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The institutional conditions of adapting to future challenges in the Slovak education system

ABOUT THE PROJECT

The “**Future Challenges to Education Systems in Central Eastern European Context**” (EDUC, <https://cps.ceu.edu/research/educ>) is a two year comparative research project aiming at assessing the ability of the education systems of five Central-Eastern European countries to adapt to various ongoing changes, such as technological changes and their impact on labor markets, demographic changes, populist politics and autocratic governance, old and new inequalities, changing gender roles, globalization, etc. The research focuses on the adaptability of education systems determined by the interplay between governance and the institutional operation of schools in Poland, Hungary, Slovakia, Serbia and Romania. The project is supported by a grant from the Open Society Foundations.

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THE INSTITUTIONAL CONDITIONS OF
ADAPTING TO FUTURE CHALLENGES
IN THE SLOVAK EDUCATION SYSTEM

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INTRODUCTION

This country report follows on from the *Adaptability of Education Systems to Future Challenges in Context: an Analytical Framework* (Rado 2020), published by the CEU Centre for Policy Studies as an output of *Future Challenges to Education Systems in Central Eastern European Context* (EDUC), a project supported by the OSF – Education Support Program. The report is an output of that same project and is conceptually underpinned by the Analytical Framework. The main aim of the report is to describe and analyse the extent to which the Slovak education system is capable of adapting to future (foreseeable) societal and educational challenges, drawing on national data. This is achieved by examining data and information categorized according to the recommended content, setting out the key themes and areas of analysis.

The report compiles and summarizes basic data on the Slovak education system and education outcomes, following the data structure given in the project terms of reference. A variety of analytical sources were used. In an effort to obtain a comprehensive view of Slovak education, a broad spectrum of relevant data of both a quantitative and qualitative nature was collected. Much of the national data is taken from analyses and reports by the state agencies within the orbit of the education ministry, but a substantial part comes from analyses by non-governmental organizations and independent reform initiatives. Slovak academic research provided another important source. The analysis also contains a comparative dimension. One of the project aims is to assess adaptability in relation to the other education systems covered by the project and to use that comparative analysis to specify the Slovak situation. Therefore international comparative studies, testing (PIRLS, TIMMS, PISA, TALIS) and OECD and EU comparative analyses are among the key sources used in this report. Restrictions on space meant we were unable to critically examine the research methodologies and ideological context of the data used. The data were selected so as to enable the identification and description of the elements of the Slovak education system that have the greatest impact on its capacity for flexibility and adaptability.

1. THE EDUCATIONAL POLICY AGENDA OF THE LAST FIVE YEARS

Unfortunately, the education ministry suffered a high level of staff turnover during the last five years. Under the two R. Fico governments (2012–2020), there were six ministers of education, four of them in the last five years. Each came from a different area of expertise and pursued a different agenda, exacerbating the unsystematic, fragmented nature of education policy. So, for example, in the last five years of the government, a reform document was produced – *Slovakia is learning* (MŠVVaŠ 2017). This was followed by the *National Programme for Education 2018–2027* (MŠVVaŠ 2018), created by

yet another team under yet another minister, further complicating things. The Slovak experience has therefore been one of multiple national strategies that have not yet guaranteed real, systematic change in the education sector. In the last five years, some partial initiatives have been introduced, most often in response to external recommendations (from the EU or OECD), or at the behest of special expert and professional groups.

Actions based on external recommendations aimed at achieving a more effective direction in preschool education include those directly addressing future challenges – changing gender roles, inequalities and inclusion, and in the longer term, labour market participation. Consequently, in the last five years and following EU recommendations, a number of changes have been implemented in education policy. The national curriculum has been revised (2016). With EU support, nursery school infrastructure and buildings have been renovated. Capacity levels are still not sufficient to reach the EU preschool attendance average. The focus on preschool education policy can be seen in the amended education law (2019), which recommends compulsory nursery school attendance for 5-year-olds beginning in 2021.

In response to the unsatisfactory PISA results, national testing has been expanded over the last five years. The National Institute for Certified Educational Measurements (NÚCEM), has been testing year 5 primary school students since 2015 (mathematics and first language), giving a wider picture of student achievement at the beginning and end of lower secondary school.

During this period, the government came under increasing pressure from employers, and vocational training was a hot topic. The outcome was the new Vocational Education and Training Act (2015) that put in place a dual education system and company schools. The dual education system is loosely based on the German one, but it is not identical: students are not contracted company employees as is the case in German-speaking countries; instead they are regular students of vocational secondary schools. The law (2019) introduced tax incentives for employers involved in vocational education provision.

It is clear that the government measures from the last five years are aimed at expanding the preschool network and at improving the quality of preschool education and to linking higher secondary education with the labour market and employers.

2. RESEARCH AND ASSESSMENT DATA INDICATING THE ACTUAL PREPAREDNESS OF THE EDUCATION SYSTEM TO RESPOND TO MAJOR FUTURE CHALLENGES

2.1. Progression in education and diversification of learning pathways

When discussing pathways in different kinds of schools with different types of sponsors, we should note that private nursery schools and church nursery schools account for 9% of nursery schools, while the remainder are in the state sector. For primary schools (combined primary and lower secondary) the figure is 8.5% and for grammar schools and vocational secondary schools (higher secondary) it is 27.9% (calculations from CVTI 2019). The majority of 10-year compulsory schooling therefore takes place in state schools and the differences in learning pathways according to sponsor are most evident at the higher secondary level.

However, there are also differences within the state system. These can be seen most strongly in the transition from primary to lower secondary. Lower secondary education is provided at stage 2 of primary school, following stage 1 primary, usually in shared premises and under a shared school administration. Another option is for students to attend a “gymnasium” (a general academic school, usually for eight years), where lower secondary and higher secondary students are taught in the same premises under the same school administration. Under the education act, the number of students who can obtain their lower secondary education at a gymnázium is limited to 5% of the cohort; however, in reality the limit is not strictly applied, especially in cities – for example, in the capital Bratislava it was 17% in 2019. In 2018 almost 20% of students obtained their lower secondary education at a school other than a primary school. The Slovak education system is therefore selective in some respects, including at the lower secondary level. Educational pathways begin to diverge at age 11 in Slovakia.

Different pathways are followed partly on academic achievement grounds but also because of social background and parental unwillingness among the wealthier to keep their children in primary school. A more complete picture is obtained by taking into account qualitative research findings from a project called Learning Makes Sense (Vančíková 2019). In interviews, senior management revealed that 8-year gymnáziums were not simply attended by students with the best academic prospects. Moreover, the 2015 PISA results for 8-year gymnázium students were comparable to those obtained by 4-year gymnázium students, suggesting that early selection does not produce such high added value as is frequently claimed. The 2018 PISA (OECD 2019b) results were very similar to those from 2015.

2.2. Learning Cultures

An interesting aspect of classroom culture in Slovakia is captured in a PIRLS 2016 study (Mullis et al. 2017) that assesses the school climate in participating countries. School emphasis on academic success is one of the indicators used. The emphasis comes from the professional staff in the school – the principal and teachers. The PIRLS study shows that in Slovakia only 3% of students attend a school in which the teachers place a very high emphasis on academic success, compared with an international average of 8%. Forty-eight percent of students attend schools in which teachers place a high emphasis on academic success, while the international average is 55%. And 49% attend schools where the emphasis is medium, as compared to an international average of 37%. Thus according to this international comparison, in Slovakia there are fewer students attending schools in which the emphasis on academic success is very high or high, and more students attending schools in which there is medium emphasis on academic success. Accordingly, in terms of classroom climate, Slovakia does not feature among the countries in which teachers push students hard to perform well.

Students’ Sense of School Belonging is another interesting indicator in PIRLS 2016. It shows that in Slovakia there is a smaller proportion of students with a strong sense of school belonging (50% as opposed to the international average of 59%), a larger proportion of students with some sense of school belonging (41% as opposed to 33%) and a comparable proportion of students with little sense of school belonging (9% compared with 8%). Strong student identification with school is therefore not typical of school life in Slovakia.

However, primary principals view things differently. A survey by Learning Makes Sense action (Fridrichová 2018b) showed that almost the same percentage of primary principals stated their school emphasized the motivation to learn and work (25.5%) as stated that the emphasis was on ability to learn (25%). At the higher secondary level, 29.5% of principals claimed that in their school the stress was

on motivation to learn and 19.4% thought it was on ability to learn. The need to emphasize and foster motivation to learn therefore rises with education level. The survey also showed that principals did not consider ability to learn to be the main effect of the school's characteristics, which, given the challenges facing society, is a problem.

Higher secondary school students think the reverse applies – only 18.5% thought that their school studies motivated them to continue their studies and into work, and 25.5% said their school taught them how to learn. When it comes to the ability to learn how to learn – a key competency related to the individual's adaptability that is crucial to further study and professional life – we have to conclude that secondary education has this effect for only a quarter of students. This is a very low figure.

Here it is worth considering several important classroom dispositions in the context of future challenges – critical thinking, transversal thinking and analytical thinking. These three were surveyed in Slovak schools in a survey by Learning Makes Sense action (Fridrichová, 2018a). According to the principals of selected primary schools, only 13.8% emphasized critical thinking at their school, while 10.7% emphasized ability to learn and think in context, and 6.3% stressed the capacity for analytical thinking. The percentage that stressed a critical thinking disposition was substantially higher in church schools (24.5%) and for analytical thinking (33%) in private schools. The survey analysts thought the problem was the content and performance standards in the national curriculum, but also the dominant teaching methods at primary and lower secondary level. Analyses of the education standards show that some subjects have rather large amounts of content and concentrate on a lower level of cognitive functioning.

At the higher secondary level, 18% of principals stated that they fostered critical thinking and 21.3% the ability to learn in context, while 9.4% of principals mentioned fostering analytical thinking.

Data on teachers' views are provided by the TALIS study (OECD 2019c). Significantly fewer of our teachers than the OECD average support the following selected activities: Have students work in small groups to come up with a joint solution to a problem or task (40.2%); Present tasks for which there is no obvious solution (29.9%); Let students use ICT for projects or class work (47.3%); Give students projects that require at least one week to complete (15.8%). According to these data, the transmissiveness of teaching prevails over the solution of problems with reduced support for students' group activities and the latter's independence.

Higher secondary students stated that teacher presentations were the most frequent teaching method (92.9%) followed by dictating notes (74.6%), which indicates there is a high level of formulaic teaching at the upper secondary level in Slovakia (Fridrichová 2018a). Just over a third of students mentioned discussion and debate (39.3%).

2.3. Learning outcomes in connection to basic competences and adaptive/threshold skills

The definition of reading literacy, as stated in PIRLS testing for example, clearly indicates that it is considered a basic competence and a key adaptive skill. Ability to read includes the ability to reflect on written texts and to use these texts as tools for attaining individual and societal goals. 'This view is increasingly relevant in today's society, where greater emphasis continues to be placed on students' ability to use the information they gain from reading... Emphasis is shifting from demonstrating fluency and basic comprehension to demonstrating the ability to apply what is read to new situations or projects' (Mullis, Martin 2015, 11). Mathematical and science literacy are similarly conceived in the TIMSS tests.

On closer examination of PIRLS test results, we see that in terms of the purpose of reading, Slovak student performance has been stronger from a literary perspective than for informational purposes. Performance in comprehension processes, retrieving, and straightforward inferencing was significantly higher than performance in interpreting, integrating and evaluating information. Slovakia did substantially better than average in retrieving and straightforward inferencing, but substantially worse in interpreting, integrating and evaluating. Moreover, Slovakia's performance in interpreting, integrating and evaluating had deteriorated since the previous assessment (2011).

In the cognitive domains assessed by the TIMSS testing (Mullis et al. 2016), Slovak student mathematical achievement in reasoning was higher than average and the difference was statistically significant, but lower in knowing. Achievement in knowing was substantially worse than in the previous testing cycle. The scores for applying were also lower, but were higher for reasoning. The improvement in reasoning may be a positive trend in the acquisition of basic and adaptive skills. The situation regarding science is quite different. Compared to the average score, Slovak students obtained higher scores in the cognitive domain knowing, but lower scores in applying and reasoning. Compared to the previous testing cycle, scores were worse in all domains, and significantly so for knowing and applying. In terms of the acquisition of basic and adaptive skills for future societal challenges, the main problem is the noticeable decline in scores for applying.

Similarly, the PISA tests 'go beyond assessing whether students can reproduce what they have learned in school. To do well in PISA, students have to be able to extrapolate from what they know, think across the boundaries of subject-matter disciplines, apply their knowledge creatively in novel situations and demonstrate effective learning strategies' (Schleicher 2019, 3).

In Slovakia, 31.4% of 15-year old students did not achieve even basic reading literacy, which figure amounts to almost a third of students nearing completion of compulsory education. It is an alarming state for lower secondary education to be in. The proportion of Slovak students in the risk group is 8.7 percentage points higher than the OECD average, and the difference is statistically significant. At the same time, the proportion of Slovak students in the top reading literacy group is substantially lower than the OECD average (by 4.1 percentage points). A more comprehensive picture can be obtained by looking at reading literacy and reading resources (OECD 2019).

The reading process was assessed in three domains (sub-scales) – locating information, understanding, evaluating and reflecting. Only in one of these domains did Slovak students obtain a better score than the average overall score for Slovakia in reading literacy – in locating information. The PISA 2018 results show that Slovak students performed relatively well in this domain only, and the difference between this score and the scores for understanding, evaluating and reflecting was statistically significant. Regarding in-text sources, Slovak students were better at working with multiple texts than at working with a single text, and the difference was statistically significant. The weak performance of Slovak lower secondary students in the literacy components of understanding, evaluating and reflecting is problematic in relation to their adaptability to future change.

National testing completes the picture on Slovak student competences. For students at the end of lower secondary, the relevant test is Testing 9, which is taken by year 9 students. These results give us a slightly more analytical view of student cognitive performance, in mathematics, for example, than the international tests do. The national tests assessed, among other things, students' cognitive processes. In 2019, the highest average score was for evaluation (66.4%) and the lowest was for analysis (56.9%). The success rate for items requiring application skills was 66.2%, and for comprehension it was 63.6%. Slovak students struggled most with analysing as a specific cognitive operation when

solving mathematical tasks. The results for the Slovak language tests were slightly different. Students were most successful at comprehension (71.2%), followed by application (62.1%), and analysis (56.8%), and least successful at evaluation. In the Slovak language tests, students achieved better results for the cognitive processes of comprehension and application than in evaluation and analysis. Analytical processes would therefore seem to be a problem in both subjects.

2.4. The attitudes of students and young people in relation to gender relationships, democracy, immigration and emigration, ethnic minorities and climate change

The information supplied above shows that in some learning areas Slovak students have lower adaptability in terms of cognitive ability and skills. One might therefore wonder whether the data is more encouraging concerning affective and attitudinal characteristics in Slovak students and young people. These characteristics often develop dynamically and through conscious effort at the higher secondary level, but the available data is not encouraging.

Opinions and attitudes are shaped within the context of the available information sources. Many popular social themes (migration, minorities, climate etc.) are targeted by disinformation, which can have a substantial influence on the development of young people's attitudes and opinions. A survey by the Youth Council of Slovakia (RMS 2019a) found that young people aged 15–24 most often searched for information on personal blogs. Only 56% of young people trusted traditional media. A particularly alarming finding is that more than a third visit alternative websites. Only 16% of young people always verified the information using other sources. While the same percentage did not verify information read in blogs against information from other websites or media outlets, while 40% only verified information in certain circumstances. The sources young people used to verify information are interesting: the most frequent source was informal contacts and conversations with friends (68%) and parents (61%). However, schools, teachers and specialist publications ranked low among the wide range of possible sources.

The high level of trust in alternative media, importance of informal influences and low tendency to verify information is fertile ground for the spread of disinformation and the formation of unfounded attitudes. In this respect, a survey by the Institute for Active Citizenship (IPAO 2018) focusing on children and young people aged 10–18 makes for interesting reading. When asked 'How would you feel if a new student who was a ...[name of minority] joined your class?', 60% of respondents responded negatively or very negatively when the minority was the Roma minority. The respondents who were most tolerant towards the Roma were from Western Slovakia. With age, negativity levels fell, stabilizing at a moderately negative attitude. Questions about LGBTQ+, Muslims and migrants revealed a correlation between older age and greater acceptance of these groups. There were also large differences between boys and girls. Generally boys were significantly more hostile than girls, with the biggest difference evident in young Slovaks who rejected the LGBTQ community (40% of boys, 20% of girls). The second biggest difference could be seen in the rejection of extremism.

A survey of opinions among 11–20 year olds conducted from 2017 to 2019 by the Institute for Active Citizenship (IPAO 2019) shows that the proportion of younger people who think their opinions matter to politicians is falling across Slovakia. The trend is alarming – in two years, trust has fallen by almost 18%. When asked about the importance of their views of the world ('Do you believe your opinion is important?'), scepticism among young people had risen over two years from just over 25% to almost 44%. There are therefore palpable levels of disillusionment and engagement levels are declining.

This can be inferred from the Youth Council of Slovakia survey (RMS 2018) on how 15–19 year olds spend their free time. It shows that young people are not particularly interested in the kinds of activities offered by civic organizations, youth centres, and clubs or volunteering. These options were barely mentioned in the young people’s responses, so we can conclude that they do not consider them potential ways of spending time.

The national data therefore point to an unflattering tendency in young people’s attitudes and stances. This impression merely grows when we take a comparative look at young people in other countries. The EU youth report is particularly interesting in this respect (EU 2018). The Europe-wide survey on which the report is based employed a fairly wide ranging sample, aged 15–30. We will look at the areas in which Slovakia stands out most. It is noteworthy that most of the references to Slovakia are critical.

Slovakia is highlighted as the country with the lowest percentage of young people (5%) stating they had participated in a youth club, leisure-time club, or any kind of youth organization activity in the last twelve months. The Slovak results concerning whether young people had taken part in activities organized by other non-governmental organizations were even worse. In Slovakia the figure was 2% of young people, while in Italy it was 22%. Out of all the EU countries, Slovakia had the lowest percentage of young people (1%) actively involved in climate change or environmental issues. The report showed that Slovakia had the lowest proportion of young people (30%) participating in activities organized by selected formal leisure organizations (sport clubs, youth clubs, leisure time clubs, cultural organizations, local organizations, human rights or global development organizations, political organizations, environmental organizations, other non-governmental organizations).

Clearly, young people in Slovakia have low levels of civic engagement and are strongly conservative in their views, the latter which are frequently based on unsubstantiated information. The aim of this report is to explain the role Slovak education and the school system play in this. Some research has indicated that it may partly be down to the way social studies and civic education are taught in Slovak schools, both historically and in the present era. Danišková and Lukšík (2017) have described how social studies and civic education differ from the American versions, even at primary school level. ‘The social science taught at primary level in the USA revolves around various social science and humanities disciplines, while in Slovak “Vlastiveda” the emotional and patriotic aspects are emphasised’ (65). The explanation for young peoples’ strong conservatism and low tolerance for diversity may therefore lie in the nature of the curriculum. However, research has also found that teachers attempt to introduce elements of civic education into their lessons, but here again the ‘results seem to confirm the idea that teachers are more strongly oriented towards adaptive citizenship rather than critical citizenship’ (71).

3. SCHOOL-LEVEL ADAPTATION

3.1. The scope of the professional, organizational, and fiscal autonomy of schools

Curricular autonomy is an important element of professional and organizational autonomy. It plays a very important role in adaptability to new and frequently unexpected challenges in education. In Slovakia, as in some other countries, schools have the option of deciding to allocate time to subjects

of their own choosing or those selected from a predefined list. Current OECD data indicates that 'on average, 5% of compulsory instruction time is [in OECD countries] allocated to subjects chosen by schools at the primary level. At the lower secondary level, 5% of compulsory instruction time is allocated to subjects chosen by schools and another 4% to subjects chosen by students' (OECD 2019, 367). In Central European countries, a substantial proportion of compulsory instruction time can be allocated to optional subjects. For example, in Czechia, Hungary, and Slovakia (lower secondary), about 10% or more of compulsory instruction time is allocated to subjects chosen by the school.

In Slovak lower secondary education, there are 146 teaching periods (weekly number of lessons for five years of lower secondary education), and 19 of those are optional, which amounts to 13% of all teaching periods. These can be used for additional subjects that build on subjects in the state education programme (national curriculum) or for subjects selected by the school (including content). Optional subjects that schools have offered are recorded in the curriculum in the school education programme. The curriculum is a more detailed version of the framework curriculum in the state education programme. In practice, these lessons are most frequently used to provide additional content within compulsory subjects. In other words they are used to increase the time allocated to these subjects (Rehuš 2018). Only a small number of schools use these lessons to introduce new subjects. This is because the compulsory content defined by the state and contained within the state education programmes for each subject is so detailed that schools often have difficulty covering it all within the existing time allocation. Therefore the large amount of content basically eliminates school and teacher autonomy in selecting educational content.

Another important element of organizational autonomy is the power of in-school actors (principal, school bodies, teachers) as contrasted with outside actors (sponsor, state and so on). This is captured in the index of school autonomy produced by the OECD (2016) in relation to the PISA tests. The index of school autonomy is calculated as the percentage of tasks for which the principal, teachers, or the school governing board have considerable responsibility. In Slovakia the index is 88.4%, which is considerably above the OECD average (71.3%).

A key element in organizational autonomy is the degree of autonomy the school principal has in relation to the sponsor. When a new principal is being recruited, the school board launches the recruitment process and the principal is selected from among the applicants. The school board then recommends the school sponsor to appoint the selected candidate. Although the school sponsor can reject the recommended candidate, this almost never happens. School principals have relatively wide-ranging responsibilities in Slovakia. They can decide on a broad range of issues relating to education and teaching, student admittance, budgeting and finances, recruitment, remuneration and the dismissal of teaching staff, and school development. In this sense, school principals have wider-ranging powers.

Data collected by TALIS 2018 (OECD 2019) shows that more than 70% of school principals in OECD countries stated that their school had autonomy. They also stated that their school was responsible for selecting learning materials (OECD 87%, Slovakia 82%); setting school rules and guidelines (OECD 86.7%, Slovakia 95.7%); student admissions (OECD 73.9%, Slovakia 94.2%); deciding on budget allocations within school (OECD 71.2%, Slovakia 71.4%) and staff recruitment or selection (OECD 70%, Slovakia 97.2%). On the other hand, school principals thought the school had least autonomy in deciding teachers' starting salaries, including pay scale (OECD 32.8%, Slovakia 62%) and teachers' salary increases (31.6% OECD compared to 43.7% in Slovakia). Reduced fiscal and salary autonomy could therefore be a problem.

National data collected by Learning Makes Sense initiative (Drál' 2018) confirms that school principals in Slovakia have wide-ranging responsibilities. Quantitative research has shown that the majority of principals said they made decisions relating to student admittance, school policy and teacher recruitment and selection. A significant proportion of principals also made decisions about teacher dismissal (74.1%) and remuneration (72.6%). They could intervene in curricular issues such as drafting the school education programme and the structure of school subjects (all items above 70%).

However, in relation to some key issues, such as staff remuneration, investment, and determining the number of student admissions, school principals in Slovakia felt restricted by the law or by the school sponsor or state administration. For example, when rewarding teaching and specialist staff, principals are restricted by the financial resources available to them. There is a centrally determined pay scale based on entitlement and a flexible element that is not based on entitlement that can be used to motivate staff, but schools often lack the financial resources for this (Drál' 2018). According to a TALIS international survey (OECD 2020), principals in the Slovak Republic stated that 44% of schools had autonomy in relation to determining salary increases or teacher bonuses, which is higher than the OECD average (32%). But it also showed this percentage was falling. The previous survey – TALIS 2013 – reported a fall in the percentage of principals stating they had primary responsibility for raising teacher salaries (a fall of 36.4 percentage points, from 90.4% to 53.9%); for determining teacher starting salaries, including incremental increases (a fall of 28.2 percentage points, from 90.9% to 62.7%) and in deciding within-school budgetary allocations (a fall of 8.4 percentage points, from 95.8% to 87.4%).

These studies tell us about professional teacher autonomy as well. In Slovakia, 87% of teachers report to having the ability to determine course content in their class, compared to 84% on average across the OECD countries and economies participating in TALIS. In Slovak Republic, teachers reporting higher levels of control over their class are more likely to report working in innovative school environments. Opportunities for teachers to have a voice in developing the school vision and goals are an integral component of teacher leadership. In Slovakia, 60% of principals report that their teachers have significant responsibility for the majority of tasks related to school policies, curriculum and instruction, which is higher than the OECD average (42%).

We can therefore conclude that the Slovak education system promotes the professional and organizational autonomy of schools, and to a larger extent than is the case in most OECD countries. Problems mainly concern fiscal and pay-related autonomy, especially in relation to the potential use of flexible salary elements. In curricular, content and organizational affairs, schools have sufficient opportunity to respond flexibly to changes in the demands placed upon schools and in carrying out their responsibilities.

However, the high degree of autonomy can also be viewed negatively – as reflecting a declining interest in education among school sponsors (mainly public ones). Most sponsors focus on funding, commercial, and supervisory activities. Few school principals can rely on the sponsor to help them solve everyday operational issues or aspects relating to staffing, finances, and economic matters or in organizing tenders. Many sponsors lack financial resources and staff support and there is little guidance about providing assistance with anything that falls outside their legal responsibilities. Some are not interested in or lack the skills to provide assistance. The school boards are independent bodies and have no influence on the running of the school. Their only key responsibility is overseeing the recruitment of new principals and recommending suitable candidates to the sponsor. The challenge for Slovakia is therefore to professionalize sponsor support in education.

3.2. Mandatory tasks deployed to schools in connection to self-evaluation and school development (quality management)

In Slovakia, school evaluations are performed not through a process of self-evaluation but on a hierarchical basis. If we exclude teacher assessments of students, school processes are evaluated by managers who are expected to formalize these processes in accordance with the law. School principals are assessed once a year by the sponsor.

School evaluations in Slovakia are highly formalized. The fact there is no official requirement to have self-evaluation processes and strategies in place is evidence of this. The State School Inspectorate has attempted to introduce change, somewhat paradoxically, given that it is an external assessment body. Nonetheless, in 2009 it embarked on a project to support self-evaluations in schools. Consequently, its school inspection criteria now include indicators of self-evaluation processes. These fall under 'School Management', where one of the assessment criteria is 'School self-evaluation processes'. One such indicator is 'Most of the teaching and specialist staff in the school take part in systematic self-evaluation processes'. The organization sets out five conditions for fulfilling this: (1) The school has formulated its goals, criteria and indicators relating to school quality and has a self-evaluation schedule and the tools for measuring school quality; (2) Following the schedule and using the school quality indicators, the school assesses the education management as the basis for improving school quality; (3) Following the schedule and using the school quality indicators, the school assesses the teaching as the basis for improving school quality management; (4) The school implements its plan to improve education quality based on the results of the self-evaluation in education management; (5) The school implements its plan to improve education quality based on the results of the self-evaluation in teaching.

To accompany the school evaluation criteria, the State School Inspectorate has produced a separate document entitled 'School self-evaluation through the eyes of the State School Inspectorate' (ŠŠI 2017), which provides greater detail (sub-indicators) on the five conditions for fulfilling the school self-evaluation. As noted above, schools are not legally required to undertake self-evaluations and so despite this being part of the State School Inspectorate's inspection criteria, the former cannot be included under the compulsory criteria.

Information on self-evaluations and the effectiveness of self-evaluation-based school development procedures is provided in the inspection reports issued by the school inspectorate in relation to these and other areas. The current report (ŠŠI 2019, 22) states that primary schools (primary and lower secondary combined) 'have not implemented a full self-evaluation in accordance with a plan for improving the quality of education processes'. A State School Inspectorate questionnaire found that primary school principals considered self-evaluation a useful tool for improving quality of schooling, but had not produced their own self-evaluation strategy'.

The report also contains a chapter entitled 'Effect of self-evaluations on improving quality of education in primary and secondary schools'. This analysed the findings of interviews and surveys undertaken by inspectors and concluded that the majority of school principals viewed self-evaluation positively, considering it a useful tool for improving the quality of school management and education. Some principals of primary schools (27.8%), gymnáziums (46.1%), and secondary vocational schools (75%) stated that they were aware of weaknesses in education management and teaching and recognized that changes needed to be made so they had introduced some of the self-evaluation processes. In doing so, they had concentrated most on distributing questionnaires (surveying school climate, student satisfaction in school, quality of teaching; and self-evaluation questionnaires for teaching staff). However, these measures do not amount to a full systematic self-evaluation process.

It would therefore be inaccurate to suggest that self-evaluation is practised widely across Slovakia. In 2020, the State School Inspectorate (ŠŠI 2020, 239) conducted a survey on self-evaluations in 64 primary and secondary schools. Of the 64 schools surveyed, only two primary schools (3.1%) had a formal self-evaluation schedule and set of criteria. One can therefore conclude that only in rare instances is self-evaluation a formal part of the organizational culture of Slovak schools.

Responsibility for school development lies with the school head. During the selection process, prospective heads have to set out their school development strategy for the period of their headship. This compulsory document is entitled the “Proposed School Development Strategy”. The School Board, which is the school’s advisory self-governing body comprising the teacher, parent and sponsor representatives, also provides input into school development strategy. Additionally, the school can set out the details of school development in its school education programme. That not only stipulates specific goals, but also details the internal system of inspections and assessments. Each year, school development is reflected in the Report on Teaching, Results and Conditions in Schools and School Facilities. In this report, the school head has to provide information about areas in which the school is doing well and areas requiring improvement. In Slovakia, school development is not seen as a participative process, but is largely dependent on the school head or senior management team.

3.3. Summary of research and evaluation results about the quality of schools (strengths, weaknesses, problems)

The State School Inspectorate reports on the quality of the schools it has inspected. In its 2019 report (ŠŠI 2019), it positively assessed Slovak primary schools concerning their provision of informal education through a variety of in-school and outside-school activities and interests in order to cater for student needs and interests.

The inspectorate also highlighted several negatives/areas of risk in its assessment. The first concerns strategic planning, including a systematic approach to goal fulfilment. The second relates to the weak grasp of the nature of inclusive education, the need to internalize the main ideas behind inclusion, and to subsequently work out a strategy for inclusive student education, including setting specific education goals for tackling prejudice and removing obstacles to ensuring at-risk groups have equal access to education within mainstream schooling. School self-evaluations aimed at improving education management and teaching were another problem area. The report indicates there is scope for improving the development of school education programmes (curricula). Schools are also encouraged to implement internal checks on subject teaching, take effective action to improve teaching, introduce measures for addressing the learning difficulties of low-achieving students, and implement follow-up checks. The inspectorate also requires teaching guidance bodies to improve their work on raising the educational attainments of all students, focusing especially on underperforming students and internal training and the professional growth of teaching staff.

Where secondary schools (upper secondary) are concerned, the State School Inspectorate positively assessed student inclusion in international projects and specialist placements abroad that enable them to make use of specialist knowledge and gain multicultural experience. They also highlighted efforts to compensate for the lack of textbooks by creating in-school materials from the internet and other published sources and making them available to students in an electronic format. Senior staff were praised for supporting continual growth in teacher knowledge.

Secondary schools are behind in terms of in-school teacher training and in exchanging information acquired from training sessions organized by subject commissions to ensure educational expertise can be fed through into teaching. Secondary schools do not have the independent support systems in place for underachievers and socially disadvantaged students that would help reduce school dropout rates and raise overall skills level in line with student needs and reduce economic and social exclusion among students. Secondary schools also need to provide better support for students to overcome learning barriers, to help them develop an awareness of the need for active learning, to take responsibility for their own learning outcomes and to assess the quality of their own work. The inspectorate pointed out the need to ensure the full self-evaluation process is part of the school system as it is both an essential and useful means of improving quality.

Therefore, the report shows that the strengths of Slovak schools lie in developing the school's activities in areas outside the stipulated content and school responsibilities. In primary schools, this relates to special interests and informal education, while in secondary schools international projects and mobility, and teacher engagement are the strong aspects. Primary and secondary schools lack the mechanisms for school self-evaluations and support is weak for student and teacher self-evaluation activities. Delegating powers to lower levels and bodies appears to be a weak point in both primary and secondary schools.

3.4. Evidence-based assessment of the actual conditions of organizational learning in schools

Collinson, Cook and Conley (2006) provide an instructive summary in the form of five assumptions currently associated with organizational learning: '1. Organizational learning is multilevel in the sense that it depends on learning at the individual, group, and organizational level...; 2. Organizational learning includes inquiry; 3. Organizational learning relies on shared (often tacit) understandings among members; 4. Organizational learning involves behavioral and cognitive change...; 5. Organizational learning includes embedding new knowledge and practices in organizational theories-in-use or routines' (109).

Reading these assumptions it is immediately clear that the most problematic aspects are inquiry and learning at the group and organizational level. Collinson et al. also refer to six interrelated conditions that may foster organizational learning in schools and school systems: 'prioritizing learning for all members; facilitating the dissemination (sharing) of knowledge, skills, and insights; attending to human relationships; fostering inquiry; enhancing democratic governance; and providing for members' self-fulfillment' (110). It is clear then that organizational learning depends on a number of psychosocial characteristics and refers to a higher order of collective learning that extends beyond a single individual.

Data on some elements of organizational learning can be found in the TALIS survey (OECD 2020). The key items here are professional collaboration and exchange and co-ordination for teaching, in which collaborative activities are defined as 'Teach jointly as a team in the same class'; 'Observe other teachers' classes and provide feedback'; 'Engage in joint activities across different classes and age groups'; 'Participate in collaborative professional learning'; 'Engage in discussions about the learning development of specific students'; 'Exchange teaching materials with colleagues'; 'Work with other teachers in this school to ensure common standards in student evaluations'; and 'Attend team conferences'.

Compared to the OECD average, Slovakia performs badly on multiple indicators. For example there is a wide gulf in scores for ‘Participate in collaborative professional learning’, with only 1.9% of lower secondary teachers in Slovakia stating that they participate at least once a month. The OECD average is 21.2%. Here, Slovakia comes last out of all the OECD and participating countries. Slovakia is also far below the OECD average on ‘Engage in discussions about the learning development of specific students’ (35.6% of Slovak lower secondary teachers do this compared to the OECD average of 61.1%). Performance on ‘Attend team conferences’ was even worse, with only 7% of Slovak lower secondary teachers selecting this response compared to the OECD average of 43.4%. For this indicator, Slovakia was fourth from last. As for the eight indicators relating to professional collaboration and exchange and co-ordination for teaching, which are key to successful organizational learning, Slovakia performs well below average on three. Performance on the remaining indicators is not much better. This can be seen in relation to two selected indicators ‘Teach jointly as a team in the same class’ and ‘Observe other teachers’ classes and provide feedback’. In comparison with the previous TALIS survey (2013), Slovakia has deteriorated on both items, and markedly so. On the first, Slovakia’s score deteriorated by 16.3%, which is the biggest fall of any country. On the second, the decline was 6.8%, which is the second largest decline.

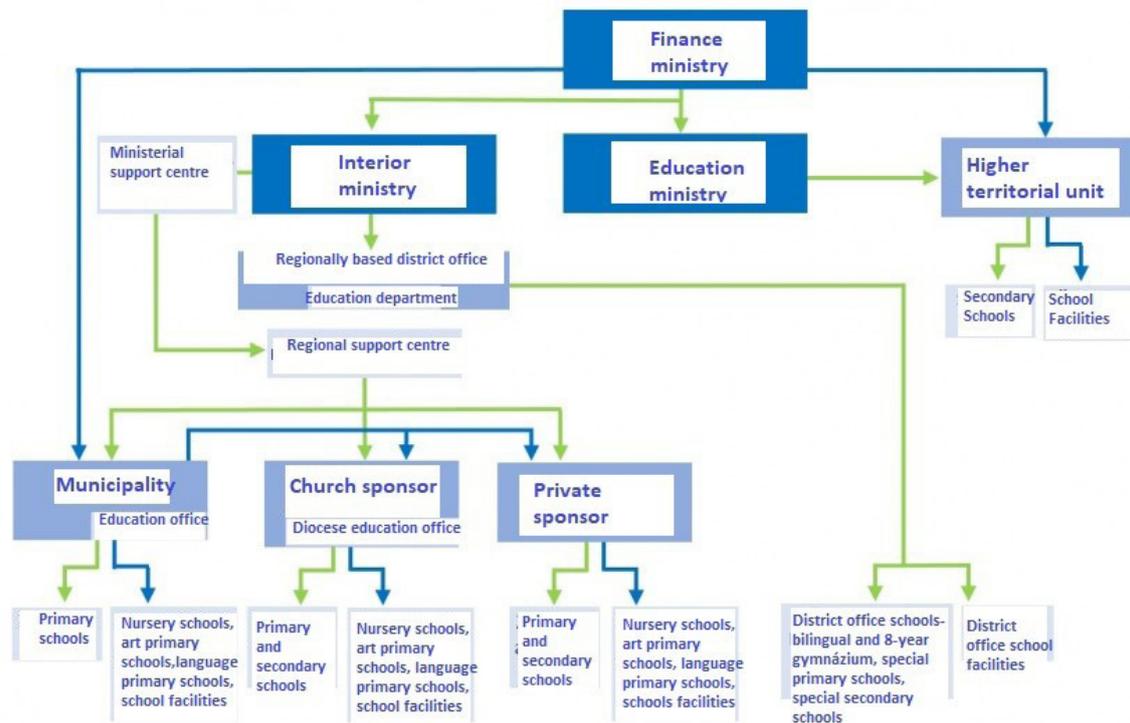
Professional collaboration in schools in Slovakia is clearly unsatisfactory. Nor can we claim that it is improving. Quite the opposite, which is a worrying state of affairs.

4. GOVERNANCE ENVIRONMENT

4.1. Management and financing

The system of educational governance operates at three levels – a central one under the education ministry and its professional organizations; a mid-level one consisting of state bodies and regional and local authorities acting as sponsors, and education officers; and a lower level consisting of school principals and school bodies. Since 1989 the system has changed a number of times, particularly at the middle level. In 2002, state responsibilities were decentralized to local government as part of the process of transferring state administration responsibilities, whereby the former became the sponsor of some primary and secondary schools and school facilities under what is known as ‘original responsibilities’. Specialist schools remained under state control. In 2013, the state administration was reformed under the slogan ESO (Effective, Reliable and Open, in English) which led to the regional school offices being abolished and their responsibilities transferred to the regionally based district offices, with the ministry of interior responsible for the financial side. The education ministry allocated finances to higher territorial units (regional government), while the funding that had previously gone to the regional school offices was allocated to the ministry of interior. The ministry now draws up the budgets for the education departments of the regionally based district offices, and so basically exerts control over most of the financing that goes into regional education.

Figure 1: School financing in Slovakia (source: Gröhling 2018)



It is generally the case that school financing in Slovakia lacks transparency and is hard to monitor. The interior ministry has no systematic role and the education ministry is of limited importance as far as school funding is concerned.

Primary school financing comes from multiple sources. Primary schools receive state funding via the interior ministry, while school facilities (children's school clubs, school canteens, student residences, art primary schools, free time centres) are directly financed by local government. A large proportion of local government financing comes from personal income tax revenue distributed to municipalities and higher territorial units (regional government) by finance and tax offices.

The main source of secondary school financing is the state budget and funding from the higher-level territorial unit budget that is used to cover material and operating costs. Secondary school financing also comes from additional sources (e.g. commercial activities, businesses [e.g. gifts] etc.), which enables schools to provide a higher standard of education depending on the region's capacity.

Financing for primary and secondary schools comes from the state budget (ministry of finance and education ministry chapter and the interior ministry chapter) and is standardized. The amount a school receives to meet its financial needs is based on school performance (number of students) and the remainder is calculated according to standardized costs (education costs and operative costs for the type of school). The standardized elements are salary and operating costs combined. Salary costs are the standardized annual costs of salaries, insurance, and employer social and health insurance contributions (personal costs) per student. These are determined according to type of school, pay scale level, subject/course difficulty, form of study and language of instruction. Size of school may also be taken into consideration where primary schools are concerned. Operating costs are standardized annual education and operating costs minus personal costs per student.

The schools therefore receive a specific sum of money from the sponsor to cover salary costs and school running costs. In public schools the salary allocations generally reflect the pay scale, so heads have little opportunity to award specific staff bonuses. However, the opportunity may arise if the head has managed to save on staff overheads, but there is no guarantee of that, and in any case such a surplus would represent a tiny amount. Only the running costs budget can be spent on school development, and this is tariff-based. The running costs budget covers the purchase of textbooks, classroom resources, and teaching materials. In schools with a legal personality the head can make purchasing and procurement decisions of a value up to €5,000. Capital expenditure in excess of €10,000 is within the sponsor's remit. Sponsors do not usually allocate funding to schools that extends beyond the standard legal funding framework.

4.2. Content regulation (curricula and standards)

Educational content is stipulated at two levels: the state level via the state education programmes that define the compulsory education content taught in all schools; and the school level via the creation of school education programmes tailored to reflect the school profile.

The key parts of the state education programme insofar as content is concerned are the education standards and the framework curricula. The education standards set out the knowledge, skills and abilities students must acquire before continuing in education or in order to achieve a particular education level. These are stipulated for all compulsory subjects. Education standards are divided into performance and content standards. Performance standards set out the level of knowledge and skills students should be capable of accomplishing. They are formulated as outputs or skills students have to acquire. The content standards set out the scope of knowledge and skills. These are usually in the form of concepts that students must learn.

The framework curricula contain a list of compulsory subjects. They also stipulate the minimum amount of time to be spent on each subject. They set out the maximum amount of time that can be spent on the subject per week with a specific year group and the amount of time the school can set aside for its own aims when creating the school education programme.

The school education programme is the basic document underpinning education. It is issued by the school principle once approved by the school education council and the school board. The school education programme is drawn up in accordance with the teaching aims set out in the relevant state education programme. For instance, it contains specific educational goals and aims, the school's specific focus, length of study, form of education, and leaving requirements. The curriculum contains information on which subjects the school has allotted time for. This is then elaborated in the framework curriculum of the state education programme. The school education programme also contains the syllabi. These set out the teaching aims, content and scope for each subject. They have to meet the minimum scope stipulated in the education standards in the state education programme.

The content of the state education programme for primary and secondary schools is controlled by the National Institute for Education, which is directly responsible to the Education Ministry. The National Institute for Education has subject commissions to which institute staff, teachers, and academics are appointed and it decides on any changes or adjustments to educational content.

Although the phrase 'education areas' is used in the law and state education programmes are divided into areas of education, in practice educational content is designed and taught within subjects and not broader education areas. We can therefore conclude that the concept of education areas has

not been embedded into Slovak education. Instead, teaching is narrowly subject-based and there is no emphasis in educational content on cross-curricular teaching or on connecting information silos.

4.3. Quality evaluation

The State School Inspectorate, set up in 2000, plays a crucial role in external school evaluations. The inspectorate is the body that carries out state inspections regarding education management, teaching and education standards, and material and technical resources, including those used in practical teaching, in schools and school facilities, practical education premises, special education facilities and education counselling and prevention facilities. It also handles complaints and petitions. The inspectorate issues an annual report on the state of education in Slovakia. It also publishes inspection reports and examples of best practice. The inspectorate carries out information-gathering inspections, full inspections, follow-up inspections, and thematic inspections.

Information-gathering inspections are aimed at collecting data and information for further use in inspections and for maintaining databases containing basic data on schools and school facilities. Full inspections provide an overall view of the quality of education, education management, and the processes and conditions of education in schools and school facilities. Thematic inspections focus on the state of affairs in selected areas of education and provide feedback on progress and the effectiveness of education policy and control. The aim of follow-up inspections is to check whether action has been taken to correct inadequacies found in the previous inspection.

The inspectorate does not have a good image in Slovakia and schools do not see it as a partner that could help them develop. The OECD seem to share this view, stating in 2014 that ‘the ŠŠI [inspectorate] is moving towards a more bureaucratic style of inspection, coupled with the concern that school inspections lack concrete connection with school improvement..., [this] poses serious risks to the ŠŠI’s reputation and image’ (Shewbridge et al. 2014, 101). The inspectorate is seen as a control body with wide-ranging sanctioning powers. According to the most recent amendment to the law on state administration in education and education governance (2020), the chief school inspector can recommend a school principal or school facility head be removed. The amendment also introduced the notion of ‘obstructing a school inspection’, which forces schools into cooperating more closely with school inspections. The law enables the inspectorate to design its own student tests and to administer these to samples of students in schools. In international comparison, this is a rather extraordinary right (Shewbridge et al. 2014).

Assessing student performance is another area that has seen many changes. In 2003, a government resolution was issued relating to the creation of a system of state monitoring regarding the quality of education in the final year of primary school (the last year of lower secondary education). This led to the creation of Monitor 9, a national survey of knowledge among year 9 primary students (and year 4 students attending 8-year gymnáziums). In 2009, national testing, known as Testing 9 was launched in mathematics and the language of instruction (Slovak, Hungarian, or Ukrainian). These tests are summative in aim, making it possible to measure student performance at the end of lower secondary education and can be used as a guide to selecting a secondary school. Based on a standardized classification, the students’ results are given in percentage form with an accompanying graph that compares the student’s performance with the national average. Students are given an official certificate displaying this information. Schools receive certificates with the whole-school results. The results and school rankings for Testing 9 are published by INEKO, a non-profit NGO.

The education ministry decided to expand the external assessment to include the ‘added value’ of the student or school. But to do this requires both entry tests and exit tests. The requirement to integrate exit testing into the primary school (year 5) test schedule gradually began appearing in the ministry’s strategic plans from 2014 onwards. Having both entry test (Testing 5) and exit test results (Testing 9) enables data to be collected about the added value of the school in lower secondary education. The first national round of Testing 5 was held in November 2015. Testing 5 is identical to Testing 9 in terms of the areas tested, the type of questions, the way it is administered and marked, but Testing 5 is not compulsory, while Testing 9 is. To reduce non-participation and school boycotts of Testing 5, the state increases the number of school inspections it carries out during the testing period.

This testing has been criticized and even boycotted because of the way it has been set up. First of all, it is not a functional element of the education system – and is of virtually no importance in education transfers. Nor is it taken into account in the transition from primary to secondary education. And neither is it considered in the transition from lower secondary to upper secondary (entrance tests). The published results and rankings take no account of the region the school is located in, or the culture or the socioeconomic background of the student population. There are therefore important methodological reasons as to why the school results should not be published without considering these factors. The test items themselves are also disputed. On several occasions it has been pointed out that the tests go beyond the educational content set out in the state education programme and are of a similar design to the items in the PISA tests, which are not based on national curricula. The workload associated with organizing and administering the tests has also attracted criticism. Consequently, there are regular petitions against the testing and calls for it to be boycotted.

By contrast, the centralized “maturita” exam is a relatively problem-free method of external assessment undertaken at the end of upper secondary education in certain subjects. It was introduced in 2004 and is a logical component of the national testing system for it serves as the university entrance exam. The maturita exam consists of two parts – internal and external. The internal part for languages of instruction and foreign languages is divided into a written component and an oral component. The state has responsibility for the external part and the written component of the internal part. The oral component of the internal part is organized by the school in collaboration with the education departments of the regionally based district offices. The maturita exam consists of four subjects, two of which are compulsory – Slovak language and literature, and one foreign language from a predefined list.

4.4. Types of learning outcomes emphasized by centrally issued curricula and standards

The learning outcomes for each area of education and the relevant subjects are set out in the state education programme (national curriculum). The table below shows the education areas and subjects for lower secondary education.

Table 1: Education areas and related subjects for lower secondary education as set out in the state education programme

Education area	Subjects
Language and communication	Slovak language and literature Slovak language and Slovak literature Minority language and literature Foreign language
Mathematics and working with information	Mathematics Information studies
People and nature	Physics Chemistry Biology
People and society	History Geography Civic education
People and values	Ethics/ Religious education/Religion
People and the world of work	Technology
Art and culture	Music Art
Health and exercise	Physical education and sport

Each subject has a separate state education programme that runs to dozens of pages. As noted above the state education programme is structured around the education standards. The teaching content set out in the education standards follows the global trend of defining education using learning outcomes.

In Slovakia types of learning outcomes emphasized by centrally issued curricula and standards differ from one subject to another. For instance, the state education programme for biology contains only performance and content standards. The performance standards are designed to activate students' lower-order cognitive processes (for example "name", "examine") and higher-order cognitive processes ("distinguish between", "draw a diagram") and target active components ("prepare a presentation"). In Slovak language and literature, the situation is more complex. Here learning is defined through key competences and a sort of active "subject competence" as well as the performance and content standards. The content standard is generally given in the form of basic learning concepts, while the performance standard also states the optimal and minimum performance and so has an additional two subcategories not found in biology, for instance. The state education programme for Slovak language differs in structure and is more detailed and complex. But if we look at the performance definition, we see that the range of cognitive processes is greater in the performance standard for biology. While the performance standard for Slovak language only gives the application level for minimum performance and is mainly based on lower-order cognitive processes (somewhat paradoxically, as it is about reading comprehension).

The most recent curricula contain new innovative educational content. Of the science subjects, the physics curriculum is perhaps the best example to consider (Rehúš 2018). This is mainly centred around practical exercises, experiments and calculation-based tasks, designed so students can build their own

knowledge and develop their investigative skills (Rehúš 2018). The best example from the social science curricula is the history curriculum. It contains basic subject competences where the emphasis is on discovery, investigation, and enquiry. Despite the rhetoric on developing key and/or basic competences, some subject curricula still focus on theoretical and encyclopaedic knowledge. And although education areas exist, there is no attempt to link content across subjects. As mentioned above, the structure and content of the state education programme for Slovak language and literature for example is problematic. The consensus is that the performance standards for Slovak language and literature lack clarity, whilst being extensive, opaque and not terribly instructive. The most often criticized science and social science curricula are chemistry and geography. Both these curricula require students to learn large amounts of theoretical and factographic information without being given the opportunity to use them in practical contexts (Rehúš 2018).

4.5. Analysis of the effectiveness of the existing professional accountability system

Slovakia's system of professional accountability is mainly formal in character. It takes into account the teacher's qualifications and education level, as well as continual education and professional growth. In other words, teachers with different levels of achievement or different levels of professional development have different responsibilities. Insofar as general qualifications are concerned, Slovak teachers are highly qualified in international comparison. The vast majority are educated to postgraduate level, and at the primary and lower and upper secondary levels over 95% of teachers are qualified (Santiago et al. 2016). However, qualifications and education level are not a sufficient guarantee of professional accountability.

As Slovakia has national entry and exit tests at the lower secondary level, there has been debate about whether teacher accountability should be linked to students' test results. This has not been formally introduced into the system of professional accountability; nonetheless, informally, school principals in particular are likely to take results into account when, for example, reviewing the flexible portion of teachers' pay. Unofficially, school sponsors also bear the test results in mind when, for example, allocating additional funding to schools at the end of the year. Therefore outside the official system, teachers and schools are frequently held accountable for test results. This is a thorny issue that has been highlighted by the OECD (Shewbridge et al. 2014, 57): "The potential risk may be exacerbated when the results of tests are used for accountability or performance measurement for either individual teachers or a school as a whole... This can create pressure to improve results at the expense of curriculum coverage, development of overall knowledge, skills and understanding, and student engagement."

Professional responsibility is regulated primarily by the law on teaching staff. It was most recently amended in 2019 following general criticism of the previous law, especially its effects. The previous law (2009) had introduced a credit system for professional development, under which teachers taking further education courses could obtain a certain number of credits entitling them to a "credit bonus" of 6% or 12% of the applicable pay grade. Over the next five years, the number of teachers receiving credit bonuses increased fivefold. Two-thirds of staff receiving credit bonuses did so at the 12% rate. The system design was ineffective at motivating staff and encouraging them to engage in ongoing education. Although the intention had been to encourage teachers to update or innovate their professional teaching skills, in practice the primary motivation for taking such courses was to obtain credits for bonuses or for becoming a registered teacher. This fixation with credits even affected teachers' choice of continual education course – the primary criterion was not the content or relevance of the course, but the number of credits received (Galáš, Rehúš 2016).

The new law applied to teaching staff is an attempt to counter these negative effects. However, it has only been in place for just over one year and so it is difficult to assess how effective it is. Under the new law, teaching staff are not just recruited on the basis of their qualifications – integrity is also taken into consideration. Proof of integrity is demonstrated by having a clean criminal record that is no older than three months old, and criminal checks are undertaken once in every five years of service with the same employer. The law also sets out teaching staff rights and obligations. This is one of the elements of professional accountability introduced in the Code of Conduct for teaching and specialist staff issued by the education ministry. It emphasizes the moral quality of teaching staff and their ability to handle ethical issues. In terms of teaching, the focus is on non-discriminatory and pro-inclusion attitudes.

The law sets out various career levels for teaching staff. It distinguishes between novice teachers, independent teachers, level 1 registered teachers, and level 2 registered teachers. Novice teachers are supervised by a teacher mentor. Adaptation training has to be completed within the first two years of initial employment. The law also details the responsibilities of other categories of teaching staff: “career positions”, such as teacher mentor, class teacher, head of subject commission, head of education area, head of guidance group, head of study area, behavioural advisor, career counsellor, and so forth. The competencies required to enter each career level or career position are set out in the form of professional standards. These can be attained through the system of professional development that consists of various types of training. The law distinguishes between qualification courses, job-specific courses, specialist courses, adaptation courses, pre-registration courses, innovative courses and refresher courses. The credit bonuses have been replaced with professional development bonuses that can be linked to type and nature of course and represent 3%, 6% and 12% of the employee’s pay grade. They are valid for seven years.

Although the new law introduces new concepts and includes new elements of professional accountability (integrity and a code of conduct), paradigmatically it is identical in spirit to the previous law. One should not therefore assume that it will change teacher motivation or that the bonus system will cease being the primary motivation for professional development, which could lead to professional development in Slovakia becoming devalued and uneven.

4.6. Overview of specific governance instruments that are potential drivers for conveying external expectation to schools

Conveying external expectations to schools is no easy task in Slovakia as there is no flexible mechanism for such a process. Regular innovation in state education programmes (national curricula) would be one way of doing this, but so far most of the content innovations have been implemented on a piecemeal basis. The result is that the compulsory learning content in the state education programmes (national curricula) remains largely unaltered.

Expert groups frequently recommend introducing a systemic mechanism for regular reviewing learning content. For example *Slovakia is learning*, a reform document, suggested measures 1-10.01 “Innovate the state education programmes in regular pre-arranged cycles” (MŠVVaŠ 2017). It also called for Slovakia to switch to a system of periodic innovative curricula in clearly defined cycles with previously agreed schedules, and recommended that no changes should be made to the state education programmes outside these cycles. Teachers, and curriculum and textbook writers, would then have sufficient warning of when to expect the next innovations to the state education programmes. The curricula could thereby become sufficiently flexible for external expectations to be conveyed. However, so far no such system has been introduced in Slovakia.

The system for conveying innovative external expectations and trends is known as experimental verification and comes under the education law. Schools that wish to create their own programmes or to follow a specific educational model can apply to the education ministry for experimental verification status. Under this process schools have certain exceptions and more freedom to implement their own programmes (e.g. during the verification process the school does not have to be inspected). Schools have to set out their own programme, justify it and submit it along with the application for experimental verification. Once accepted, the school is responsible for carrying out the verification process which is regularly assessed by the experimental verification guarantor. The guarantor may be a university or a ministry-sponsored organization. The guarantor produces an annual report of the experimental verification. The school, in conjunction with the guarantor, proposes the schedule for completion, and it is not uncommon for the process to take several years. At the end of the process, the guarantor produces a final report including a final decision on whether the experimental verification process was successful and whether the school can continue to follow that programme. Based on the guarantor's final report, the education ministry issues its decision on the experimental verification and implementation of the report's findings.

Experimental verification is not used much – mainly to verify auxiliary education models. In the 2019/2020 school year, only 11 education programmes or models were verified for use at the pre-primary to higher secondary level, as well as 27 study or learning areas at the higher secondary level (MŠVVaŠ 2020a). Most of these related to subject innovations, technological innovations, or labour market changes. The most common areas undergoing verification were alternative models (e.g. Montessori nursery schools), education programmes with a specific focus (mainly bilingual and ICT programmes), special education and inclusion programmes, or the implementation of new forms of assessment (e.g. verbal assessment). Experimental verification is another way in which the Slovak education system is open to more radical education innovations and to new external education demands.

Another option for education innovation would be to do this through professional development and continual education courses and to update the content. There are two sides to this. One is to make the range of courses more systematic to reflect the latest developments, society's needs, and new expectations. The other is getting teachers to attend the courses, which would ensure the innovations were implemented in education. This would prove effective if the primary criterion for course selection was the content and desire to innovate education rather than formal criteria such as bonuses for professional development or career progression. Neither of these has been properly thought through in Slovakia.

The largest provider of training for teaching and specialist staff is the Teaching Methods Centre, which is directly financed from the state budget and so occupies an advantageous position over the other providers. Given its superior status, the Teaching Methods Centre is expected to provide a sufficient range of continual education courses for all categories of teaching and specialist staff. However, the Learning Makes Sense initiative (Miškolci 2018b) found the centre was unable to fulfil this role. Staffing issues mean it is unable to run all its accredited and published courses. Furthermore, it has frequently been criticized for the quality of the courses it provides, mainly for failing to keep up-to-date, being too theoretical and not providing enough guidance and linking sufficiently to practice. Moreover, the data obtained by the Learning Makes Sense initiative shows that its advantageous position negatively impacts the system of continual education both in terms of variety and quality. The situation is particularly problematic regarding secondary vocational education as the centre is unable to provide free courses to specialist subject teachers and special training supervisors. Meanwhile secondary vocational schools

lack the financial resources to cover the cost of buying in training from companies. Some vocational secondary schools in Slovakia have to rely on company philanthropy, with companies occasionally providing free training to secondary school teachers (Miškolci 2018b).

Another Learning Makes Sense survey (Miškolci 2018a) showed that 42.9% of primary and secondary teachers in Slovakia had received no training and had not undertaken an accredited or non-accredited continual education course in the last year.

5. SHIFTING TO ONLINE TEACHING AND LEARNING DURING SCHOOL CLOSURES

The quality of the online teaching and the ability of schools to adopt to the new situation is captured in a survey carried out on 25–26 March 2020 on a representative sample of Slovak parents (Gdovinová 2020). At that time, almost two-thirds of parents stated that teachers were merely sending their children homework and that there was no interactive teaching. Less than 20% of parents said their child was receiving interactive online teaching. But more than half of parents (58 percent) stated that their child's teacher was communicating daily with their child. Only 7 percent of parents stated that there was no communication between their child and the teacher. After the first wave of the pandemic schools reopened from 1 June, but only on a voluntary basis and only nursery schools and the first five years of primary school. Other students were not given the option of returning to school.

The situation regarding overall responsibility for the education sector began stabilizing in the second half of April, when the state issued guidance on how to proceed in the emergency situation. One of the first such instruments was Guidance on primary school assessments during the emergency situation (MŠVVaŠ 2020c). The guidance stipulated that the interim assessments during school closures would not be done by grade classification. In all primary school and lower secondary years, the final assessment could be given in the form of a written assessment. This broadened the scope for the use of written assessments, as previously the law had only allowed them at primary level. The guidance also advised schools not to assess students on the basis of tests and written exams during the school closures. Importantly, during the emergency situation, no student was to be assessed as weak or unsatisfactory – or in other words, could not be made to repeat the year.

Guidelines were also drawn up on primary education content and the organization of the syllabus during the disrupted 2019/2020 school year (MŠVVaŠ 2020b). These fundamentally altered the structure of general education content. Prior to this, each of the education areas had been equal in weight, but under the guidance education areas were divided into “main education areas” (language and communication; mathematics and working with information; people and society; people and nature) and “complementary” education areas (people and values; people and the world of work; art and culture; health and exercise). The teaching of main education areas was to be planned in line with the recommended amount of time students should spend on that area per week under conditions of distance learning (5 to 8 hours for years 1 to 3; 8 to 10 hours for years 4 to 5; 10 to 15 hours for years 6 to 7; and 12 to 15 hours for years 8 to 9). The recommendation was that the complementary education areas should become additional learning over and above the relevant learning load or integrated into the content covered in the main education areas. Teacher-assessed exercises were only to be set for the

main education areas. There were to be no compulsory tasks for students relating to the complementary education areas. During the time of school closure, students were to study via distance learning organized by the primary school, depending on the students' and teachers' resources (with work being delivered and received via online platforms, telephone, post or other means).

The State Education Institute modified the learning content for the education areas to reflect the new guidelines and ensure that schools prioritized the teaching of the basic content of the main education areas. The changes were set out in a document entitled "Education content for primary schools during the emergency school closures" (ŠPÚ 2020). The National Institute for Education also launched a platform, www.ucimenadialku.sk, summarizing all the information related to distance learning, including information and links to online education platforms and tools (Microsoft Teams, Cisco Webex, Edupage, Teemea, Google Hangouts, Google Classroom, Skype, Jitsi Meet, Viber, WhatsApp, Zoom, Moodle, Slido).

However, one of the great challenges with distance learning is ensuring that students from socially disadvantaged backgrounds, marginalized communities, or minorities are not left out. The figures indicate that during the first wave of the pandemic 52,000 primary and secondary school students (7.5% of the student population) were not engaged in distant learning. Almost 128,000 students (18.5% of the student population) had no internet-based learning (Ostertágová, Čokyna 2020). That means that the problems caused by the transition to online learning did not just affect socially disadvantaged children or children living in marginalized communities. Online learning mostly consisted of tasks being sent out by email or other communication means. This type of online teaching is less effective than, for instance, direct online teaching. Just over 20% of the teachers surveyed taught directly online. According to the teachers, most of the problems with online learning were linked to students' lack of digital skills. The situation was particularly difficult in schools with a high proportion of students from socially disadvantaged backgrounds and in special primary schools. Consequently, a significant proportion of the student population had their right to education restricted.

CONCLUSIONS

As this report has shown, the preparedness of Slovak education to adapt to future challenges depends on multiple systemic factors that are evolving at varying speeds. In the conclusion of this report, we look at the factors we think are hindering or accelerating the ability of Slovak education to adapt to future challenges.

The first factor is the lack of continuity in education policy. This is partly a result of the political instability in Slovakia and the frequent replacement of education ministers in recent years. There is also a lack of consensus among experts as to the kinds of measures that are essential if Slovak education is to adapt to future challenges. This can be seen in the parallel existence of various initiatives aimed at reforming education and multiple (sometimes contradictory) reform policy documents, often issued with the minister or government's blessing. Slovakia seems to have lost its way in terms of deciding which systemic changes should be implemented in the future, and responds disproportionately to partial external demands or pressures emanating from various national interest groups or international political structures and organizations.

The current state of the legislation, as well as of education governance and financing, is partly a consequence of the layers of various uncoordinated and ill-thought out goals and measures. One example is the chaotic decentralization of education governance that has resulted in the opaque and non-transparent financing of education and education institutions, as shown in Figure 1 of this report.

The uncoordinated and non-transparent communication between the central and local levels of education governance presents a threat to the functionality, adaptability and flexibility of the education system. This is particularly evident in the degree of autonomy wielded by Slovak schools, which is unusual both in terms of the legislation and internationally. This autonomy can be seen in both the wide-ranging powers of school principals and teachers and the fairly wide scope of curricular autonomy. One might assume that the latter could act as one of the drivers of adaptability to future challenges; in practice, though, the autonomy is largely fictitious in that school principals are hampered by incompetent sponsors and lack the additional resources that would enable them to exploit their autonomy. The same is true of the curricula. The content-heavy state curricula prevent schools from making use of their allocated lessons or from designing new innovative subjects that would enable them to improve student adaptability to new education demands. And when it comes to teachers' professional development, the tension between central and local governance has led to accredited courses provided by the state monopoly being favoured over non-accredited courses from a range of providers capable of developing more up-to-date and flexible education courses.

The internal flexibility and openness of schools could compensate for the rigidity and uncoordinated nature of the system by ensuring dynamic, productive, inclusive learning cultures. But there is not much evidence of this in Slovakia. In comparison with teachers in other countries, a smaller proportion of Slovak teachers places a very high emphasis on academic success. The share of Slovak students reporting a high sense of school belonging is also smaller. The situation regarding professional culture in schools is no better either. Of all the OECD countries, Slovakia has the smallest proportion of teachers participating in collaborative professional learning.

In terms of adaptability to future challenges, school learning cultures should be targeted at supporting specific dispositions. One of these is the ability to learn to learn. Only a quarter of higher secondary students in Slovakia reported being taught how to learn at their school. There are also differences between sponsors in their efforts to encourage critical thinking, the ability to learn, to think in context, and the capacity to think analytically. State schools stress this the least, while church and private schools emphasize it more. Nonetheless, these are still marginal goals in education.

The opportunities for promoting the characteristics required to adapt to future challenges are limited. It is unsurprising then to find that research into the educational outcomes of Slovak students has highlighted poor interpretation skills (PIRLS), application skills (TIMMS), evaluative and reflective skills (PISA), and analytical skills (T 9). Consequently, students are ill prepared for dynamic change and future challenges.

The values held by young people in Slovakia are no help in fostering adaptability to future challenges either, with surveys showing the younger generations are increasingly distrustful of the state and institutions, hold rigid values, are intolerant and support extremism. Young Slovaks are among the least engaged in leisure pursuits in Europe and are least likely to be actively involved in civic engagement and in preventing climate change. The activation potential of Slovak youngsters regarding future challenges is therefore extremely low.

These disadvantages of Slovak education are barely discussed in school circles. There is little consideration of the inadequacies because there is no system for sharing feedback or engaging in self-reflection and self-evaluation. This presents a great problem at a time when schools should be introducing internal changes to ensure that students end up being better prepared to tackle future challenges. However, self-evaluation processes are still in their infancy in Slovakia.

A compressed example of how the education system and education governance operate in Slovakia is the emergency situation resulting from the COVID-19 pandemic. Health risks – as well as environmental risks – will continue to be a future challenge for society. Slovakia has shown how unprepared it is to tackle these challenges in education. Typically, this lack of preparedness has been accompanied by political instability. The state eventually began introducing guidelines but not until schools had been left to spontaneously “grapple” with the new situation for many weeks amidst the complete lack of coordination. The selective nature of the education system was evident in the digital exclusion of large numbers of students from the education process. The emergency situation fully revealed the extent to which the Slovak education system is unprepared for future challenges.

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