms a statistically significant more positive score for 106 and 105 in comparison to all the other variables in the group.

5.2 The perception of the urgency of changes in the curriculum

The descriptive characteristics of the variables focusing on the urgency of curricular changes in recent years are presented in Table 3. These are the results of the rating scales with this meaning: 1 = not at all urgent, 2 = rather unurgent 3 = rather urgent, 4 = highly urgent. The overall *Index of urgency of curricular changes* is calculated as the average of all numbered variables in this table.

Table 3 Variables evaluating "the urgency of curricular changes"

	AM	SD	CIam	Med	IQR	CImed
Index of urgency of curricular changes	2.83	0.61	2.79-2.87	2.83	1.00	2.83-2.91
206 – supporting a positive climate in classroom	3.25	0.77	3.20-3.31	3.00	1.00	3.00-3.00
204 – updating the methods, strategies and forms of teaching	3.20	0.75	3.15-3.25	3.00	1.00	3.00-3.00
205 – higher level of acceptance for learners'personal individualities	2.96	0.74	2.91-3.01	3.00	0.00	3.00-3.00
202 – objectives and educational outcomes	2.56	0.82	2.51-2.62	3.00	1.00	3.00-3.00
201 – teaching material and content	2.52	0.89	2.46-2.58	3.00	1.00	2.00-3.00
203 – decentralization of power and the need to create school educational programmes	2.47	0.88	2.40-2.53	2.00	1.00	2.00-3.00

Note. AM = arithmetic mean, SD = standard deviation, CI = 95% confidence interval for AM, Med = median, IQR = interquartile range, CImed = confidence interval for median

The relatively high Cronbach's alpha within this group of items (0.836) suggests a good consistency of the content within the analyzed grouping. Exploratory factor analysis indicated a two-factor solution (two factors with 37% saturation): the first three variables (201–203 "educational efficiency" factor), and the second three variables (204–206 "innovation humanity" factor). In the descending order of urgency of changes according to AM, the highest ranked variable was 204 (the need to promote positive climate) and 206 (the need for innovations in the methods, strategies and forms of teaching). The Friedman test followed by post hoc tests identified statistically relevant differences in the scores of variables 201, 202, 203 of "educational efficiency" factor compared to the other variables (this is consistent with the findings of the factor analysis).

5.3 Benefits of the curricular reform

Table 4 shows the descriptive characteristics of the variables focusing on areas in which respondents indicated a need for curricular changes. The values of the four-level rating scale have this meaning: 1 = no benefit, 2 = largely without benefit, 3 = moderately beneficial, 4 = greatly beneficial. The total *Index of the benefits of the reform* is calculated as the arithmetic mean of all sub-items scores. We deliberately took the information in this field out of numerical order (to make it clearer, we dropped some of the variables in ranking that had low differences).

Table 4
Variables evaluating "the benefits of the reform"

	AM	SD	Clam	Med	IQR	CImed
Index of the benefits of the reform	2.50	0.58	2.47-2.54	2.50	1.00	2.46-2.57
301 – greater opportunity to profile the school	2.82	0.74	2.77-2.87	3.00	1.00	3.00-3.00
302 – closer links between school and practice	2.45	0.80	2.40-2.50	2.00	1.00	2.00-3.00
303 – possibility to take into account regional specificities for the school	2.89	0.68	2.85-2.94	3.00	0.00	3.00-3.00
304 – improvement of the communication of the school with families of students	2.37	0.84	2.32-2.42	2.00	1.00	2.00-2.00
305 – greater freedom for teachers	2.52	0.83	2.47-2.58	3.00	1.00	3.00-3.00

	AM	SD	Clam	Med	IQR	CImed
306 – improvement of the work of the teaching staff	2.31	0.80	2.25-2.36	2.00	1.00	2.00-2.00
307 – improvement of the management of work in schools	2.49	0.81	2.43-2.54	3.00	1.00	2.00-3.00
308 – improvement of the climate and atmosphere of schools	2.30	0.82	2.24-2.35	2.00	1.00	2.00-2.00
309 – positive pedagogical thinking of teachers	2.33	0.80	2.27-2.38	2.00	1.00	2.00-2.00
310 – more positive views of parents about the school	2.38	0.77	2.32-2.43	2.00	1.00	2.00-2.66
311 – improvement of the public view of the school	2.40	0.79	2.35-2.45	2.00	1.00	2.00-3.00
312 – improvement of the quality of work at school	2.49	0.78	2.44-2.54	3.00	1.00	2.00-3.00
313 – modernization of educational concepts	2.71	0.75	2.67-2.76	3.00	1.00	3.00-3.00
314 – improvement of teaching managementat school	2.59	0.75	2.53-2.64	3.00	1.00	3.00-3.00
315 – improvement of educational goals	2.53	0.73	2.48-2.58	3.00	1.00	2.00-3.00
316 – improvement of educational content (curriculum)	2.42	0.78	2.37-2.47	2.00	1.00	2.00-3.00
317 – improvement of methods and forms of teaching	2.69	0.74	2.65-2.74	3.00	1.00	3.00-3.00
318 – possibility to factor for individual needs of students	2.73	0.73	2.68-2.78	3.00	1.00	3.00-3.00
319 – greater activity and creativity of students	2.65	0.77	2.60-2.70	3.00	1.00	3.00-3.00
320 – greater student interest in learning	2.10	0.83	2.04-2.15	2.00	1.00	2.00-2.00
321 – improvement of learning results of students	2.18	0.82	2.12-2.23	2.00	1.00	2.00-2.00

Note. AM = arithmetic mean, SD = standard deviation, CI = 95% confidence interval for AM, Med = median, IQR = interquartile range, CImed = confidence interval for median

The extremely high Cronbach's alpha (0.966) in this case has more negative connotation: it indicates a high similarity of scores of individual variables, i.e. a reduced differentiation power of the entire group of items. Factor analysis helped to organize the 21 variables in this four-factor model: a powerful factor saturated by variables 304–312 ("teacher" factor) and three weaker

factors saturated by variables 313–321 ("educational methods"), variables 301–303 ("benefits for school"), and variables 320 and 321 ("student" factor). Non-parametric analysis of the variance again shows statistically significant differences in certain pairs of variables. Substantive significance, (for here, only estimated in terms of the overlapping confidence intervals) would be relatively uninteresting.

6 Discussion

6.1 Comments and interpretations

The following part contains a brief summary of findings related to individual research objectives and questions.

The first objective was to find out the level of teacher satisfaction with the development trend of the reformed education system for the last six years. Our findings about the individual issues were as follows:

- (1.1) *Is education getting importance in society?* 8 out of 10 respondents believe that education being seen as a priority has not happened. 36% strongly agreed with this statement, while another 45% were inclined to have this opinion.
- (1.2) Do the respondents see positive changes in the school system? Up to 41% of them see no positive changes in the school system and another 44% see only a slight positive change in the school system.
- (1.3) Are the reform efforts internationally comparable? Disconcent was quite apparent. While 44% were in moderate opposition, 28% voiced strong disapproval. For this entry, 13% voiced no opinion.
- (1.4) Are the respondents inclined to continue with the reform? 11% want to continue the reform while 12% would like for it to be discontinued. The milder opinion had 40% for reform and 30% against its continuation. 13% still agree with the extreme statement "the reform should be ended and we should return to the system that was in place before 1989" (i.e. in the socialist era).

The *Index of satisfaction with the development of education* has a value of 2.5, corresponding to a typical evaluation position of "mild discontentment". Partial factors, however, reveal two more diverse views: a more optimistic ("the reform" around 2.6) and a more pessimistic ("the system" around 1.8).

Together, these variables can represent up to three different indications: the majority of respondents wish to have the reform, they do not consider it internationally competitive and also the development of the national education system is considered undesirable.

The second objective to determine how urgent the respondents see the need for change in selected areas of the curriculum that was in force before the reform led to the following findings:

- (2.1) Did the respondents feel the need to change the objectives, content, methods and outcomes of education? The strongest need for change is felt in the "modernization of methods, strategies and forms of learning". 8 out of 10 respondents found the need for change to be highly urgent. With "changes in the objectives and education outcomes", 43% of the respondents felt the need, yet only 8% felt it was urgent. Only 5 from 10 felt a need for changes in the "curriculum and teaching content".
- (2.2) *Did the respondents feel the need for decentralization of power?* Here there is a slight polarization of opinions: 42% wanted decentralization; 45% did not. Only about 1 in 10 considered it to be urgent.
- (2.3) Did the respondents feel the need to make the curriculum centered more on the student and the class as a group? This was the strongest rating expressing a need. Up to 9 out of 10 respondents indicated the need for "a stronger influence of the curriculum to create a positive atmosphere in the classroom". 51% of the respondents wished for "increased acceptance of the specific needs and peculiarities of the students".

The urgent need for curricular change was proven to be rather strong by the respondents, but not all components of the curriculum were viewed the same. The *Index of urgency of curricular changes* reached 2.83, corresponding to a rating of "moderate reformist position". Within the structure of this index, this position was contributed by an intrinsic factor, which we call "innovation humanity" (e.g. climate in the classroom, specifics of students) in contrast to the factor of "educational efficiency" (e.g. curriculum and teaching content).

The third objective was to identify what the respondents consider as benefits of the curricular reform for their school. Our answers to each question are as follows:

- (3.1) How do the respondents see the benefit of the reform specified for their school? Nearly 75% of respondents think that the benefits of the reform are the "taking better into account the regional differences of schools". 7 out of 10 think that the reform has brought "more opportunities to profile their school". Half of the respondents view the reform as resulting in an improved quality of work in their school.
- (3.2) How do they see the benefits of the reform for the working conditions of teachers at their school? A slight majority think that the reform "has brought greater freedom for teachers". In contrast, however, 6 out of 10 respondents believe "the reform has resulted in no positive change in the thinking of teachers". In the "improvement of teachers", the opinions are polarized. Every second respondent thinks "there was a management improvement in their school work" (but only 7% strongly believed this). 6 out of 10 take the position that the reform "did not bring work improvement of the teaching staff". 56% believe that the reform "had no impact on improving the climate and atmosphere at their school".
- (3.3) How do they see this benefit for the public acceptance of their school? Almost every second respondent thinks that the reform "did not bring change in the public view of their school". 6 out of 10 teachers think "the reform improved the communication with the families of students".
- (3.4) How do they see the benefit of the reform for the effectiveness of education in their school? 7 out of 10 respondents agree with the statement "the reform has brought to their schools a more modern concept of education" and 51% agree with the fact that "the reform has improved the process of teaching at their school". 6 out of 10 agreed with the statement that "the reform has brought quality improvement in methods and forms of teaching". "Improving the quality of educational objectives" was recognized by 51% of respondents. 5 out of 10 of those surveyed however, think "the reform did not bring improvement of teaching content".
- (3.5) How do they see the benefit of the reform for their students? 60% think "the reform did not bring improvement of educational results of students". Only 5% of respondents strongly agreed with the statement of a positive impact of the reform on student achievement. We found the following paradox: 6 out of 10 respondents agreed "the reform has brought greater activity and creativity of students" in their schools, however, 7 out of 10 felt

"there is no change in the interest of students towards learning". From these respondents, half strongly believe so. The most powerful benefit of the reform the respondents identified with was "taking into account the individual needs of students in their school" (64% hold this view, while the opposite view was only 5%).

The *Index of the benefits of the reform* (2.50) reveals the predominance of slightly positive evaluations for most of these areas (with the highest contribution to the regional school profile, in contrast to the lowest contribution to the motivation of students). The evaluations of this aspect are mutually less discriminating, though it can be seen that the respondents used a slightly different evaluation model in areas related to the teaching profession ("teacher" "factor") compared to the other three ("educational methods", "benefits for school" and "student" factor).

6.2 Limits and advantages of the study

The main shortcomings of our research are as follows:

The pilot group was not very extensive. The questionnaire was validated primarily through focus groups. The objectivity would increase if there were a larger sample of teachers.

A strong retrospective effect. The research was asking about the reform after a long period of time (over 5 years). The responses may not be representative of the respondents' true feeling of the reform.

Problems with normality of the sampling distribution. This can be linked to an asymmetrical distribution of ratings (division of the phenomenon), as well as the lower number of stages in the evaluation scale. This reduces the room to maneuver the statistical analysis to estimate the impact on the basic set.

Local "projective" potential of the terminology used. Not all terms in each item could be construed as consistent by the respondents. This leaves open the possibility of "shaping" issues and it may affect the validity of the particular research tool. This deficiency, however, should be compensated by simultaneous qualitative research.

The weaker differentiation potential in the third group of items. Some items measure the same thing. The research findings would be more comphrensive if the number of entries was reduced and if the entries were structured into different thematic groups.

The main advantages of our research are as follows:

The uniqueness of the intent. This research is the only attempt in the Slovak Republic to systematically map the opinions of teachers about the reform of 2008. It was created as a platform for further research into curriculum innovations in Slovakia.

Comparative dimension. The research does not ignore similar studies in the Czech Republic. The results can be compared with the results not only in this country but also in other countries.

Conceptual preparation. The questionnaire was designed to cover the different areas of the conceptual map of the problem. It was created on the basis of theoretical analysis of the curriculum reform by specialists in the primary and lower secondary level of education system in the Slovak Republic.

The quality and range of the sample. The research covered 10% of the core set of the population. It was conducted by stratification method, which was strictly applied to a random selection.

High return. The questionnaires did not have to be re-administered, thus all respondents' opinions came from the same time period.

The time gap. The disadvantage of the aforementioned time period has possible positive consequences. The respondents' answers are certainly missing the extremity of immediate reactions and are based on longer-term experience with the studied phenomenon.

7 Conclusions

This paper presents the attitudes of basic school teachers towards the curricular reform in Slovakia as a determining factor of its success. Similar to findings from other authors (Janík et al., 2010a, b), in Slovakia we can also observe a certain ambivalence about these attitudes. On the one hand, we see signs of dissatisfaction leading to a dismissive attitude to the ongoing reform; on the other hand, people feel a necessity for curricular changes. Our questionnaire examined three thematic areas that could indicate the way this widely discussed issue is reflected in the specific conditions of the Slovak curricular reform at basic schools.

The first examined area concerned the overall satisfaction of teachers with the recent development of the education system in Slovakia. It was proven that there is a rather large group of teachers that believe the curricular model used before 1989 was better than the current one. As this curricular model was applied in a non-democratic political environment, this phenomenon requires deeper analysis that reaches beyond the capacity of this paper. However, it brings some optimism that most of the teachers, as well as administration workers, despite their critical opinions, declared the need for changes in the school system. This finding is supported by the mostly positive responses for items of the second examined area that concerns their feelings of urgency for a need to make changes in the pre-2008 curriculum. The level of respondents' disappointment with the current reform proves that the aims and goals of the curricular reform planned by the educational policy makers did not meet the expectations of teachers at basic schools. The curricular reform initiated in 2008 mainly brought decentralization of decision-making competences towards a higher curricular autonomy of schools, especially in the area of managing the teaching contents. Teachers, however, expected more changes in creating a positive climate in the classrooms, in teaching methods and forms, and in the possibilities for encouraging individual approach during instruction. This is probably one of the key factors that determine the attitudes of basic school teachers towards the reform. This assumption is also supported by the score from the respondents' answers in the third examined area related to the positive impacts of the curricular reform. Here, the respondents assigned the highest score to the reform's positive impact on students' learning habits and improvement of their educational performance.

Our findings confirm that, just like the case of curricular reforms in the rest of the world (Daly & Finnigan, 2010; Lee & Yin 2011; Mutch, 2012; Mouraz, Leite, & Fernandes, 2013), the key determinant of the Slovak curricular reform success is the teacher. However, teachers' key role is not only based on their level of autonomy as the implementators and performers of the national curriculum in the local environment. It is becoming obvious that the level of acceptance of their opinions on the planned curricular changes by the authorities in power that form the educational and curricular policy is just as important.

References

- Anderson, R. D. (1995). Curriculum reform: Dilemmas and promise. *Phi Delta Kappa International Stable*, 77(1), 33–36.
- Anderson, R. D., Anderson, B. L., Varnaka-Martin, M. A., Romagnano, L., Bielenberg, J., Flory, M., Mieras, B., & Whitworth, J. (1994). *Issues of curriculum reform in science, mathematics and higher order thinking across the disciplines.* The Curriculum Reform Project, University of Colorado. U.S. Department of Education, Office of Educational Research and Improvement.
- Brown, M. A. (1980). Attitudes and social categories: complementary explanations of innovation-adoption behavior. *Environment and Planning A*, *12*(2), 175–186.
- Brown, S., & McIntyre, D. (1993). *Making sense of teaching*. Buckingham: Open University Press.
- Brundrett, M., Duncan, D., & Rhodes, C. (2010). Leading curriculum innovation in primary schools project: An interim report on school leaders' roles in curriculum development in England. *Education 3-13: International Journal of Primary, Elementary and Early Years Education*, 38(4), 403–419.
- Brundrett, M., & Duncan, D. (2011). Leading curriculum innovation in primary school. *Management in Education*, *25*(3), 119–124.
- Connelly, F. M., & Clandinin, D. J. (1988). *Teachers as curriculum planners*. New York: Teachers College Press.
- Cuban, L. (2008). US school reform and classroom practice. In C. Sugrue (Ed.), *The future of educational change* (pp. 75–88). London: Routledge.
- Daly, A. J., & Finnigan, K. S. (2010). A bridge between worlds: Understanding network structure to understand change strategy. *Journal of Educational Change*, 11(2), 111–138.
- Fullan, M. (1991). The new meaning of educational change. New York: Teacher College Press.
- Haney, J. J., Czerniak, C. M. & Lumpe, A. T. (1996). Teacher beliefs and intentions regarding the implementation of science eduction reform strands. *Journal of Research in Science Teaching*, 33(9), 971–993.
- Hargreaves, A. (2008). The fourth way of change: Towards an age of inspiration and sustainability. In A. Hargreaves & M. Fullan (Eds.), *Change wars* (pp. 11–40). Toronto: Solution Tree.
- Hargreaves, A., & Goodson, I. (2006). Educational change overtime? The sustainability and nonsustainability of three decades of secondary school change and continuity. *Educational Administration Quarterly*, 42(1), 3–41.
- Ho, D. CH. W. (2010). Teacher participation in curriculum and pedagogical decisions: Insights into curriculum leadership. *Educational Management Administration Leadership*, 38(5), 613–624.
- Janík, T., Janko, T., Knecht, P., Kubiatko, M., Najvar, P., Pavlas, T., Slavík, J., Solnička, D., & Vlčková, K. (2010a). *Kurikulární reforma na gymnáziích: výsledky dotazníkového šetření* [The curriculum reform at grammar school: Questionnaire survey; in Czech]. Praha: Výzkumný ústav pedagogický v Praze.
- Janík, T., Knecht, P., Najvar, P., Pavlas, T., Slavík, J., & Solnička, D. (2010b). *Kurikulární reforma na gymnáziích v rozhovorech s koordinátory pilotních a partnerských škol* [The curriculum reform at gymnasium: Interviews with coordinators at pilot and partner schools; in Czech]. Praha: Výzkumný ústav pedagogický v Praze.
- Kennedy, C. (1996). Teacher roles in curriculum reform. *ELTED*, 2(1), 77–89.

- Kennedy, C., & Kennedy, J. (1996). Teacher attitudes and change implementation. *System, 24*(3), 351–360.
- Kirk, D., & MacDonald, D. (2001). Teacher voice and ownership of curriculum change. *Journal of Curriculum Studies*, *33*(5), 551–567.
- Lee, J. C.-K., & Yin, H-B. (2011). Teachers' emotions and professional identity in curriculum reform: A Chinese perspective. *Journal of Educational Change*, *12*(1), 25–46.
- Levitt, K. (2001). An analysis of elementary teachers' beliefs regarding the teaching and learning of science. *Science Education*, 86(1), 1–22.
- Mouraz, A., Leite, C., & Fernandes, P. (2013). Teachers' role in curriculum design in Portuguese schools. *Teachers and Teaching: theory and practice*, *19*(5), 478–491.
- Mutch, C. (2012). Curriculum change and teacher resistance. Curriculum Matters, 8(1), 1–8.
- Pimley, G. (2011). Curriculum autonomy through curriculum expertise. *Forum for promoting comprehensive education*, *53*(1), 93–99.
- Priestley, M. (2011). Schools, teachers, and curriculum change: A balancing act? *Journal of Educational Change*, 12(1), 1–23.
- Sahlberg, P. (2009). Learning first. School accountability for sustainable society. In D. G. Kenneth, L. S. Brenda, & J-C. Couture (Eds.), *Education accountability. Proffesional voices from the field* (pp. 1–22). Rotterdam: Sense Publishers.
- Stenhouse, L. (1975). *An introduction to curriculum research and development.* London: Heinemann.
- Van Driel, J. H., Beijaard, D., & Verloop, N. (2001). Professional development and reform in science education: The role of teachers' practical knowledge. *Journal of Research in Science Teaching*, 38(2), 137–158.
- Wu, S. M. (2015). Development and application of the measures of school value, teacher. *The New Educational Review*, *39*(1), 240–250.
- Zákon č. 245/2008 Z.z. z 22. mája 2008 o výchove a vzdelávaní (školský zákon). [Education Act No. 245/2008]. Available https://www.minedu.sk/data/att/9287.pdf.

Authors

Štefan Porubský, Matej Bel University in Banská Bystrica, Faculty of Education, Educational Research Center, Ružová 13, 97411 Banská Bystrica, Slovak Republic, e-mail: stefan.porubsky@umb.sk

Marian Trnka, Matej Bel University in Banská Bystrica, Faculty of Education, Department of Elementary and Preschool Education, Ružová 13, 97411 Banská Bystrica, Slovak Republic, e-mail: marian.trnka@umb.sk

Vladimír Poliach, Matej Bel University in Banská Bystrica, Faculty of Education, Department of Psychology, Ružová 13, 97411 Banská Bystrica, Slovak Republic, e-mail: vladimir.poliach@umb.sk

Radka Cachovanová, Matej Bel University in Banská Bystrica, Faculty of Education, Department of Elementary and Preschool Education, Ružová 13, 97411 Banská Bystrica, Slovak Republic, e-mail: radka.cachovanova@umb.sk

Kurikulární reforma na Slovensku v pohledech učitelů základních škol

Abstrakt: V roce 2008 začala na Slovensku kurikulární reforma. Ta zavedla dvouúrovňový systém kurikula v rámci předškolního, základního i středního vzdělávání. Setkala se se smíšenými reakcemi, jak od učitelů, tak od vedení škol. Tento příspěvek stručně představuje tuto reformu, obsah základních kurikulárních dokumentů a některé z výsledků dotazníkového šetření zaměřeného na postoje učitelů základních škol k reformě. Jejich názory byly sledovány ve třech oblastech: spokojenost s vývojem školského systému na Slovensku v posledních šesti letech, důležitost kurikulárních změn a jejich dopad.

Klíčová slova: vzdělávací politika, kurikulární reforma, postoje učitelů, základní škola

Adaptation of Teacher Power Use Scale to Lower Secondary Students and Student Teachers ¹

Kateřina Vlčková a, Jan Mareš b, Stanislav Ježek c

^a Masaryk University, Faculty of Education, Department of Education
 ^b Masaryk University, Faculty of Education, Department of Psychology
 ^c Masaryk University, Faculty of Social Sciences, Institute for Research of Children, Youth and Family/Department of Psychology

Received 29 September 2015; final version received 18 December 2015; accepted 21 December 2015

Abstract: Power can be defined as an ability to influence opinions, values, and behaviour of others. The realisation of curricular aims is enabled by clearly established power relationships in classes. Newly qualified teachers often struggle with establishing power relationships. French and Raven's influential typology of social power as a relational phenomenon distinguishes coercive, reward, legitimate, referent, and expert bases of teacher power. In our methodological study we adapted Teacher Power Use Scale - TPUS (Schrodt, Witt, & Turman, 2007) that measures these power bases. The adaptation focuses (instead of tertiary teachers, their students, and Anglo-Saxon context) on student teachers, lower secondary students, and reflects the Czech sociocultural context. The non-probability adaptation sample consists of 1686 students from 96 lower secondary classes taught by 96 student teachers during their long term teaching practice. Our data basically support French and Raven's theory and the original TPUS, except that the structure of student teacher power bases seems to be naturally simpler in the perception of lower secondary students. Above all, legitimate and coercive student teachers power bases were strongly intercorrelated, i.e. perceived by students as one factor; similar to teacher power bases structure in other Czech data.

Keywords: power bases, Teacher Power Use Scale, student teachers, lower secondary education, scale adaptation, confirmatory factor analysis

Power in the social science context can be understood as an ability of a person or a group to influence opinions, values, and behaviour of others (McCroskey et al., 2006). Power is viewed as a *situational* (Jacobs, 2012; Schulz & Oyler, 2006), *circular* (Buzzelli & Johnston, 2001; Aultman, Williams-Johnson,

DOI: 10.5817/PedOr2015-6-798

¹ This paper was funded by *Czech Science Foundation* – Project GA13-24456S *Power in the Classes Taught by Student Teachers*. The authors thank for the kind support.

& Schutz, 2009) and *reciprocal* phenomenon (McCroskey, 2006; Moscovici, 2007). As such it represents one of the most studied phenomena in social sciences (e. g. Simmel, 1896; Weber, 1922; Foucault, 1975). It is obvious from the definition that power is crucial for educational and instructional settings.

1 Teacher power

Recent research shows that the realisation of instructional aims is enabled by clearly established *power relationships* in classes (Šalamounová & Švaříček, 2012). This supports Bernstein's (1996) theory of dominance of *regulative instructional discourse* while the *didactic discourse* constitutes a part of the regulative one. *Power negotiation* and *use of power* are understood as an inherent part of the educational process (McCroskey & Richmond, 1983; Šeďová, 2011). As Sarason (1990) notes, *teachers' professional competence* can be also measured in relation to their ability to set up power relations in the classes.

According to research findings (Richmond & McCroskey, 1992; Staton, 1992), newly qualified teachers have the necessary knowledge related to the subject matter, but they do not know how to establish power relationships in the classroom. The harsh and rude part of the reality of everyday classroom life can cause collapse of their ideals formed during teacher training – "the reality shock" (Veenman, 1984). These might be one of the main reasons why novice teachers quit their profession (Šalamounová, Bradová, & Lojdová, 2014; Blížkovský, Kučerová, Kurelová et al., 2000, p. 169) which is regarded as a social and economic problem in many European countries. Therefore it is important to focus educational research on the topic of power relationships in the classroom and to develop reliable instruments for measuring it.

1.1 Typology of teacher power: Power bases

Traditional and the most influential typology of social power as a *relational* phenomenon comes from French and Raven (1959). It distinguishes teacher's power according to the principle which it is based on (as perceived by students).² The typology of power bases has been developed and partly revised over the years but the main five power bases remained stable (Raven, 1992, 1993).

² Examples of situations for each power base can be seen in appendix in Czech original adaptation of TPUS or in table 1 in English back translation of the Czech adaptation.

Reward power comes from a student's perception that the teacher can provide him/her with positive benefits or rewards (extra points, grades, psychological reward such as affirmation from the teacher, relational rewards such as being complimented by the teacher in front of the classmates). The teacher power emanates in this case from the student wishing to receive the benefits.

Coercive power presents a student's awareness that the teacher can punish him/her for example through grade penalties, critique, disciplining in front of classmates, or losing the teacher's favour. The teacher power in this case emanates from the student wishing to avoid unpleasantness.

Legitimate power reflects the teacher's authoritative role in relation to the student. Social norms assign to persons who hold position of legitimate authority a certain right to verse or influence others.

Referent power reflects a student's positive regard for the teacher and personal identification with the teacher perceived as similarity or interpersonal affinity being manifested by the student's feeling of unity with the teacher, or the desire to have same identity (i.e. admiring the teacher). The teacher's ability to influence a student stems from the positive regard in which the student holds the teacher.

Expert power emanates from the teacher's knowledge or expertise as an educator in the subject area. In the class, the student may recognize the professional background, superior understanding of the subject, as well as the teaching skills of the teacher.

1.2 Instruments measuring teacher power bases

Attempts to measure teacher power bases as defined above led to the construction of *Perceived Power Measure* (PPM) and *Relative Power Measure* (RPM) by McCroskey and Richmond (1983) and later to the construction of *Power Base Measure* (PBM) by Roach (1995a). In recent years an improved *Teacher Power Use Scale* (TPUS) was developed by Schrodt, Witt, and Turman (2007).

Perceived Power Measure – PPM (McCroskey & Richmond, 1983) was originally constructed by Richmond, McCrosky, Davis, and Koontz (1980) who were inspired by Student's (1968) measure designed for employees in general. Student used a single-item-type measure on a five-point Likert-type scale. Richmond et al. (1980) decided to use five seven-point bipolar

scales (agree-disagree, wrong-right etc.) for each type of power in order to estimate reliability. Later, McCroskey and Richmond (1983) made a minor modification of this instrument. Respondents are given the definitions of the five power bases and answer five statements regarding these power bases on a Likert type scale. Teachers answer statements of the following character: *I use ... power*. Students answer statements: *My teacher uses ... power*. Richmond et al. (1980) as well as McCroskey and Richmond (1983) reported high reliability of the instrument. For McCroskey and Richmond (1983) it was important to measure not only the relative use of power bases, but the degree of use of each power base as well, therefore they designed another instrument called *Relative Power Measure* – RPM which accompanies the PPM. The RPM also first explains the five power bases to respondents; then asks them to estimate the percentage of total power usage that stems from each base, with the requirement that the total equals 100 percent.

Later Roach's (1995a) Power Base Measure (PBM) improved the measurement of teacher power. PBM was primarily developed to measure power use of teaching assistants (Roach, 1995b) in relation to college outcomes. PBM consists of 20 Likert-type items³ (four for each power base) describing perceived effects of teacher power on student behaviour (e.g. coercive power: The student will experience negative consequences for noncompliance with instructor requests; referent power: The student should comply to please the instructor; legitimate power: The student must comply because it is a university rule or expectation; expert power: The student should comply because the instructor has great wisdom/knowledge behind the request; reward power: The instructor will see to it that the student acquires some desirable benefits if he/she does what is suggested). PBM showed high overall reliability coefficients - over .85 (Roach, 1995a,b) and in subsequent research the alpha coefficients of reliability of individual scales ranged from .66 to .90 (Golish, 1999; Turman & Schrodt, 2006). Nevertheless, the factor loadings for the scale indicated that a number of items tended to cross-load onto multiple factors (Roach, 1995a). Turman and Schrodt (2006) reported weak factor loadings for legitimate and coercive power on teacher power. Schrodt, Witt and Turman (2007) found that PBM may not adequately represent the latent construct of power use in instructional contexts. According to them, one possible explanation for this result may be that the items representing coercive and legitimate power on the PBM are less salient

With five-point frequency scale that ranges from *never* to *very often*.

to students in the college classroom than the items representing prosocial forms of power, such as expert, reward, and referent power. Also some items of reward power (e.g. *If the student complies with instructor requests, he/she will receive some type of compensation or prize.*) may be perceived by students as manipulative and therefore measuring some aspects of coercive power. Thus, they designed another instrument.

Teacher Power Use Scale - TPUS (Schrodt, Witt, & Turman, 2007) presents the latest instrument measuring perceived (observable) power of teacher. The original TPUS measures the five above mentioned power bases with 30 items on a seven-point Likert-type scale ranging from never to always. Items were constructed on the basis of PPM, RPM, PBM and typologies of behaviour alteration techniques described in observational research. According to Schrodt, Witt, and Turman (2007) the instrument shows better psychometric properties than Perceived Power Measure by McCroskey and Richmond's (1983) or Roach's (1995a) Power Base Measure. The TPUS demonstrated better internal reliability, concurrent and discriminant validity, and it contained more valid and reliable indicators for the five power bases. Coefficient of reliability Cronbach's alpha ranged between .77 and .90. The TPUS was better at measuring so called *anti-social forms of power* (coercive and legitimate) and pro-social forms of power (referent and reward) at the aggregated level as well. In future research this newest instrument might be improved and above all adapted to other educational levels and sociocultural contexts, which is our attempt.

1.3 Findings on teacher power

Most of the studies that used instruments based on the French and Raven's typology focused on tertiary students and teachers. According to research findings, the most frequently used power base reported by students seemed to be coercive power, followed by legitimate and expert power; the least used were reward and referent power (Jamieson & Thomas, 1974). On the other hand, Schrodt, Witt, and Turman (2007) found that in communication courses university students perceived the expert power base as the most used (average of two studies using PBM was 2.21 and 2.72; on a scale from never - 0 to always - 4), then legitimate (x = 1.93 and 2.33), reward (x = 2.26 and 1.75), referent (x = 1.94 and 1.75), and coercive power (x = 1.43 and 1.15). Students perceived the use of so called harsh power mechanisms as inappropriate and reported discomfort when those were applied; on the other hand, the expert power was perceived as the best (Elias & Loomis, 2004).

Referent, expert, and reward power (as prosocial forms of power) were positively correlated with *cognitive* and *affective learning*, and *student motivation*, whereas legitimate and coercive power (viewed by students as antisocial forms of power) were negatively associated with these *learning outcomes* (Kearney et al., 1984; McCroskey & Richmond, 1983; Plax et al., 1986; Richmond, 1990; Richmond & McCroskey, 1984). Other studies reported a relation between teacher power and students' *inappropriate behaviour* (Myers, 1999; Tauber, 1999).

As for teaching assistants, higher power use was associated with lower argumentativeness (Roach, 1995a,b). Students often communicated from the same power bases as they experienced social influence of their teachers (Golish, 1999; Golish & Olson, 2000), e.g. teachers' use of reward power was related to students' use of prosocial *behaviour alteration techniques* (BATs), and conversely, teachers' use of coercive power was associated with students' antisocial BATs (Golish & Olson, 2000). Students' perceptions of teacher *confirmation behaviours* were positively associated with prosocial forms of power and negatively associated with antisocial forms of power (Turman & Schrodt, 2006). No influence of teacher's gender on student's perception of their power was found (Elias & Mace Britton, 2005).

The relevance of these findings needs to be further supported with findings on different samples, i. e. above all on younger students and in different socio-cultural contexts. Sufficient findings regarding student teachers or novice teachers are missing as well as findings about perception of (student) teacher power by younger learners. Logically, the instruments measuring the phenomenon at these educational levels are missing as well; this regards international situation as well as the Czech Republic.

1.4 Aims of our study

In accordance to this state of the art and needs of further theory and methodology development, our methodological study aims to adapt the *Teacher Power Use Scale – TPUS* (Schrodt, Witt, & Turman, 2007) for the specific context of student teachers in lower secondary classrooms. At the national level, our aim was also the adaptation of TPUS to Czech educational conditions.

The adaptation was guided by the need of measurement of power bases of student teachers and lower secondary students, above all in our larger research project on student teacher power (see Vlčková et al., 2015). The measurement instrument had been missing not only in Czech but also in international conditions. The adaptation of TPUS to younger learners and students teacher's instruction had been missing in the theory, research, and practice therefore it is important to find out whether the instrument can show a similar structure like in the case of teachers and tertiary students. Simultaneously, there is only limited knowledge about the power bases student teachers use when they start their teacher profession and how students whom they teach perceive their power. Student teachers find themselves in a specific position at schools. In reality, they are perceived by neither their students, nor their mentor teachers as regular teachers. Their power vastly depends on power relations set by their mentor teachers and school management and how they introduce them to the classes where they are learning to teach (more findings in Lojdová, 2015).

2 Research design

2.1 Adaptation of measuring instrument

Following the recommendations of Hambleton, Merenda, and Spielberger (2005), our adaptation of the *Teacher Power Use Scale* – TPUS (Schrodt, Witt, & Turman, 2007) with the aim to measure the perceived student teacher power bases included re-designing the instrument for lower secondary students (as opposed to university students) and student teachers (as opposed to university teachers), and for the Czech conditions (as opposed to the Anglo-Saxon context). We found the original TPUS suitable for the intended adaptation (i.e. significantly different population and socio-cultural context) and as it is the newest and most advanced instrument measuring teacher power we decided to adapt it; however, some changes (as described below) had to be done.

The adaptation included independent parallel translations, multiple cultural and linguistic adaptations, multiple expert reviews, and cognitive interviews with relevant respondents. The instrument was first adapted for lower secondary students and their teachers (Vlčková, Mareš, Ježek, & Šalamounová, 2016, in print), afterwards for measuring the student teacher power in lower secondary classrooms. For measuring the student teacher power, new items were developed for each power base according to theory (table 1). Some items measuring teacher power were reformulated or removed. The changes (in comparison to the original TPUS) are presented in table 1.

Table 1
Adapted and Developed items of scale power bases: version for student teachers (Vlčková, Mareš, & Ježek)⁴

Power base		Scale items	
	Adapted from TPUS	Newly created items; or alternative items	New items developed for the student teacher
		to adapted or original item	context
Coercive	16, 18, 29, 33, 35, 36	06, 26, 47	25, 34
Reward	20, 24, 38, 48, 49	45	40, 51
Referent ⁵	1, 8, 13, 19, 23	10, 12, 15, 32, 41	4
Legitimate	7, 14, 22, 37, 39, 50	5, 11, 42	9, 17, 44
Expert	3, 21, 27, 31, 36	2, 28, 30, 43	_

In contrast to the original TPUS, the items were reformulated from singular or plural passive (reporting about others in generally) to singular active form (reporting about oneself) which allows more psychometrically reliable respondent's answers.

The scale version for adaptation consisted of 51 items (see appendix): 11 items for coercive power base, 10 for expert, 12 for legitimate, 8 for reward, and 10 referent power base. The response scale was adapted for younger learners, i. e. reduced to 5 points $(1 - I \ agree, 5 - I \ don't \ agree)^6$ in contrast to the original TPUS. The responses were put on a response scale of agreement instead of frequency because of the limited students' experience with the assessed student teacher. To assess the psychometric properties of the instrument we used confirmatory factor analysis (CFA) in Mplus and item analysis with internal consistency estimation.

The scale items are available in the appendix (in Czech, as used in the research) or in table 2 (in English back-translation).

One item from original TPUS was not (with the same meaning) included in our instrument: *My teacher demonstrates commitment to the class by being authentic and genuine when interacting with students.*

Due to the introduction of this response scale change (from frequency to agreement response scale), the factor analysis model estimates may change. It may result in different psychometric properties of the model estimates compared to the original TPUS. This problem was considered in the analysis. The change of length of the response scale (from 7 point to 5 point) is considered not to have an effect on the estimates in our study.

2.2 Data collection

The scale was administered in 2014 to lower secondary classes/students (ISCED A2) taught by student teachers of master study programmes at the Faculty of Education, Masaryk University, Czech Republic. The student teachers were going through their second semester of teaching practice at schools. The student teachers administered the questionnaire themselves (90%) to their students at the end of their long term continual teaching practice, mostly after 3–6 or 10 lessons which they had taught in the class. In some cases (10%) the questionnaire was administered by a mentor teacher, class teacher or substituting teacher. The student teachers computed the results themselves and used them for self-reflection in the teaching practice seminars at the faculty. This helped us to assure better data quality for our research purposes as well. The data were collected as nonprobability sampling; most of the schools were from the city of Brno and its surroundings.

2.3 Sample

The sample included 1686 students from 6th to 9th grade (12% in the 6th grade, 23% in the 7th, 41% in the 8th, and 24% in the 9th grade). The students were between 11 and 17 years old; the majority was 13–15 years old⁷. In total we analysed 96 classes/student teachers. On average, there were 18 students per class. 1306 students were taught by a female teacher, 380 students from our sample were taught by a male student teacher. 1560 (93%) students were from lower secondary schools (základní škola), 126 (7%) students were from lower secondary grammar schools (víceleté gymnázium); i.e. in the sample there were 7 lower secondary academic schools and 58 lower secondary schools. The student teachers⁸ taught Civics (21 student teachers), Foreign Languages (18), Czech Language (14), Mathematics (14), History (9), Science (6), Health Education (5), Geography (4), Physics (3), and ICT (3).

⁷ 11-year-old students (1.73%), 12 (13.25%), 13 (25.67%), 14 (37.61%), 15 (20.54%), 16 (1.13%), 17 years old (.06%).

The percentage of our sample of students in different subject was following: Foreign Languages (French 2% of students, English 1%, Russian 7%, German 4%) and Czech language (15%), Mathematics (15%), Physic (3%), Informatics (3%), Science (8%), Health Education (7%), History (9%), Civics (23%), and Geography (4%). The classes in foreign languages are of the half size of standard classes; therefore there are fewer students compared to number of student teachers.

3 Findings

3.1 Confirmatory factor analysis

A confirmatory factor analysis in Mplus, version 7.11 (Muthén & Muthén, 2013), was conducted to confirm the data structure suggested by theory of French and Raven (1959) and TPUS (Schrodt, Witt, & Turman, 2007), i.e. the existence of five power bases in student's perception of student teacher power use in the classes. The first five-factor model with all 51 items produced unsatisfactory fit indices. The model treated all items as continuous and used the MLR correction for deviations from normality. Then we allowed the residuals of items that explicitly mentioned the status of the student teacher to correlate. The resulting model (model 1, table 2) did not fit the data perfectly but at least allowed rough interpretation (chi² = 5296, df = 1210, p < .001; CFI = .81; SRMR = .083; RMSEA = .045).

Model 1 had a number of deficiencies. Item C06 (*When I do not hand in my homework to this teacher, I feel really bad.*) had a minimum loading on the coercive factor while the modification indices strongly suggested its loading on the expert factor. Items L05 (*This teacher says that teachers have to be obeyed.*) and L11 (*This teacher emphasizes that we have to obey at school.*) did not load well on legitimate factor and were substantially locally dependent. Moreover, from the practical standpoint, the high correlation between legitimate and coercive factors (model 1 in table 3) suggested that the factors are nearly indistinguishable. A final argument for modification came from the analysis of the adapted TPUS for lower secondary teachers (Vlčková, Mareš, Ježek, & Šalamounová, 2016, in print), in which a four-factor model performed better.

Thus we tested an alternative four-factor model (model 2, table 2) with the items of legitimate and coercive power loading on a common factor. We also removed the problematic items C06, L05 and L11. While its fit indices were only marginally better ($chi^2 = 5241$, df = 1210, p < .001; CFI = .82; SRMR = .082; RMSEA = .044), it enables for a much clearer interpretation.

Table 2 Standardized factor loadings in models 1 and 2^9

	Model 1	Model 2
Item	loading	loading
Factor: Referent power		
R01: I have a lot in common with this teacher.	.61	.61
R04: I find this teacher nice because she has to learn as I do.	.63	.55
R08: This teacher is friendly to me.	.55	.46
R10: This teacher is fair to me.	.46	.62
R12: I like to talk with this teacher also during breaks.	.62	.61
R13: I see this teacher also as a human, not just as a teacher.	.61	.59
R15: I think of this teacher as of a friend.	.59	.64
R19: This teacher and I have the same point of view.	.64	.60
R23: I can see things from the same point of view as this		
teacher.	.60	.66
R32: I want to be like this teacher.	.66	.59
R41: What this teacher says and does is very important to me.	.59	.63
Factor: Expert power		
E02: When this teacher explains something while teaching, it is comprehensible.	.67	.67
E03: This teacher tells different news connected to the		
subject.	.53	.53
E21: I think this teacher is great at teaching.	.76	.75
E27: When this teacher teaches, I know what to do and when to do it.	.67	.67
E28: This teacher is able to show me how I can practically use what I learn.	.65	.65
E30: This teacher understands what she teaches very well.	.70	.69
E31: When this teacher explains something, I can believe it.	.69	.69
E36: This teacher is a real expert in this subject.	.69	.69
E43: This teacher is able to explain to me anything I do not understand.	.68	.68

Items are translated from original Czech items; they are meant only for information, not for use in research. Original scale items of the Czech version are available in the appendix. The questionnaire is presented in a version for a female student teacher.

	Model 1	Model 2
Item	loading	loading
		Factor: Legitimate/ coercive
Factor: Legitimate power		
L05: This teacher says that teachers have to be obeyed.	.26	
L07: This teacher thinks that she can decide about everything when she is a teacher.	.61	.56
L09: When this teacher does not like my behaviour, she cannot do anything about it anyway because she does not belong to our school.	.43	.44
L11: This teacher emphasizes that we have to obey at school.	.24	
(L14: This teacher has a reserved approach to me.)	.34	.32
(L17: I obey this teacher because our teacher has told me to do so.)	.36	.33
(L22: This teacher says that it does not matter if I do not like something in the class.)	.39	.39
L37: This teacher obviously shows that a teacher is something more than a student.	.56	.49
(L39: This teacher suggests that what she wants is also supported by our teacher, headmaster or school rules.)	.32	.26
L42: This teacher says things like: "I end the lesson, not you."	.52	.52
L44: When this teacher does not like my behaviour, she cannot do anything about it because she is not a proper teacher yet.	.46	.48
(L50: This teacher thinks that students have to obey because a teacher is an authority.)	.33	.26
Factor: Coercive power		
C06: When I do not hand in my homework to this teacher, I feel really bad.	01	
C16: Although I criticize the rules, this teacher does whatever she wants anyway.	.51	.52
C18: When I do not work in the class as well as this teacher imagines, she embarrasses me in the class.	.55	.55
(C25: When I misbehave in the class of this teacher, she tells it to our teacher.)	.40	.38
C26: This teacher is angry with me when I express myself in the class that I do not agree with what she is saying.	.57	.56
(C29: When I do not follow this teacher's instructions, she punishes me.)	.40	.37

	Model 1	Model 2
Item	loading	loading
C33: When I hand in my homework late, she behaves in such a way it makes me feel bad.	.47	.44
C34: When I do not work as this teacher wants, she tells our teacher about it.	.45	.44
C35: When I do not do in the class what this teacher wants, she looks at me angrily.	.55	.53
C46: This teacher ignores me as a punishment when I do not work as she wants.	.61	.60
C47: When I do not have my materials for the class, this teacher is upset.	.54	.52
Factor: Reward power		
RW20: When I know something extra in the class, this teacher points it out.	.52	.52
RW24: When I work well in the class, this teacher appreciates it.	.64	.64
RW38: When I behave in the class as this teacher wants, she rewards me.	.53	.53
RW40: When I work well in the class of this teacher, she tells our teacher about it.	.73	.73
RW45: When I learn what is required, this teacher praises me.	.51	.51
RW48: When I make an effort in the class, this teacher is nicer to me.	.73	.73
RW49: When I do in the class what this teacher demands, she praises me for that.	.51	.51
RW51: When I behave well in this teacher's class, she praises me to our teacher.	.52	.52

Note. Crossed out items are problematical items removed from model 2. Items in the brackets are items with factor loading under .40.

Table 3 reports the correlations among factors in model 1 and model 2. In model 2 legitimate and coercive power are integrated into one factor. Correlations between reward, expert, and referent power are also high. The authors of the original TPUS Schrodt, Witt, and Turman (2007) reported similar findings (see Discussion).

Table 3
Correlations among factors in models 1 and 2

Model 1

Model

Model 1					Model 2			
						Legitimate/		
	Expert	Legitimate	Coercive	Reward		Expert	coercive	Reward
Referent	.77	17	18	.69	Referent	.77	21	.69
Expert		31	42	.70	Expert		43	.70
					Legitimate/			
Legitimate			.85	07	coercive			12
Coercive				09				

Note. All correlations p < .01.

3.2 Scales reliability

According to the CFA model 2 (table 2 and 3) we estimated internal consistency reliability for four power bases scales (the legitimate and coercive power bases were integrated into one factor). Reliability was sufficiently high – over .80 in all cases (see table 4). No exclusion of any item would improve the coefficient of reliability. The scale items can be seen in appendix (in Czech, as used in the study) or in table 2 (in English back-translation).

Table 4
Scales reliability and descriptive statistics (Model 2)

Power base	Cronbach's alpha	Number of items	Mean	Median	SD
Expert	.88	9	4.13	4.33	.75
Referent	.86	11	3.31	3.36	.82
Legitimate/					
coercive	.83	20	2.40	2.35	.63
Reward	.81	8	3.53	3.60	.80

3.3 Descriptive statistics

All four power bases (except legitimate/coercive power base) were quite strongly (over point 3 at a scale from 1 to 5) perceived by students as used by the student teachers at their long term practice as measured by our adaptation of TPUS (table 4). Students reflected as the most applied power base by the student teachers the expert power which means that student teachers were perceived as experts. The least applied in the classes was

legitimate/coercive power base (table 4). As the instrument needs validation, these findings are preliminary.

3.4 Instrument shortening and validation of the short version

The adapted student teacher scale – compared to the original TPUS – has a different number of items per scale (see table 4) caused above all by merging of original legitimate and coercive factors and by our preference of the criterion of content coverage (not primarily high internal consistency as in the original instrument). In further development of the instrument some items can be excluded to shorten the adapted TPUS. The shortening can be suggested for the purpose of validation of our presented findings as well as for the practical reasons of instrument administration at schools. I.e. for further validation of the instrument the approach of excluding some items according to the CFA model 2 loadings (table 1) and scales reliability analysis can be applied. Exclusion of items with factor loadings under .40 can be realised (no item was under .60 and above .40 and at the same time decreasing the scale reliability). This reduction regards actually only items from legitimate/coercive power base (e.g. L14, L17, L39, L50, D25, and D29). After this reduction the scales reliability of legitimate/coercive power base remains high (α = .82). From the referent power base scale the item R08 can be excluded because it seems that it uses an archaic Czech word (in English meaning "be forthcoming") and not all students understand it precisely. These new scales of power bases in the Czech conditions need to be validated on another data sample, on which we are currently conducting a new CFA analysis. New findings will be published in the instrument manual (Mareš, Vlčková, Ježek, et al., 2016, in print).

4 Discussion

The aim of the study was to adapt a scale measuring perceived teacher power from Anglo-Saxon context to Czech condition, from tertiary level to lower secondary level students, and from teachers to student teachers. Confirmatory factor analysis was conducted and the Czech data basically supported the original model of relational power with five main power bases, with the difference that the structure of student teacher power bases seems to be less-dimensional in the perception of lower secondary students. Coercive and legitimate student teacher power bases were very highly intercorrelated, and many items of these scales tended to crossload among the two

factors. Our interpretation is that the two power bases are not differentiated by the lower secondary students. Alternatively, the two factors may not be differentiated in student teachers' behaviour. Consequently, a four factor model was suggested for the Czech conditions. These findings are similar to our findings concerning Czech teachers and their lower secondary students (Vlčková, Mareš, Ježek, & Šalamounová, 2016, in print). Also in international findings these power bases were reported to be strongly correlated (e.g. Schrodt, Witt, & Turman, 2007). The four factor solution (i.e. combining two latent constructs – legitimate and coercive power) was consistent with the test of PBM by Schrodt, Witt, and Turman (2007). The four factor solution was also tested by Schrodt, Witt, and Turman (2007) in the development of the TPUS. These two power bases produced highest intercorrelations (.83) but the four-factor solution produced decline in model fit in their analysis, suggesting that the five-factor solution was most appropriate for their data.

Our decision for the four-factor solution (not three-factor solution) was also indirectly supported by the structure of teacher power data from the Czech adaptation of *Teacher Power Use Scale* for lower secondary student and teachers (Vlčková, Mareš, Ježek, & Šalamounová, 2016, in print) where a four factor solution was found superior.

Our observational data from a research project on student teacher power and open and thematic qualitative coding of the data (Vlčková et al., 2015) show that, for example, student teachers perceived as experts demonstrated higher referent power, and opposite; when student teachers were perceived as having high referent power they could motivate students with rewards more easily; and when student teachers were perceived as experts they gave students actually more rewards etc. Coercive power was enabled by legitimate power and was used in a milder modus in the context of student teachers since they are supervised by their mentor teacher and in our research also by cameras and the researcher in the classroom (Vlčková et al., 2015). Lower secondary students were not able to distinguish the coercive (student) teacher power from the legitimate one.

The superiority of the four-factor model on our data does not impact on the meaningfulness of the five power base theory. The findings of the factor analyses (compared to TPUS by Schrodt, Witt, and Turman, 2007) can be affected by our methodological changes of the original TPUS, such as items reformulation for younger students, development of new items (which were more specifically formulated), stress primarily on complexity of the items not only high reliability, by response scale change, etc. Also, the students who assessed the student teachers did not know them for as long as their regular teachers; they were asked to report on their behaviour after a short time of their practice in their classes.

As this scale was developed on the basis of the Czech adaptation of TPUS for teachers and then adapted for student teachers, the CFA showed that the newly suggested items specific for student teachers were not as fitting to the scales as the previous items because the new items were more specific about the situation or form of student teacher behaviour. This regards to some extent also (in accordance with the theory) newly developed items for the teacher scale, on which the student teacher scale was based. Therefore, some modifications of these items are desirable.

The preliminary (the adapted scale needs validation) descriptive findings show that the expert power is perceived as the most used and the legitimate/coercive power as the least used power. Student teachers were surprisingly (as they are just preparing for becoming teachers in the subjects) very strongly perceived as experts. This corresponds to the findings of Schrodt, Witt, and Turman (2007) based on previous measure for teacher power (Roach's PBM, 1995a), only with the difference that legitimate power was perceived as the second most used one. It corresponds with the findings of McCroskey and Richmond (1983) as well – teachers and students saw the biggest proportion of power use to stem from reward, referent, and expert base. Nevertheless, contradicting results were reported by Jamieson and Tomas (1974) for high school students/teachers – the coercive and legitimate power bases were the most used. However, this might be caused by the socio-culturally specific situation of schooling in the U.S.A. at the beginning of 1970s.

The situation of the student teachers during their long term teaching practice is very different from the situation of a regular teacher (Vlčková et al., 2015). Student teacher power bases are only "borrowed" from the regular teacher (mentor) and not always fully handed over. For example, student teachers can give grades, but only the best grades functioning as a reward, but they don't write them to the students' record book as this is done only by the regular teacher, probably in order to keep the continuity of assessment clear during the school term. Another example is that students are often unsure if the student teacher can somehow punish them if they don't obey or don't

do their (home)work etc. This uncertainty is not only on the side of the students, but also on the side of the student teachers as well as their mentors (regular class teachers) because the power conditions are often set in the classroom only when a situation occurs and not in advance.

5 Conclusion

The presented study attempted to contribute to the field of teacher, specifically student teacher power measurement in the (Czech) classes and its theory by adapting the TPUS (Schrodt, Witt, & Turman, 2007) measuring the five power bases suggested by French and Raven (1959). In this study we presented the above mentioned instrument adaptation for international academics in English to demonstrate that the adaptation of the TPUS to younger students as well as student teachers is possible and can bring reliable results. For Czech scientists also the original Czech adaptation version for their use is published in the appendix. The adapted instrument can be used for self-evaluation by student teachers during their teaching practices in schools as well as by teacher educators and school mentor teachers to support the student teachers educational expertise and their reflective practice.

For Czech student teachers, teachers, and teacher educators we are preparing an instrument manual (Mareš, Vlčková, & Ježek, et al., 2016, in print) for both instruments adapted by us: *Student Teacher Power Use Scale – Czech version* (Báze moci: verze pro studenty učitelství – BMS) and *Teacher Power Use Scale – Czech version* (Báze moci: verze pro učitele – BMU).

For further research, it is desirable to test the *Student Teacher Power Use Scale – Czech version* developed by us on a different set of data for its structure and for its fit to Czech data. The adaptation of the *Student Teacher Power Use Scale – Czech version* as well as the TPUS to the educational context of other countries can be beneficial as well.

Acknowledgement

The scale items development was co-operated by dr. Zuzana Šalamounová, dr. Kateřina Lojdová, dr. Josef Lukas, dr. Tomáš Kohoutek, and Mgr. Jarmila Bradová from Masaryk University. Data collection was supported by

¹⁰ A successful adaptation of TPUS to Turkish college condition was reported by Özer et al. (2014). Findings are preliminary; the authors conducted only exploratory factor analysis.

dr. Kateřina Lojdová, dataset creation, translation of scale items by Mgr. Kateřina Švejdíková, and English correction of the paper by Mgr. Kateřina Švejdíková and dr. Eva Minaříková from the same institution. The authors thank the anonymous reviewers for suggestions for study improvement.

References

- Aultman, L. P., Williams-Johnson, M. R., & Schutz, P. A. (2009). Boundary dilemmas in teacher-student relationships: Struggling with "the line". *Teaching and Teacher Education*, *25*(5), 636–646.
- Bernstein, B. (1996). *Pedagogy, symbolic control and identity*. London: Taylor and Francis.
- Blížkovský, B., Kučerová, S., Kurelová M. et al. (2000). *Středoevropský učitel*. [Central European teacher]. Brno: Konvoj.
- Buzzelli, C., & Johnston, B. (2001). Authority, power, and morality in classroom discourse. *Teaching and Teacher Education*, *17*(8), 873–884.
- Elias, S. M., & Loomis, R. J. (2004). The effect of instructor gender and race/ethnicity on gaining compliance in the classroom. *Journal of Applied Social Psychology*, *34*(5), 937–958.
- Elias, S. M., & Mace Britton, L. (2005). Social power in the classroom: Student power in the classroom: Student attribution for compliance. *Journal of Applied Social Psychology*, *35*(8), 1738–1754.
- Foucault, M. (1975). Surveiller et punir: Naissance de la prison. Paris: Gallimard.
- French, J., & Raven, B. (1959). The bases of social power. In D. Cartwright & A. Zander (Eds.), *Group dynamics* (pp. 259–269). New York: Harper & Row.
- Golish, T. D. (1999). Students' use of compliance gaining strategies with graduate teaching assistants: Examining the other end of the power spectrum. *Communication Quarterly*, 47, 12–32.
- Golish, T. D., & Olson, L. N. (2000). Students' use of power in the classroom: An investigation of student power, teacher power, and teacher immediacy. *Communication Quarterly*, 8(3), 293–310.
- Hambleton, R. K., Merenda, P. F., Spielberger, C. D. (2005). *Adapting educational and psychological tests for cross-cultural assessment*. Mahwah: Lawrence Erlbaum.
- Jacobs, G. (2012). Models of power and the deletion of participation in a classroom literacy event. *Journal of Research in Reading*, *35*(4), 353–371.
- Jamieson, D. W., & Thomas, K. W. (1974). Power and conflict in the student-teacher relationship. *Journal of Applied Behavioral Science*, 10(3), 321–336.
- Kantek, F., & Gezer, N. (2010). Faculty members' use of power: Midwifery students' perceptions and expectations. *Midwifery*, *26*, 475–479.
- Kearney, P., Plax, T. G., Richmond, V. P., & McCroskey, J. C. (1984). Power in the classroom IV: Alternatives to discipline. *Communication Yearbook, 8,* 724–746.
- Lojdová, K. (2015). Legitimní moc aneb vypůjčená role učitele. [Legitimate power or borrowed teacher's role]. In K. Vlčková & K. Lojdová, et al. (2015), *Z posluchárny za katedru: mocenské vztahy ve výuce studentů učitelství* [From a Lecture Hall to a Teacher's Desk: Power Relations in Student Teacher Classes]. Brno: Munipress.

- Mareš, J., Vlčková, K., & Ježek, S., et al. (2016, in print). *Báze moci: Manuál k nástroji*. Brno: Munipress.
- McCroskey, J. C., et al. (2006). *An introduction to communication in the classroom.* Boston: Allyn & Bacon.
- McCroskey, J. C., & Richmond, V. P. (1983). Power in the classroom I: Teacher and student perceptions. *Communication Education*, *32*(2), 175–218.
- Moscovici, H. (2007). Mirror, mirrors on the wall, who is the most powerful of all? A self-study analysis of power relationships in science methods courses. *Journal of Research in Science Teaching*, 44(9), 1370–1388.
- Muthén, L. K., & Muthén, B. O. (2013). *Mplus: Statistical analysis with latent variables. User's guide (Version 7.11).* Muthén and Muthén. PMCid:PMC3135722.
- Myers, S. A. (1999). The relationship between college student challenge behaviour and instructor power. *Speech and Theatre Association of Missouri Journal*, *28*, 8–17.
- Özer, N., Uğurlu, T., Sincar, M., Yildirim, M. C., & Beycioğlu, K. (2014). Teacher power use in the college classroom: Turkish students' views. *Procedia Social and Behavioral Sciences*, *116*, 2589–2592.
- Plax, T. G., Kearney, P., McCroskey, J. C., & Richmond, V. P. (1986). Power in the classroom VI: Verbal control strategies, nonverbal immediacy and affective learning. *Communication Education*, *35*, 43–55.
- Raven, B. H. (1992). A power/interaction model of interpersonal influence: French and Raven thirty years later. *Journal of Social Behavior and Personality*, 7(2), 217–244.
- Raven, B. H. (1993). The bases of power: Origins and recent developments. *Journal of Social Issues*, 49(4), 227–251.
- Richmond, V. P. (1990). Communication in the classroom: Power and motivation. *Communication Education*, *39*, 181–195.
- Richmond, V. P., & McCroskey, J. C. (1984). Power in the classroom II: Power and learning. *Communication Education*, *33*, 125–136.
- Richmond, V. P., & McCroskey, J. C. (Eds.). (1992). *Power in the classroom. communication, control, and concern*. Hillsdale: Lawrence Erlbaum.
- Richmond, V. P., McCroskey, J. C., Davis, L. M., & Koontz, K. A. (1980). Perceived power as a mediator of management communication style and employee satisfaction: A preliminary investigation. *Communication Quarterly*, *Fall*, 37–46.
- Roach, K. D. (1995a). Teaching assistant argumentativeness and perceptions of power use in the classroom. *Communication Research Reports*, *12*, 94–103.
- Roach, K. D. (1995b). Teaching assistant argumentativeness: Effects of affective learning and student perceptions of power use. *Communication Education*, 44(1), 15–29.
- Sarason, S. B. (1990). *The predictable failure of educational reform: Can we change course before it's too late?* San Francisco: Jossey-Bass.
- Schrodt, P., Witt, P. L, & Turman, P. D. (2007). Reconsidering the measurement of teacher power use in the college classroom. *Communication Education*, *56*(3), 308–323.
- Schultz, B. D., & Oyler, C. (2006). We make this road as we walk together: Sharing teacher authority in a social action curriculum project. *Curiculum Inquiry*, *36*(4), 423–451.
- Simmel, G. (1896). Superiority and subordination as subject-matter of sociology. *American Journal of Sociology*, 2(2), 167–189.

- Staton, A. Q. (1992). Teacher and student concern and classroom power and control. In V. Richmond & J. McCroskey (Eds.), *Power in the classroom* (pp. 159–176). New Jersey: Lawrence Erlbaum.
- Student, K. R. (1968). Supervisory influence and work-group performance. *Journal of Applied Psychology*, *52*, 188–194.
- Šalamounová, Z., & Švaříček, R. (2012). Komunikace z pohledu učitelů [Communication from the teachers' point of view]. In K. Šeďová, R. Švaříček, & Z. Šalamounová, *Komunikace ve školní třídě* [Communication in the classroom] (pp. 215–228). Praha: Portál.
- Šalamounová, Z., Bradová, J., & Lojdová, K. (2014). Mocenské vztahy mezi začínajícími učiteli a jejich žáky. [Power relations between novice teachers and students]. *Pedagogická orientace*, 24(3), 375–393.
- Šeďová, K. (2011). Mocenské konstelace ve výukové komunikaci [Constellations of power in educational communication]. *Studia Paedagogica*, *16*(1), 89–118.
- Tauber, R. (1999). *Classroom management: Sound theory and effective practice*. Westport: Bergin & Garvey.
- Turman, P. D., & Schrodt, P. (2006). Student perceptions of teacher power as a function of perceived teacher confirmation. *Communication Education*, *55*, 265–279.
- Veenman, S. (1987). *On becoming a teacher: An analysis of initial training*. Paper presented at Conference on Education of the World Rasque Congress, Bilbao.
- Vlčková, K., Lojdová, K., Lukas, J., Mareš, J., Šalamounová, Z., Kohoutek, T., Bradová, J., & Ježek, S. (2015). *Z posluchárny za katedru: mocenské vztahy ve výuce studentů učitelství* [From a lecture hall to a teacher's desk: Power relations in student teacher classes]. Brno: Munipress.
- Vlčková, K., Mareš, J., Ježek, S., & Šalamounová, Z. (2016, in print). Báze moci používané učitelem ve školní třídě: česká adaptace dotazníku Teacher Power Use Scale [Power bases used by teacher in the classroom: Czech adaptation of Teacher Power Use Scale]. *Pedagogika*.
- Weber, M. (1922). Wirtschaft und Gesellschaft. Tübingen: Mohr.

Authors

Kateřina Vlčková, Masaryk University, Faculty of Education, Department of Education, Poříčí 31, 603 00 Brno, Czech Republic, e-mail: vlckova@ped.muni.cz

Jan Mareš, Masaryk University, Faculty of Education, Department of Psychology, Poříčí 31, 603 00 Brno, Czech Republic, e-mail: mares@ped.muni.cz

Stanislav Ježek, Masaryk University, Faculty of Social Sciences, Institute for Research of Children, Youth and Family/Department of Psychology, Joštova 218/10, 602 00 Brno, Czech Republic, e-mail: jezek@fss.muni.cz

Adaptace dotazníku Teacher Power Use Scale na žáky druhého stupně základních škol a studenty učitelství

Abstrakt: Moc lze definovat jako schopnost ovlivnit názory, hodnoty a jednání ostatních. Jasně stanovené mocenské vztahy ve třídách umožňují realizaci kurikulárních cílů. Začínající učitelé často bojují s ustanovením těchto vztahů. Vlivná typologie sociální moci jakožto vztahového jevu autorů Frenche a Ravena (1959) rozlišuje donucovací, odměňovací, legitimní, referenční a expertní bázi moci učitele. V této metodologické studii popisujeme adaptaci nástroje Teacher Power Use Scale – TPUS (Schrodt, Witt, & Turman, 2007) určeného k měření těchto bází moci. Adaptace se zaměřuje na úpravu dotazníku specificky pro český kontext a také pro studenty učitelství a jejich žáky na druhém stupni základních škol (oproti původní verzi, která byla zaměřena na univerzitní učitele a jejich studenty v anglosaském kontextu). Dostupný výzkumný vzorek sestával z 1686 žáků z 96 tříd druhého stupně základních škol vyučovaných 96 studenty učitelství v průběhu jejich dlouhodobé praxe. Získaná data v zásadě podporují teorii Frenche a Ravena a původní TPUS. Nicméně vnímání bází moci studentů učitelství je u žáků druhého stupně jednodušší. Báze legitimní a donucovací silně korelovaly, jinými slovy byly žáky vnímány jako jeden faktor. Toto zjištění odpovídá výsledkům výzkumu bází moci učitele zkoumaných na jiných vzorcích žáků v českém kontextu.

Klíčová slova: báze moci, Teacher Power Use Scale, student učitelství, druhý stupeň základních škol, adaptace výzkumného nástroje, konfirmační faktorová analýza

Appendix

Items of adapted TPUS for student teachers (in Czech)¹¹

Expertní moc (Expert power)

- E02: Když tato učitelka ve výuce něco vysvětluje, je to srozumitelné.
- E03: Tato učitelka říká různé novinky, které souvisí s vyučovacím předmětem.
- E21: Podle mě tahle učitelka umí skvěle učit.
- E27: Když tahle učitelka učí, vím, co a kdy mám dělat.
- E28: Tato učitelka dovede ukázat, jak můžu učivo prakticky použít.
- E30: Tahle učitelka velmi dobře rozumí tomu, co učí.
- E31: Když tahle učitelka něco vysvětluje, dá se tomu věřit.
- E36: Tato učitelka je skutečným odborníkem na tento předmět.
- E43: Tato učitelkami umí vysvětlit to, čemu nerozumím.

Legitimní moc (Legitimate power)

- L05: Tato učitelka říká, že učitelé se musí poslouchat.
- L07: Tahle učitelka žije v tom, že musí být vždycky po jejím, když je učitelka.
- L09: Když se téhle učitelce nelíbí, jak se chovám, stejně nemůže nic dělat, protože nepatří k nám do školy.
- L11: Tato učitelka dává najevo, že ve škole se musí poslouchat.
- (L14: Tahle učitelka se ke mně chová s odstupem.)
- (L17: Tuhle učitelku poslouchám, protože mi to řekla naše paní učitelka.)
- (L22: Tato učitelka říká, že i když se mi ve výuce něco nelíbí, je to jedno.)
- L37: Tato učitelka dává najevo, že učitel je něco víc než žák.
- (L39: Tahle učitelka naznačuje, že to, co chce ona, podporuje taky naše paní učitelka/učitel, ředitel nebo řád školy.)
- L42: Tahle učitelka říká věci typu: "Zvoní pro mě, ne pro vás."
- L44: Když se téhle učitelce nelíbí, jak se chovám, stejně nemůže nic dělat, protože ještě není učitelka.
- (L50: Podle této učitelky mají žáci poslouchat, protože učitel je autorita.)

Donucovací moc (Coercive power)

C06: Když téhle učitelce nedonesu úkol, cítím se fakt špatně.

C16: I když kritizuji pravidla, tahle učitelka si stejně udělá, co chce.

¹¹ Version for a female student teacher. Crossed out items are problematical items removed from model 2. Items in the brackets are items with factor loading under .40. These items could be in further research not included.

C18: Když mi to v hodině nejde tak, jak si tahle učitelka představuje, před celou třídou mě ztrapní.

(C25: Když ve výuce téhle učitelky zlobím, řekne to na mě naší učitelce.)

C26: Tahle učitelka se na mě naštve, když dám v hodině najevo nesouhlas s tím, co říká.

(C29: Když neplním pokyny téhle učitelky, potrestá mě.)

C33: Když téhle učitelce donesu pozdě úkol, chová se tak, že se cítím špatně.

C34: Když nepracuji tak, jak by si tahle učitelka přála, řekne to naší učitelce.

C35: Když v hodině nedělám to, co tato učitelka chce, naštvaně na mě kouká.

C46: Tahle učitelka mě za trest přehlíží, pokud nepracuji tak, jak chce.

C47: Když nemám pomůcky, tahle učitelka je naštvaná.

Odměňovací moc (Reward power)

RW20: Když vím ve výuce něco navíc, tahle učitelka to vyzdvihne před ostatními.

RW24: Když mi to v hodině jde, tato učitelka to ocení.

RW38: Když se v hodině chovám tak, jak tato učitelka chce, nějak mě odmění.

RW40: Když mi to v hodině téhle učitelky jde, řekne to naší učitelce.

RW45: Když se naučím, co mám, tato učitelka mě pochválí.

RW48: Když se v hodině snažím, je na mě tato učitelka hodnější.

RW49: Když v hodině dělám, co tahle učitelka chce, pochválí mě za to.

RW51: Když jsem ve výuce téhle učitelky hodný/á, pochválí mě naší učitelce.

Referenční moc (Referent power)

R01: S touto učitelkou mám hodně společného.

R04: Tahle učitelka je mi sympatická, protože se musí učit do školy stejně jako já.

((R08: Tato učitelka je vůči mně vstřícná.))12

R10: Tato učitelka se mnou jedná na rovinu.

R12: S touto učitelkou si rád/a povídám i o přestávce.

R13: Tuto učitelku vidím i jako člověka, nejen jako učitelku.

R15: Tuhle učitelku beru jako kamaráda.

R19: Já a tato učitelka máme stejný pohled na věc.

R23: Na věci se dokážu dívat stejně jako tato učitelka.

R32: Chtěl/a bych být jako tato učitelka.

R41: To, co říká a dělá tato učitelka, je pro mě důležité.

¹² Item R08 in the double brackets is an item with problematic interpretation by students.

The Czech Pedagogical Society in 2015

The Czech Pedagogical Society (CPS) is a Czech academic association bringing together academics, teachers, and others with a professional interest in pedagogy and its related disciplines. The Czech Pedagogical Society has been active for 51 years. It is a member of the Council of Scientific Societies of the Czech Republic (a part of The Czech Academy of Sciences) and is also active in the international context. CPS section for comparative education is a member of the World Council of Comparative Education Societies. Recently, a section for leisure time education has been created under the CPS.

The CPS significance for academic educational community has not diminished despite the many twists and turns in its history. The society has withstood both the pressures to become an accepted organization during the totalitarian regime and the major changes after the fall of the communist regime in 1989. However, its role in relation to its members has changed significantly. In the past, the CPS created opportunities for experts to meet and hold discussions about complex issues related to education. Nowadays, the membership of CPS is about the members' motivation to be a part of a community of educators, to meet and to self-educate. As the number of active members has been steadily growing (by the end of 2015 our association had 226 members), it is especially the interest of young educators and emerging academics that is very important for the society.

For CPS, the year 2015 brought a variety of interesting events and challenges for its next activity. The society acts both on the national level organizing international conferences and expert activities and on the regional level of its subsidiaries situated in the university cities – Prague, Brno, Olomouc, Ostrava, Zlín, České Budějovice, Liberec, and Hradec Králové. These subsidiaries usually organize a wide range of specialized events, such as conferences, lectures or discussions about current topics with specialists.

Recently, sixteen groups of experts have been formed by the Czech Pedagogical Society. The experts may be assigned to draw up a statement about a particular topic. Another significant achievement is the establishment of the edition *Sborníky České pedagogické společnosti (Proceedings of the Czech Pedagogical Society)*. The proceedings include high-quality thematic contributions from annual conferences that reflect knowledge valued both in research and in practice.

Publication of *Pedagogická orientace* (*Journal of the Czech Pedagogical Society*), in cooperation with the Faculty of Education, Masaryk University, is still one of the core activities. The journal has earned a leading position among the academic journals in the Czech Republic and, thanks to the inclusion into several prestigious databases and publication of an English issue, the journal has reached the international audience, too.

The aim of the Czech Pedagogical Society is to maintain the high quality of the journal and to offer opportunities for introducing new empirical findings which will initiate valuable academic discussions, either through presentation in the journal or at the conferences and other professional meetings organized by the society.

We would also like to connect with postgraduate students and young educators and present the Czech Pedagogical Society as a mediator of further self-education and development of the interest in education as a science. A better presentation of the society, primarily in the virtual world, is related to this aim.

The key activity of the society in 2015 was the international conference Škola *a její křižovatky* (*School and Its Crossroads*). The 22nd annual conference (March 26–27 2015) was organized by the Department of Pedagogy and Psychology of the Faculty of Education of the University of South Bohemia in České Budějovice.

The conference provided opportunities for discussing issues affecting the lives of contemporary schools in the pedagogical, psychological, and social context. The conference theme suggested considering school an institution that stands at the crossroads which opens up many directions and inspiring incentives. The focus of the individual sections derived from levels that characterize the school as an institution, as a place of didactical innovation, as a place for development of the teaching profession, as a place for discovering child with his or her health, social, cultural, and other characteristics.

The conference plenary presentations introduced topics that became a subject matter of many subsequent discussions and have resonated in the society up till now. The basic theses of the plenary talks became part of the conference proceedings. The plenary presentations mapped the issues of school reform, its impacts and variations in the Czech and international context.

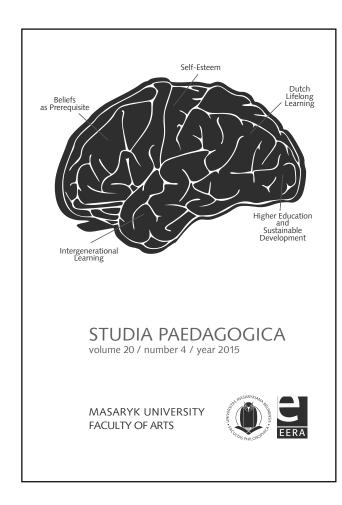
The ideas of Christine Winter from the University of Sheffield (UK) were introduced to the discourse of the Czech educational science. She presented one of the plenary talks *Becoming and belonging: Just curriculum knowledge for the global classroom.* She introduced the current approach to the curriculum of global citizenship which is based on the Western traditions of thinking. Nowadays, during the time of deepening global tensions which are increasing with migration, religious conflicts and economic recession, the authors' contribution is highly relevant.

The individual sessions were divided into four themes. The first section, School and its Institutional Crossroads, was focused on finding ways to understand the directions in which the school as an institution may be oriented in today's "liquid times". The contributions described the situation of the school which stands at the crossroads of reforms and social pressures, social demands, and contrasting social expectations. Contributions concerning school evaluation and pedagogical interactions, and presentations focusing on the subject-specific didactics of psychology, science, geography, health education, and media education, were presented in the second section, School and its Didactical Crossroads. The third section School and its People at the Crossroads was divided into two subsections. The first subsection dealt with teachers and their practice, the second one aimed at the student teachers. The contributions of the experts from Russian Federation raised an interesting discussion about the issues of teacher education in Russia, the Czech Republic and Slovakia. In the second subsection aimed at the student teachers, a wide spectrum of contributions was presented. The contributions concerned three key topics – pupil, teacher and teacher education. The fourth section School and its Integration Crossroads focused on finding ways to understand a child with his or her health, social, cultural and other characteristics, and also ways to work with pupils from diverse environments. Multicultural issues, pupils' diversity, attitudes toward pupils with special educational needs, bilingualism and problems of pupils with a different mother tongue were the prevailing topics of the contributions.

Currently, the preparations for the 2016 conference are underway. It will be held from March 17th to March 18th 2016 at the Pedagogical Faculty, University of Ostrava and focus on the *Perspectives of Education in the Contemporary World Conditions*.

Tomáš Čech Palacky University in Olomouc, Faculty of Education, Institute of Education and Social Studies

Miroslav Procházka, Miluše Vítečková Department of Pedagogy and Psychology, Faculty of Education, University of South Bohemia in České Budějovice



Theo van Dellen:
The Dutch Lifelong Learning Scene

Mualla Bilgin-Aksu, Turkan Aksu, Soner Polat:

School Administrator Self-Esteem and Its Relationship to Trust in Teachers

Jana Straková, Jaroslava Simonová: Beliefs of Czech Teachers as a Prerequisite for Effective Teaching

Claus Holm, Anders Martinsen: Mapping the Relationship Between Higher Education and Sustainable Development

Milada Rabušicová, Kateřina Pevná, Zuzana Vařejková:

Surrogate Grandparents as Actors in Intergenerational Learning

Studia paedagogica

Studia paedagogica publishes papers on education, upbringing and learning from all spheres of social life. The papers are theoretical, but mainly empirical as the journal publishes research undertaken in the Czech Republic and abroad. The journal publishes only original research papers and is open to both experienced and early researchers. Early researchers can publish their papers in the section Emerging Researchers of the journal and are offered intensive editorial support. The journal is interdisciplinary - it covers current topics in educational research while at the same time providing scope for studies grounded in other social sciences. The journal publishes four issues per year, of which the first three are in Czech and the last one in English.

The journal is indexed in international databases (DOAJ, ERA, ERIH PLUS, EBSCO, CEJSH, Journal-Seek, NewJour, PKP, ProQuest and Ulrich's Periodicals Directory).

www.studiapaedagogica.cz

Studia paedagogica 4/2016



Issue Topic: Childhood

Editors: Francesca Gobbo, Roman Švaříček

We are opening the next English-language issue of *Studia paedagogica* to contributions dealing with childhood. Childhood long ago stopped being perceived as a marginalized social phenomenon in a world focused on adults and has become a significant domain worthy of social science inquiry. Nevertheless, we believe that if we enlarged the scale of the map of childhood, we would see many blank spaces. Therefore, we would like to devote the next monothematic issue of *Studia paedagogica* to mapping these still-unexplored areas using an ethnographic microperspective.

The issue is open to contributors engaged within the fields of education, psychology, sociology, and anthropology who would focus on childhood in the European region. Childhood as a social category and an area of educational policy and practice may be examined from many different perspectives, using various theoretical frames focusing on diverse aspects. However, we would like to concentrate in particular on the following four areas.

1) Metamorphoses of childhood

The conceptualization of childhood is considerably influenced by the contemporary globalizing world and the technological and economic changes taking place in it. Childhood is such an integral part of society that it is literally connected with the complex nature of the world. Globalization makes it possible to spread universal concepts and helps to create new constructs of childhood. Within these constructs, children are seen as subjects actively participating in the social world, though childhood has also been treated as preparation for life, especially in the Western world. Technological and economic accents blur the boundary between childhood and adulthood; therefore, we often we hear of the disappearance of childhood (Postman), the prolongation of childhood (Prout), the enterprising subject (Rose), and the child as a customer (Castenada). Despite this, we are interested in, for example, whether the idea of an innocent childhood, where a child has to be protected from the adult world, still reflects the original concept or whether it has new content.

In connection with the changes that the concept of childhood is undergoing, the nature of parenthood, which is strongly influenced by the media discourse, is also changing. Before we can say how parenting is changing, we should first know how the everyday life of a child looks. There is a lot of room for the application of ethnographic research methods because our goal is to get a true and vivid picture of a child's ordinary day. What role do parents, schools, and peers play in it? How do today's parents raise their children? What are the roles and functions of childcare institutions?

Do these institutions contribute to the debate about carer gender and, in more general terms, to the role of fathers in relation to childhood? As some authors write about superchildren (Eisenberg), can we analogously speak about superparents? Do any of Qvortrup's (1995) nine paradoxes, for example postulating that parents think that it is good to be with their children, but spend more and more time each day without their children, still hold?

2) Socialization

The society shapes the child, and the child, in turn, naturally shapes the society through the formation of interpersonal relationships. The human body is at birth neither biologically nor socially completed (Shilling). The individual is thus integrated in a society that they are actively forming themselves, especially in the family environment (Corsaro). The maintenance of relationships in the family, where the child is familiarized with the patterns of social relationships, is traditionally viewed as the basis of successful socialization. We are interested in how a child perceives the relationship level of its primary social environment. How does it represent these relationships? What language does it use to speak about them?

Parents and significant others mediate the social world to the child (Berger, Luckmann). By internalization, the child receives social reality, or a version of reality mediated by adults, as part of the primary socialization. Therefore, parents serve as mediators between the society and the child; we are interested in how this learning takes place. The child is able to follow normal interpersonal interactions and communication patterns within its environment. How do children learn values, relationships, and the world? Are we really obsessed with the problems of children (Ariés)?

3) The body and disciplining practices

The institution of family is based on a number of particular communication practices which are seen as normal and natural in the school environment. These communication practices take place both verbally, on the level of discourse, i.e. in language, and non-verbally, on the level of the body. The body is viewed as a source and product of social and cultural processes, but above all, we are interested in how the body is experienced, interpreted, and completed during childhood. The culture of adults and their own body experiences certainly strongly affects how the body is represented, and lived, for the child.

One of the central questions is how the body is formed through disciplining techniques. How does education on the one hand, along with nutrition, hygiene, and exercise, co-create for the child the sense of its own body? How do children in today's society, influenced by media discourses, perceive their own bodies? How does the school oversee corporeality through regulatory practices? How do, on the other hand, children learn to use their bodies to resist the disciplining practices of the adult world?

We wonder how it is possible to approach the materiality of the body. What discourses affect our cognition of the body, and in what ways, if we maintain Foucault's assumption that social phenomena are constructed from within discourses?

4) Methodological issues of childhood research

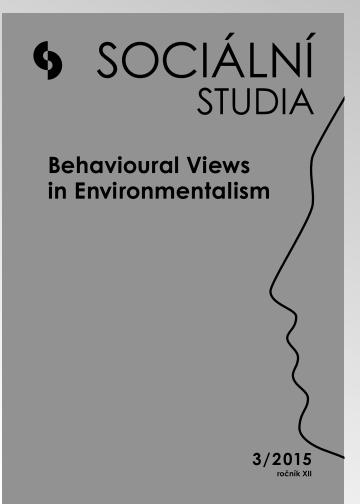
Current research of childhood is often poetically referred to as a step away from modernity (Prout), since there has been a change in the conceptual understanding and interpretation of childhood. The biologizing view (Darwin) of childhood, emphasizing nature, was replaced by the social constructivist view (Vygotsky), giving way to the attempts of many authors to synthesize the separating dualistic view (Prout). Is it possible to overcome the separating dualism? Which new methodological questions emerge in the research of children? What new challenges do researchers face in dealing with childhood? Will the new experimental paradigms in the humanities help better respond to the old research questions? What new ethical consequences does research on childhood inevitably bring?

These questions cannot cover the whole scope of the field. Still, we hope they will help to inspire authors to submit their original empirical and/or theoretical papers for publication.

The deadline for full texts is **30 June 2016**. All contributions will be peer reviewed before being accepted for publication. The issue of the journal will be published in **English in December 2016**. The editors of the *Childhood* issue are Francesca Gobbo and Roman Švaříček. You can find more information as well as more detailed author guidelines at:

www.studiapaedagogica.cz





EDITORIAL — **Eva Fraňková**, **Jan Dostalík**, **Radoslav Škapa**: Behavioural Views in Environmentalism

ARTICLES — Lucie Sovová: Self-provisioning, environmental consciousness and responsible consumption in Brno allotment gardens • Vojtěch Pelikán, Hana Librová: Types of Motivation for Environmentally-Oriented Behavior: The Case of the 2011 Blockade at Šumava National Park • Lukáš Kala: The Environmental Impact of Single's Consumer Behavior • Jan Krajhanzl, Jan Skalík: Czech Greenpeace Donors and the Barriers in Their Climate-Friendly Household Behavior • Bruce Johnson, Jan Činčera: Examining the Relationship Between Environmental Values and Attitudes and Behaviour in Education Programmes • Tomáš Chabada, Tomáš Hampejs, Jan Skalík, Eva Bujnošková, Jaroslav Hlinka: Connecting With Nature in the Lab: Malleability of Implicit and Explicit Attitudes Towards Nature • Jan Vávra, Vera Peters, Miloslav Lapka, Tony Craig, Eva Cudlínová: Home temperature and heating habits in selected European countries • Audrone Telesiene, Aiste Balzekiene: Influence of biographical situational and attitudinal factors upon public environmental behaviour: empirical evidence from CEE countries • Eva Kyselá: Acceptability of environmental policies in the Czech Republic: a comparison with willingness to make economic sacrifices

Pedagogická orientace, 2015, roč. 25, č. 6, vychází 31. 12. 2015

Vědecký časopis České pedagogické společnosti

Předseda redakční rady a vedoucí redaktor: Petr KNECHT (Masarykova univerzita)

Redakce: Eva MINAŘÍKOVÁ, Masarykova univerzita (zástupce vedoucího redaktora), Tomáš JANÍK, Masarykova univerzita, Lenka KAMANOVÁ, Masarykova univerzita, Kateřina LOJDOVÁ, Masarykova univerzita, Jana MAJERČÍKOVÁ, Univerzita Tomáše Bati ve Zlíně, Jana POLÁCHOVÁ VAŠŤATKOVÁ, Univerzita Palackého v Olomouci, Jan SLAVÍK, Západočeská univerzita v Plzni, Petr URBÁNEK, Technická univerzita v Liberci, Marta RYBIČKOVÁ, Masarykova univerzita (administrace)

Adresa: Pedagogická orientace, Institut výzkumu školního vzdělávání PdF MU, Poříčí 31, 603 00 Brno, e-mail: knecht@ped.muni.cz, tel. +420 549 494 298

Redakční rada (české vydání): Tomáš ČECH, Masarykova univerzita, Jana DOLEŽALOVÁ, Univerzita Hradec Králové, Jana DVOŘÁČKOVÁ, Masarykova univerzita, Petr FRANIOK, Ostravská univerzita v Ostravě, Peter GAVORA, Univerzita Tomáše Bati ve Zlíně, Marcela JANÍKOVÁ, Masarykova univerzita, Hana KASÍKOVÁ, Univerzita Karlova v Praze, Dana KNOTOVÁ, Masarykova univerzita, Ondrej KAŠČÁK, Trnavská Univerzita v Trnavě, Jana KOHNOVÁ, Univerzita Karlova v Praze, Tomáš KOHOUTEK, Masarykova univerzita, Milan POL, Masarykova univerzita, Jiří PROKOP, Univerzita Karlova v Praze, Karel RÝDL, Univerzita Pardubice, Irena SMETÁČKOVÁ, Univerzita Karlova v Praze, Vladimír SPOUSTA, nezávislý expert, Iva STUCHLÍKOVÁ, Jihočeská univerzita v Českých Budějovicích, Jiří ŠKODA, Univerzita J. E. Purkyně v Ústí nad Labem, Vlastimil ŠVEC, Masarykova univerzita, Vojtěch ŽÁK, Univerzita Karlova v Praze

Mezinárodní redakční rada (anglické vydání): Inger Marie DALEHEFTE, University of Agder, Norsko, Michaela GLÄSER-ZIKUDA, Friedrich-Alexander-Universität Erlangen-Nürnberg, Německo, Patricia HOFFMEISTER, Technische Universität Dortmund, Německo, Ondrej KAŠČÁK, Trnavská univerzita v Trnavě, Slovensko, Christine WINTER, The University of Sheffield, Spojené království

Pokyny pro autory: Pedagogická orientace uveřejňuje příspěvky spadající do kategorií: teoretické studie, empirické studie, přehledové studie (přibližně 36 000 znaků včetně mezer), diskusní příspěvky (18 000 znaků), zprávy (9 000 znaků) a recenze (9 000 znaků). Studie jsou strukturovány do podkapitol a sestávají zpravidla z těchto částí: abstrakt (v délce max. 1 200 znaků včetně mezer), klíčová slova, abstract v anglickém jazyce (v délce max. 1 200 znaků včetně mezer), key words, úvod, stav řešení problematiky, použité postupy a metody, výsledky a jejich interpretace, diskuse, závěry a stručná informace o autorovi/autorech příspěvku.

Jednotlivé studie procházejí recenzním řízením typu "double-blind peer review". Studie jsou recenzovány vždy dvěma odborníky na dané téma, redakce uchovává autory i recenzenty ve vzájemné anonymitě. Ostatní příspěvky (diskuse, zprávy, recenze) posuzuje redakce. Podrobné pokyny pro autory a informace k recenznímu řízení jsou k dispozici na https://journals.muni.cz/pedor

V časopise jsou uveřejňovány pouze původní práce, které dosud nebyly publikovány a nejsou odevzdány jinde k publikování (např. v jiném časopisu, sborníku nebo monografii).

Pedagogická orientace respektuje mezinárodní Kodex jednání a pokyny pro dobrou praxi pro editory vědeckých časopisů Komise pro publikační etiku (COPE), Etický kodex České pedagogické společnosti a Etický kodex České asociace pedagogického výzkumu.

Pedagogická orientace (ISSN 1211-4669 print; ISSN 1805-9511 on-line; reg. č. MK ČR E 20166). Vydává Česká pedagogická společnost, o. s., Poříčí 538/31, 639 00 Brno, IČ 00444618, ve spolupráci s Masarykovou univerzitou. Vychází 6 čísel ročně. Sazba: Mgr. Monika Foltánová; písmo: Cambria, NimbusSanL, Syntax; tisk: Papír a tisk, s. r. o., Čechyňská 18, 602 00 Brno; jazyková korektura: Mgr. Eva Minaříková, Ph.D. Předplatné je možné objednat prostřednictvím formuláře na https://journals.muni.cz/pedor. Vydávání časopisu je podporováno Radou vědeckých společností ČR.

Cena jednotlivého výtisku: 79 Kč. Cena ročního předplatného (6 čísel): 560 Kč, pro předplatitele ze zahraničí 34 EUR, obojí je včetně poštovného. Cena inzerce: 8 000 Kč / 1 tisková strana.

Plné texty studií (od roku 2005) jsou k dispozici na https://journals.muni.cz/pedor

Časopis je zařazen mimo jiné v následujících databázích: Seznam recenzovaných neimpaktovaných periodik vydávaných v ČR, ERIH (NAT), DOAJ, Educational Research Abstracts Online (Taylor & Francis), EBSCO Education Source, CEJSH, ProQuest.



Pedagogická orientace

Journal of the Czech Pedagogical Society

Pedagogická orientace is a peer reviewed scholarly journal which aims to support the development of pedagogical thinking. It comprises articles on current issues in theory and practice in education, curriculum and instruction, educational psychology, educational research, educational policy and teacher education. The Journal provides a forum for distinguished authors as well as young researchers from within the Czech Pedagogical Society as well as from outside.

Vol. 25, No. 6, 2015 ISSN 1211-4669 (Print) ISSN 1805-9511 (Online) http://www.ped.muni.cz/pedor



