

***Professional Development of Teachers:
Comparison of Czech and Russian Educational Systems***

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Abstract

Being a part of a larger research, this study focuses on the Czech and Russian educational systems in terms of Continuous Professional Development (CPD). It is a secondary data analysis which draws a comparison between Czech and Russian teachers and puts an enlarged interpretation of the results on lower-secondary school teachers' CPD from the OCED's Teaching and learning International Survey (TALIS 2018). The aim of this analysis is to provide and compare general information on CPD in terms of its content, form, impact on teaching practices and to review what types of CPD are crucial for Czech and Russian teachers in order to promote, sustain teachers' CPD and keep them up to date. The research also seeks to uncover the better CPD system of the two and promote dissemination to the less well-performing one. In order to achieve the analysis objectives, the quantitative methods were employed. The study of CPD has identified both differences and similarities between the two countries. The analysis has revealed that countries don't differ much in terms of types of CPD undertaken and participation rates are consistently high across the such activities as courses and seminars, reading professional literature and peer observation. The countries vary significantly with respect to online courses, participation in networks and observation visits to other schools (about 70% in Russia and 20% in the Czech Republic). However, teachers need to be encouraged to take ownership of their professional development and consider it as a personal responsibility rather than a professional obligation.

Keywords: Teacher Continuous Professional Development, In-Service Training, Teacher Professionalism

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Introduction

This secondary data analysis is a part of a larger research which focuses on the Czech and Russian educational systems in terms of Continuous Professional Development (CPD) of the lower-secondary school teachers in public sector. According to ISCED (International Standard Classification of Education) it covers the following grades: from 6 to 9 in the Czech Republic and from 5 to 9 in Russia. The report draws a comparison between Czech and Russian teachers and puts an enlarged interpretation of the results on lower-secondary school teachers' professional development and teachers' experiences from the OCED's Teaching and learning International Survey 2018 (TALIS 2018). Though a comparative analyses of teacher development can be done in many ways (Spilková, 2002), in the TALIS survey the following aspects of teachers' CPD have been represented: induction programmes and mentoring activities; types and content of CPD; overall support for teachers' participation in CPD; perceived impact of CPD on teaching practices; experienced needs and barriers for CPD.

The Czech Republic and Russia have been selected for comparison for quite a number of reasons. Firstly, the need for a more highly educated work force is stimulating policy-makers in both countries to expand access to schooling and enhance its quality. The countries strive to improve educational standards to comply with the worldwide quality. In both countries the governments have enacted policies that require teachers and school leaders have opportunities to update not only their pedagogical content knowledge but social pedagogical knowledge as well (Shulman, 1987). The choice of the Czech Republic and Russia for the analysis is based on the comparative research of the two countries because the comparative study in education allows one to see various practices and procedures in a wider context that helps to throw light on them, examining alternatives to the normal practice (Phillips, 2000). Another noteworthy reason is that the comparative analysis of the Czech Republic and Russia highlights the similarities and explains the differences in the educational systems in the light of the national contexts which are influenced by the historical development of a country, its political system and legislation (Úrbánek, 2005; Greger, Walterová, 2007). Despite continuing differences among the schooling systems, the emerging global economy virtually demands that nations now address similar educational issues. Thus, this acknowledgment may help to establish if these distinguishing characteristics reflect on the Continuous Professional Development and effect its' features.

Therefore, the aim of this analysis is to provide and compare general information on CPD as perceived by lower-secondary school teachers in the Czech Republic and Russia in terms of its content, form, impact on teaching practices and to review what types of CPD are crucial for teachers in order to promote, sustain teachers' CPD and keep them up to date as "teachers are called upon not only to acquire new knowledge and skills but also to develop them continuously" (Teachers' professional development 2010:12). The secondary data are like a "compass" which guides the study (Hesse-Biber, 2010). In order to carry out an in-depth secondary data analysis only the questions from 19 to 28 of a Teacher Questionnaire were addressed (Teacher Questionnaire pp.11-15) as they focus on professional development received by lower-secondary school teachers. The following questions help to address these research objectives:

1. What induction programmes and mentoring activities were available to lower secondary school teachers?
2. What CPD was undertaken by teachers in the year prior to the TALIS 2018 survey?

3. What support did schools provide teachers undertaking CPD activities?
4. What were the characteristics of CPD activities that teachers felt had the greatest positive impact upon their practices?
5. What CPD did teachers say that they need?
6. What did teachers perceive to be the greatest barriers to receiving more CPD?

Drawing upon the outcomes of the study, the researcher intends to propose a theoretical model of effective professional development of lower secondary school teachers so that teachers are able to capitalize on the experience and the theoretical framework provided by this study. The research also contributes to a better theoretical understanding of CPD in the Czech context.

TALIS 2018: context, goals and methodology

The topic of CPD: has become an area of growing interest internationally and there is an increasing body of research focused on various aspects of teachers' professional development (Avalos, 2011; Kennedy, 2005) and how the nature of CPD has changed and developed over the past few decades. TALIS defines CPD as "activities that develop an individual's skills, knowledge, expertise and other characteristics as a teacher" (OECD, 2009, p. 49). Professional development can be defined broadly as "the body of systematic activities to prepare teachers for their job, including initial training, induction courses, in-service training, and continuous professional development within school settings" (Teachers' professional development, 2010:19). Other definitions, such as that offered by Day (1997), interpret the nature and purpose of CPD much more widely and adds emphasis on the role of teachers in development of educational policy for which they need special knowledge and professional thinking. With due regard to different aspects of CPD, TALIS 2018 covers all the themes in questionnaires which project teachers' perspectives and experiences in full and provide insight into the reality of CPD in schools.

Being a part of a larger research, this secondary data analysis of TALIS 2018 dataset focuses on Professional Development of lower-secondary school teachers only (questions 19-28). The work with the following variables is carried out and the researcher matches them to teachers in the Czech Republic and Russia: kinds of professional development activities teachers participate in (courses, peer-observation, reading professional literature) and its impact on their teaching; the extent to which teachers currently need professional development (student assessment practices, teaching students with special needs, for example) and barriers to teachers' participation in professional development. The TALIS secondary data is high-quality data as "the sampling procedures have been rigorous" and "it is the first major international survey of teachers and school leaders, allowing them to provide input the educational policy analysis and development in key areas" (OECD (2018c). The survey was initiated and managed by the OECD. The survey was organized and conducted in three phases: (1) the pilot phase, the purpose of which was to develop and trial the content of the survey questions with a small number of TALIS participants; (2) the field trial phase, designed to test and evaluate the questionnaires and item formats as well as the survey procedures and data collection modes; and (3) the main survey phase.

TALIS 2018 applied online data collection method for achieving the goals of the survey of monitoring and comparing education systems in terms of the conditions of teaching and learning. Information is gathered via self-administrated online questionnaires (main data collection mode) and paper questionnaires (substitute or fall-back mode) for use by teachers

and principals who were either not willing or not able to use the online delivery instruments. To ensure that the samples are not biased by non-response, TALIS 2018 required a minimum overall participation rate of 75% of teachers for each participating education system with a minimum response rate of 75% of sampled schools and each included school attaining a minimum response rate of 50%. (OCED 2018 Framework). Though there has been some recent criticism of a sample survey approach in the literature (Gorard, 2016), “statistical models that account for the inherent multilevel (system, school, teacher) structure of the TALIS data provide a useful means of understanding and explaining differences within and across schools and within and across countries” (OCED 2018:16 Framework). In large surveys such as TALIS, sampling variation is relatively small.

This cross-country survey allows the Czech Republic and Russia among other 46 countries that participated in the 2018 TALIS “to identify other countries facing similar challenges and to learn from other policy approaches” (Teacher Questionnaire 2018:2). Main data collection windows were composed of three-month period toward the end of the 2017/18 school year. TALIS 2018 was conducted in the Czech Republic in March-April 2018 and in March-June 2018 in Russia respectively. Table 1 reflects that the survey collected information from 219 schools and 3,447 lower-secondary school teachers in the Czech Republic, an average of just over 15 teachers for each school in the sample. The survey yields a final sample of 230 schools and the total number of lower-secondary school teachers as 4,011, reflecting the greater number of teachers within lower-secondary schools in the Russian Federation. This reflects weighted school-response rates of 100% and weighted teacher-response rates of 93,8% in the Czech Republic and 100% and 99,9% in Russia accordingly. These response rates are very good by the standards of TALIS 2018.

Table 1: Weighted participation rates and number of schools and lower-secondary school teachers’ participating in the Czech Republic and Russia in TALIS 2018 (OECD 2018 Technical Report pp.185-186)

Education System	Estimated size of teacher participation	Weighted school participation before replacement (%)	Weighted school participation after replacement (%)	Number of participating schools	Number of participating teachers	Teachers’ participation in participating schools (%)
The Czech Republic	42,348	100	100	219	3,447	93,8
Russia	646,405	98,7	100	230	4,011	99,9

Methods of secondary data analysis on the Czech Republic and Russia

All the data were derived from the TALIS 2018 teacher questionnaire but only questions 19-28 devoted to CPD of lower-secondary school teachers were incorporated in the study. In analysing these data, it was essential to assess how respondents evaluate the professional development activities undertaken, the role professional development plays in enhancing the quality of teaching and barriers to receiving professional development. Every question contributes towards the overall aim of the research – to compare the CPD in both countries and consider its wider implications. Access to TALIS 2018 teacher questionnaire is unproblematic as the data are available in the OECD domain and exists outside of the research project.

In order to achieve the analysis objectives, the quantitative methods were employed. Creswell and Piano Clark (2007) recognise the preparation of data as an initial stage in converting raw data into a form useful for data analysis. In this analysis it means measuring the questionnaires by assigning numbers to responses. Burns and Burns (2008:96) define measurement as ‘the process through which observations are translated into numbers’. As it is a secondary data analysis, ‘it offers the prospect of having access to good-quality data for a tiny fraction of the resources involved in carrying out a data-collection exercise yourself’ (Bryman 2012:312). Thus, the first stage was accessing and downloading the survey results. As ‘tables are commonly used in quantitative analysis, where they are usually called cross-tabulations and contain counts or percentages in the cells’ and ‘they are convenient when making comparisons of different subgroups of the dataset’ (Gibbs 2007:78), the comparisons using Microsoft Excel were made and after that, explanations were produced. In order to perform high-quality data analysis and ensure the best results, a computer software package that supports the management of quantitative data: International Business Machines Statistical Packages for the Social Sciences (IBM SPSS), the International Database (IDB) Analyzer and EXCEL software was used. The International Association for the Evaluation of Educational Achievement (IEA) Data Processing and Research Centre (IEA DPRC) developed the International Database (IDB) Analyzer software, specifically for the purpose of analyzing international datasets, such as TALIS. In conjunction with SPSS, the IDB Analyzer generates SPSS syntax that allows for taking the sampling design into account in the computation of statistics and standard errors (Strizek et al. 2014). Crossley and Watson (2003), claim that bias is common with comparative studies, given that we are all conditioned by our upbringing, culture, educational background and socio-political values and attitudes. Therefore, caution was taken to avoid or minimize such tendencies by eliminating any preconceived notions, prejudiced impressions or information about the schools and teachers.

Interpretation of findings

1. Induction and mentoring programmes and activities.

Induction and mentoring programmes considered to be ‘another important type of support for teachers’ development which takes the form of policies and practices to support teachers who are either new to the profession or new to the school’ (Teachers’ Professional Development 2010:77). Chart 1. provides the extent to which formal and informal induction programmes and activities are common among lower-secondary school teachers in the Czech Republic and Russia during their first employment as a teacher. The reports of the teachers indicate that only 31,1% of teachers in the Czech Republic and 29,4% of teachers in Russia participated in formal induction programmes during their first employment as a teacher. The participation rate is also very low in informal induction programmes: 29,7% and 26,6% respectively. Thus, fewer than half of teachers had access to formal and informal induction programmes during their first employment. These figures are remarkably low and provide a negative sign that the Czech Republic and Russia are not the leaders in induction provision for new teachers either during their first employment or at their current schools.

Mentoring activities are considered to be a part of a formal arrangement. TALIS defines mentoring as a support structure in schools where more-experienced teachers support less-experienced teachers (Teachers’ Professional Development 2010). The following picture emerges for mentoring practices lower-secondary school teachers in the Czech Republic and Russia participated in: mentoring was reportedly experienced by 11,4 per cent of Russian teachers as part of their formal arrangement against lower participation rate as only 7,1 per

cent among Czech teachers. Though chart 2 indicates that the proportion of novice teachers being mentored in Russia was higher than in the Czech Republic, mentoring was not a commonly reported activity in both countries.

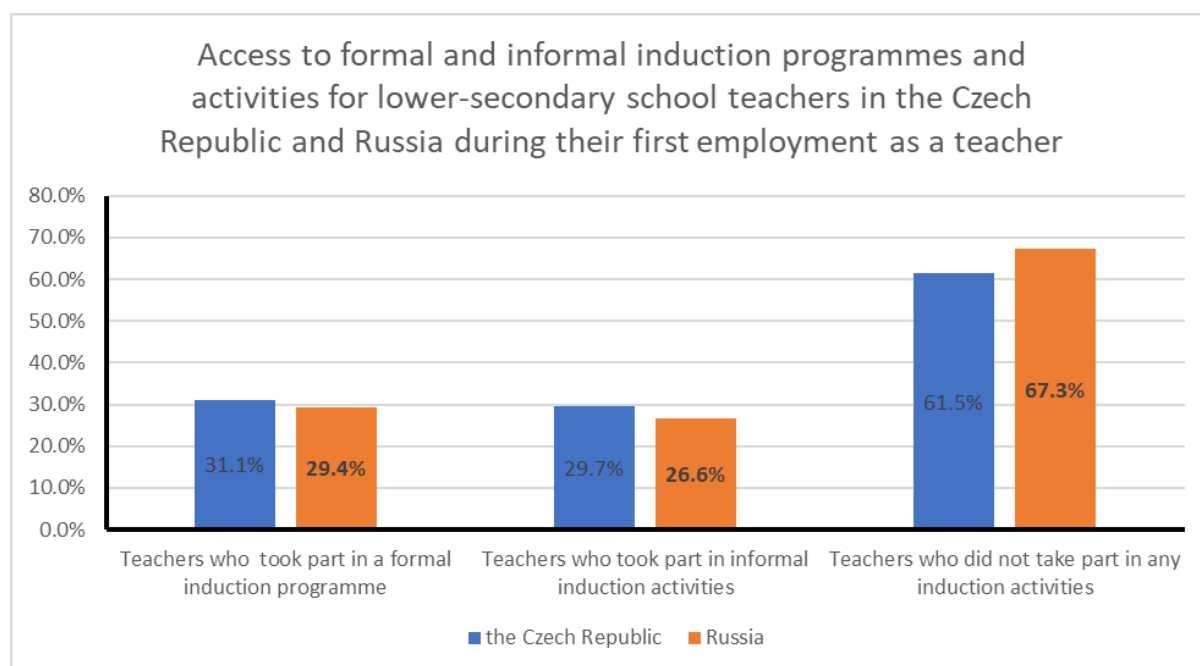


Chart 1. Q19-1) Access to formal and informal induction programmes and activities of lower-secondary school teachers in the Czech Republic and Russia during their first regular employment as a teacher.

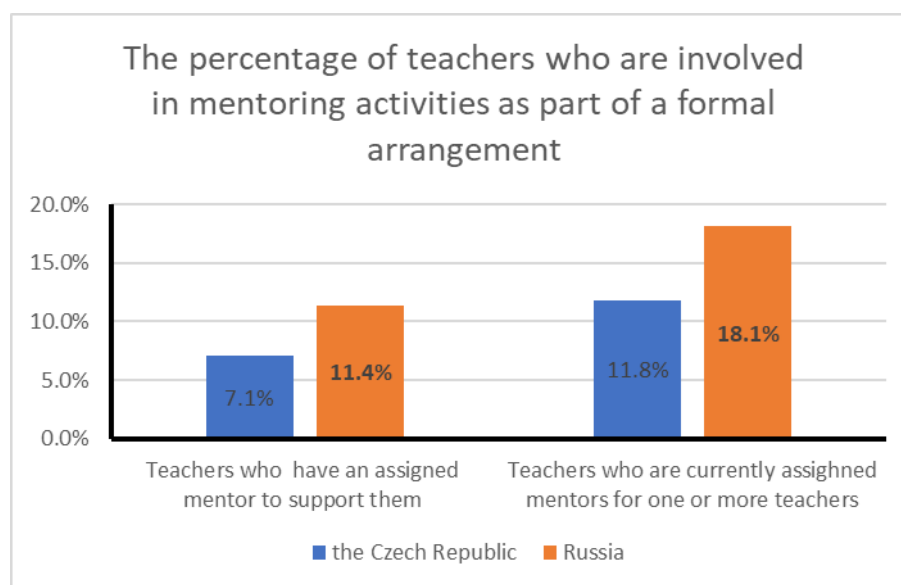


Chart 2. (Q21) The percentage of teachers who are involved in mentoring activities as part of a formal arrangement

2. Types and content of Continuous Professional Development

TALIS 2018 asked teachers about a wide range of activities, from more organised and structured to more informal and self-directed learning as well as the content of CPD that Czech and Russian lower-secondary school teachers participated in during the last 12 months

prior to the survey. The teachers in both countries stated that they regularly participate in different kinds of activities. The amount of professional development undertaken by lower-secondary school teachers is much the same in terms of courses/seminars and reading professional literature. The highest reported participation was in “reading professional literature” 86,4% in the Czech Republic and 91,2% in Russia. Attendance at courses/seminars attended in person was the next popular means of experiencing professional development activities, with 83,7% of Czech teachers and 85,1% of Russian teachers. Chart 3 makes it evident that participation rates are fairly consistently high across most types of activities in Russia in comparison to the Czech Republic. It indicates the large differences between the participation in online courses and seminars as 69,3% in Russia and 24,4% in the Czech Republic as well as “education conferences where teachers present their research or discuss education issues” – 69,9% in Russia and 27,5% in the Czech Republic respectively. The largest differences are found in some aspects of observation visits to other schools 71,1% among Russian teachers compared to 19,1% of Czech teachers. The countries vary significantly with respect to participation in a “network of teachers formed specifically for their professional development” – 65,5% of teachers in Russia reported taking part in them and only 23,6% of teachers in the Czech Republic.

The analysis shows that teachers in the surveyed countries give similar priority to the content of professional development. Chart 4 provides a comparison of different content of professional development reported by teachers. A great percentage of lower-secondary teachers took part in “knowledge and understanding of the subject field” 89% of Russian teachers versus 71% of Czech teachers.

Specifically, a significant minority were not interested in professional development activities devoted to “school management and administration”, “teaching in a multicultural and multilingual setting” and “communicating with people from different cultures or countries” just 24-27% of Russian teachers and 11-14,6% of Czech teachers.

In general, an average per cent of teachers in lower secondary education report engaging in professional development over the past year including different types of content. However, there is enormous variation among countries.

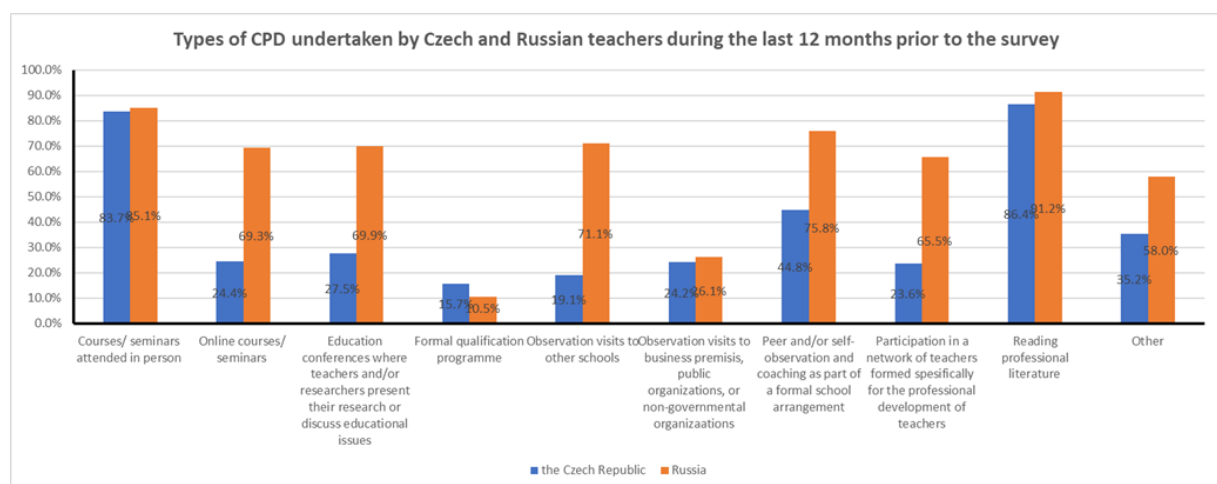


Chart 3. (Q22) Types of CPD undertaken by Czech and Russian teachers during 12 months prior to the survey

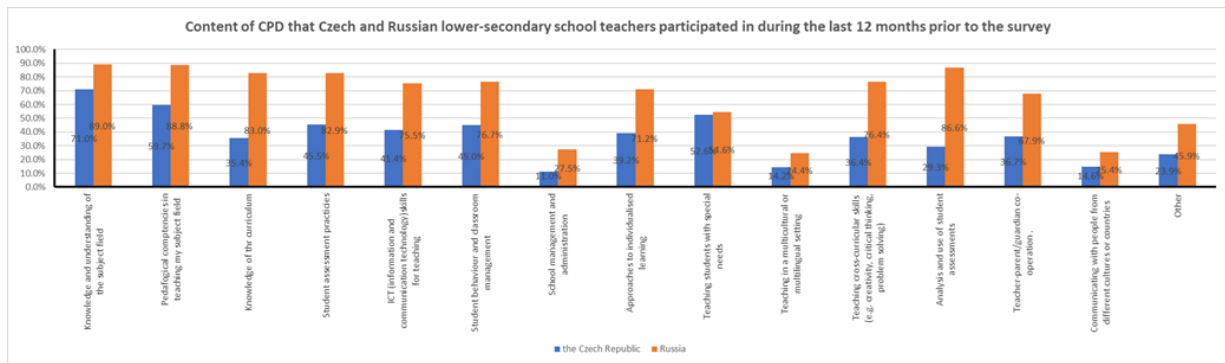


Chart 4. (Q23) Content of CPD that Czech and Russian lower-secondary school teachers participated in during the last 12 months prior to the survey

3. Overall support for teachers' participation in Professional Development

Table 5 shows that support for professional development can take a variety of forms. TALIS distinguishes “between financial support – direct payment of the costs of the development activities or salary supplements for undertaking development – and support in the form of time scheduled to allow for development activities” (Teachers’ Professional Development 2010:74). The analysis reveals that reduced teaching load was the most commonly used form of support with 64,2% of Czech teachers and 57,4% of Russian teachers who reported receiving release from teaching duties to complete CPD. Provision of materials was the next most frequently offered support accessed by around 47,7% of teachers in both countries. Non-monetary support for teacher development is mostly provided through scheduled time for activities that take place during regular working hours at the school, days off, classroom resources, software, apps, book vouchers and promotion opportunities. As reported by Czech teachers, it was a significant mean of support for Czech teachers – 40,0% drew “not-monetary support for activities outside working hours” but this was not the case among Russian teachers. Only 26,7% of Russian lower-secondary school teachers reported that they commanded this form of support with recompense in the form of days off or reduced teaching load.

Though professional development activities are not normally linked to a salary increase, 39,9% of Czech teachers reported advancement on the salary scale compared to Russian teachers who were slightly below the Czech Republic in terms of percentage of teachers who said their salary had increased as a result of their CPD. The figures show that direct increase salaries and monetary supplements are fewer common means of professional development support in both countries.

The analysis shows that professional development is not completely free for many teachers. It gives some cause for concern especially for Russian policy makers as Russia displays a considerably low level of monetary support. About 70% of Russian teachers who were engaged in some professional development reported that they made financial contribution in recognised professional development programmes. The situation is better in the Czech Republic where only half of the teachers reported that they did not self-fund the professional development activities they undertook.

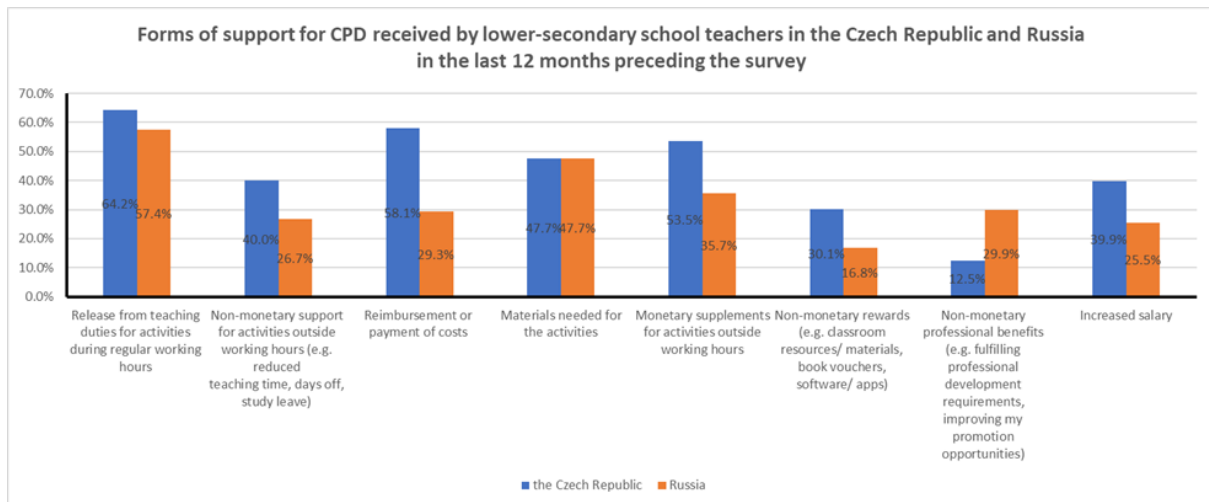


Chart 5. (Q24) Forms of support for CPD received by lower-secondary school teachers in the Czech Republic and Russia in the last 12 months preceding the survey.

4. Effectiveness of Professional Development – teachers’ perceptions.

For TALIS, the effectiveness of professional development is based on teacher self-reported perception. As chart 6 describes, on average 87,6% of surveyed lower-secondary school teachers in Russia and 78,4% of Czech teachers reported positive impact on their teaching practices.

Teachers were asked to nominate the characteristics of CPD that contributed to its effectiveness (Chart 7). Most teachers reported a significant positive impact on their teaching of their prior knowledge 95,0% of Russian teachers and 86,8% of Czech teachers accordingly. According to 85,4% of Czech teachers and 71,1% of Russian teachers the most effective forms of professional development were those having coherent structure and provided opportunities to practise (with 83,7% in Russia versus 73,0% in the Czech Republic). The area of great interests to teachers are programmes “provided follow-up activities”. Thus, 80,0% of Russian teachers and 67,7% of Czech teachers reported a high and moderate impact of them on their teaching practices. Extended professional development activities are viewed by teachers as one of the less effective types of activities with 30,2% of Russian teachers and 23,4% of Czech teachers. There is a notable contrast between the teachers’ opinion on “opportunities for collaborative learning”. They are found particularly effective by teachers in Russia (80,0%) while teachers in the Czech Republic take a far less positive view on them (29,9%).

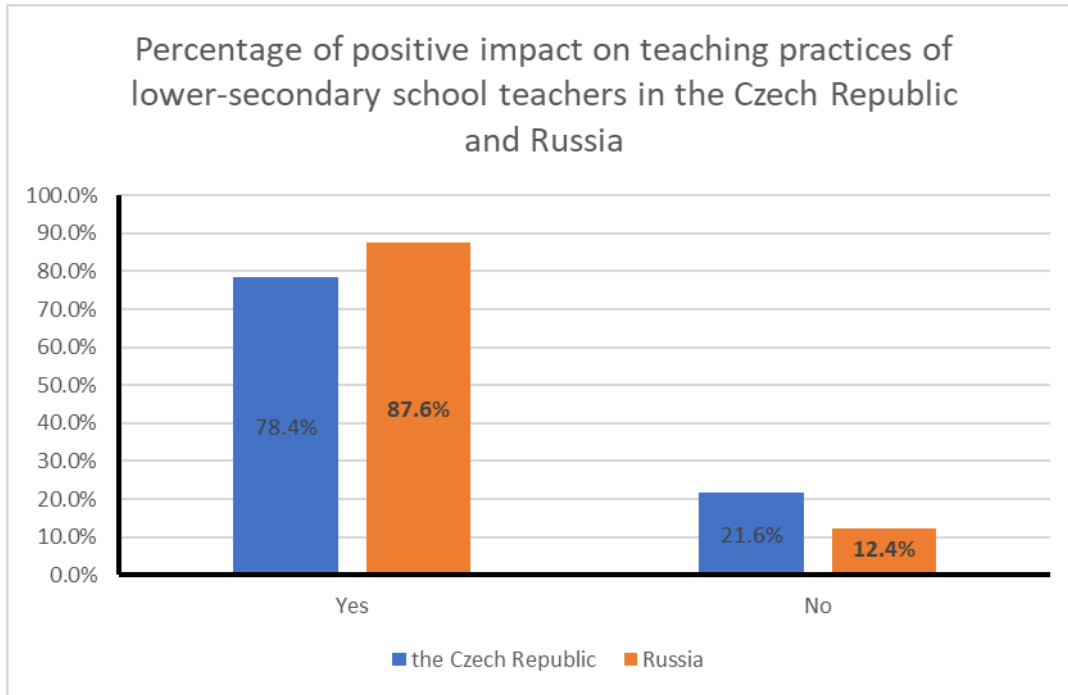


Chart 6 (Q25). Percentage of positive impact on teaching practices of lower-secondary school teachers in the Czech Republic and Russia

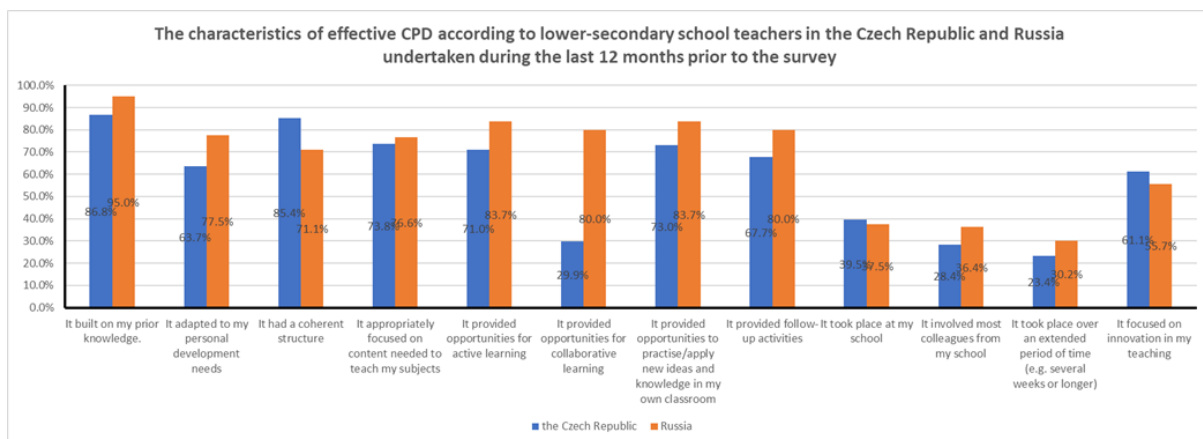


Chart 7 (Q26). The characteristics of effective CPD according to lower-secondary school teachers in the Czech Republic and Russia undertaken during the last 12 months prior to the survey

5. Teachers' needs for Professional Development

Chart 8 shows the extent to which lower-secondary school teachers in the Czech Republic and Russia report a high level of CPD needs. The data send the important message that vast majority of teachers in both countries don't want more professional development that they had received. The area which is rated most frequently overall as a high-level need across two countries is "student behaviour and classroom management" with 16,7% of Czech teachers and 13,6% of Russian teachers. There are some patterns across countries which differ sharply. Thus, sizeable proportions of Russian teachers reported having a high level of development need for "pedagogical competencies in teaching their subject fields", "knowledge of the curriculum" and "student assessment practices" – 15,5%, 14,5% and 14,2% respectively. Conversely, Czech teachers feel much less need for this professional

development activities with only 7,2%, 3,3% and 6,5% of teachers. Czech teachers' need for these professional development activities is about 10 percentage points less in comparison to Russian teachers. We can conclude that lower-secondary school teachers' need is rather low in all areas of their work but mostly notably in "school management and administration". The analysis indicates that the greatest degree of need for development when aggregated across all the areas was reported by teachers in "student behaviour and classroom management" and "students with special need". Across all of these areas, teachers in the Czech Republic were less likely to report a high need for additional CPD than teachers in Russia.

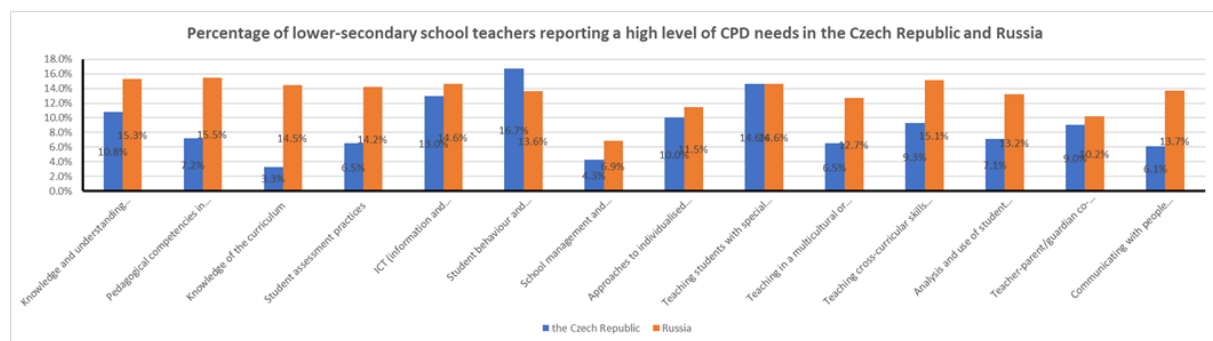


Chart 8 (Q27) Percentage of lower-secondary school teachers reporting a high level of CPD needs in the Czech Republic and Russia

Conclusion

The analysis revealed that:

1. Thus, fewer than half of teachers in the Czech Republic and Russia had access to formal and informal induction programmes during their first employment. Although formal and informal induction is relatively rarely provided for new teachers during their first employment, the Czech Republic presented a higher percentage of teachers who participated in induction programmes at their current school. This remarkably low figures for both countries provide a negative sign that the Czech Republic and Russia are not the leaders in induction provision for new teachers either during their first employment or at their current schools. It might lead to a conclusion that induction programmes are offered at the discretion of the school. Though the proportion of novice teacher being mentored in Russia was higher than in the Czech Republic, mentoring was not a commonly reported activity in both countries.

2. The teachers in both countries stated that they regularly participate in different kinds of activities. The analysis reveals that the amount of professional development undertaken by lower-secondary school teachers is much the same in terms of courses/seminars and reading professional literature. Attendance at courses/seminars attended in person was the next popular means of experiencing professional development activities. In general, an average per cent of teachers in lower secondary education report engaging in professional development over the past year including different types of content. However, there is enormous variation among countries. Teachers in the surveyed countries give different priorities to the content of professional development.

3. The analysis shows that teachers in both countries receive both monetary and non-monetary support for their continuing professional development. There are certain differences among the countries in terms of the amount of received support but the analysis reveals that reduced

teaching load was the most commonly used form of support. We can conclude that the professional development is not completely free for many teachers. It gives some cause for concern especially for Russian policy makers as Russia displays a considerably low level of monetary support. About 70% of Russian teachers who were engaged in some professional development reported that they made financial contribution in recognised professional development programmes. The significant point is that the situation is better in the Czech Republic where only half of the teachers reported that they did not self-fund the professional development activities they undertook.

4. Teachers were broadly positive about the effectiveness of professional development on their teaching practices. Among the nominated characteristics of CPD that contributed to its effectiveness, most teachers reported a significant positive impact on their teaching of their prior knowledge. Extended professional development activities are viewed by both Czech and Russian teachers as one of the less effective types of professional development activities.

5. The remarkable finding was that vast majority of teachers in both countries don't want more professional development that they had received. In spite of this fact, the choice of continuing professional development programmes may depend on a training plan established to meet the educational priorities of the teachers. It has been concluded that lower-secondary school teachers' need for professional development is rather low in all areas of their work but mostly notably in "school management and administration".

6. There are many barriers that constrain the professional development of teachers. The most commonly cited reasons for teachers not undertaking more professional development than they had done were very similar in both countries. One of the most frequently cited barriers according to teachers' reports was "conflict with work schedule" and the second prominent barrier was that teachers do not have time because of family responsibilities.

References

- Avalos, B. (2011). Teacher professional development in Teaching and Teacher Education over ten years. *Teaching and Teacher Education*, 27, 10-20.
- Bryman, A., (2012). *Social Research Methods, 4th edition*. Oxford University Press
- Burns, R.B. & Burns, R.A., (2008). *Business research and methods and statistics using SPSS*. London. Sage Publications.
- Cresswell, J.W. & Plano Clark, V.L., (2007). *Designing and conducting mixed methods research*. London: Sage Publications Ltd.
- Crossley, M., & Watson, K., (2003). *Comparative and International Research in Education: Globalisation, Context, and Difference*. London: Routledge Falmer
- Day, C., (1997). In-service teacher education in Europe: conditions and themes for development in the 21st century. *Journal of In-service Education*, 23(1): 39–54.
- Gibs, R.G., (2007). *Analyzing qualitative data*. SAGE Publications
- Gorard, S., (2016). *Damaging Real Lives Through Obstinacy: Re-Emphasizing Why Significance Testing is Wrong*. *Sociological Research Online*, 21(1), 2
- Greger, D., Walterová, E. (2007). In pursuit of educational change: the transformation of education in the Czech Republic. *ORBIS SCHOLAE* 1 (2), 11-54. Charles University in Prague, Faculty of Education.
- Hesse-Biber, S.N. (2010). *Mixed methods research: Merging theory with practice*. New York: Guilford Press.
- Kennedy, A. (2005). Models of Continuing Professional Development: a framework for analysis. *Journal of In-service Education*, 31(2).
- OECD (2009). *Creating Effective Teaching and Learning Environments: First results from TALIS*. Paris: OECD.
- OECD. (2018). *Teacher Questionnaire*. Main Survey Version.
- OCED (2018). *Teaching and Learning International Survey (TALIS) 2018 Conceptual Framework*. OECD Education Working Paper No. 187
- OECD. (2018c). *A Teacher Guide to TALIS*. (Teaching and Learning International Survey).
- OECD (2018). *TALIS 2018 Technical Report*. Paris: Author.
- Phillips, D. (2000). Learning from Elsewhere in Education: some perennial problems revisited with reference to British interest in Germany. *Comparative Education*, 36(3), 297-307.

Shulman, L. S. (1987). Knowledge and Teaching: Foundations of the New Reform. *Harvard Educational Review*, 57(1), 1 – 21.

Spilková, V. (2002) Současné proměny vzdělávání učitelů v zemích Evropské unie. *Pedagogická orientace* 2, 44-54.

Strizek, G.A., Tourkin, S., Erberber, E., & Gonzales, P., (2014). Teaching and Learning International Survey (TALIS) 2013: U.S. technical report (NCES 2015-010). National Centre for Education Statistics. <https://nces.ed.gov/pubs2015/2015010.pdf>.

Teacher Questionnaire (2018). Organisation for Economic Co-operation and Development (OECD). Teaching and Learning International Survey (TALIS).

Teachers' professional development (2010). Europe in international comparison. An analysis of teachers' professional development based on the OECD's Teaching and Learning International Survey (TALIS). *Luxembourg: Office for Official Publications of the European Union*.

Urbánek, P. (2005). *Vybrané problémy učitelské profese: Aktuální analýza*. Liberec: Technická univerzita v Liberci, Fakulta pedagogická

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