The Practice of Assessing the Quality of Student Education: Perspectives from Finland, Canada, and Hong Kong

Tatiana N. Obukhova

Abstract

Critically reviewing the national systems for assessing the quality of education in Finland, Canada, and Hong Kong, the authors consider key issues related to the regulation of quality assessment of general education. The purpose of the study is to analyze foreign practices in the quality assessment regulation (general education) existing in the leading countries in the National Systems Performance Rating. Using the method of content analysis of normative documents, the authors determine the main features of the systems for assessing the quality of general education. They also identify the principles and approaches to assessing the quality of education in the studied countries, which have differences and depend on the goals and objectives of the program that defines the development strategy of the general country-specific education. The authors conclude that the quality assessment focused on the general education is the main criterion for the effectiveness of the functioning and development of the education system in the countries under analysis, and this is reflected in government programs that regulate activities in the field of education. The research also clearly shows that Finland and Canada use softer levers of education management, which give educational institutions more freedom. While in Hong Kong, more “tough” ones are used. In particular, Hong Kong relies on strictly regulated standards and procedures for ensuring the quality of education. The authors state that the practice of regulating the assessment of the quality of education in the studied countries should be taken into account in the development of regulatory and instructive documents governing activities to assess the quality of general education in the Russian Federation.

Keywords: Quality of education, regulation, assessment, system, general education, international systems.

1 Institute of Education Management of the Russian Academy of Education, Moscow, Russia. Email: chaiko@iuorao.ru
Introduction

The topic of assessing the quality of general education is reflected in many research papers of those authors who study the features of the organization of monitoring educational achievements in Australia, the USA, Chile, France, the Czech Republic, Norway, the United Kingdom of Great Britain, and Northern Ireland (Bolotov, et al., 2016).

This article focuses on international practices in regulating the system of assessing the quality of general education in the three countries that are leaders in the Global Index of Cognitive Skills and Educational Attainment, showing high results in international monitoring studies of the quality of education TIMSS (Trends in Mathematics and Science Study), PIRLS (Progress in International Reading Literacy Study), PISA (Program for International Student Assessment): Finland, Canada, Hong Kong (Pearson, 2017).

The purpose of this article is to analyze international practice in the field of regulating the system of assessing the quality of general education in these countries. In addition, the authors are considering the possibility of using the best foreign experience in the implementation of the activities of the national project “Education” to join the Russian Federation in the “number of ten leading countries of the world in the quality of general education” (Presidium of the Council ..., 2018).

There is a strong body of the research devoted to the issues of education quality and assessment around the world, covering general issues and approaches (Potemkina, Pudenko, & Rudneva, 2017; Banta, 1991; Montt & Borgonovi, 2018; Goff, 2017; Koch, 2013; Ricci, 2004; Schildkamp, Visscher, & Luyten, 2009; Hofman, Dijkstra, & Hofman, 2009), as well as such countries as the United States (Stasz, Bodilly, & Remes, 2004), Qatar (Al-Thani et al., 2016), Singapore (Lim & Tan, 1999), Japan (Kuramoto & Koizumi, 2018), South Korea (Kwon, Lee, & Shin, 2017), Australia (James, 2003), Lithuania and Latvia (Barkauskaitė, Žygaitienė, & Miškinienė, 2013; Bethell & Kaufmane, 2005).

In the countries of our research interest, one could identify the following groups of published research: (i) Finland (Laukkanen, 1998; Sahlberg, 2007 Webb et al., 1998), (ii) Canada (Norcini et al., 2011; Suurtamm & Koch, 2014; Volante, 2007; Volante, 2008; Jang & Sinclair, 2018), and (iii) Hong Kong (Gopinathan & Lee, 2018; Vyas, 2018; Lee & Gopinathan, 2003; Chan, 2007; Chong, 2012; Chou, 2012).

The novelty of our research is that it critically reviews the existing approaches to education quality assessment, with the purpose of providing further recommendations on how their experiences could be used in the Russian Federation. Since there is no such research available, our paper makes a significant contribution to the existing literature.

Materials and Methods

To conduct a study on the regulation of the system for assessing the quality of general education in international practice, the authors use a problem-analytical review that implements methods of content analysis of regulatory documents on the quality of education, contextual analysis and assessment of models of foreign experience using the example of Hong Kong, Canada, and Finland.
The object of the study is the regulatory legal and instructive documents of these countries, which regulate the procedures for assessing the quality of general education, primarily through the prism of issues that are problematic for Russian education, as reflected in our published research (Maron, Koroleva, & Chaiko, 2019; Chaiko & Smyslova, 2019).

**Results and Discussion**

The problem of assessing the quality of general education is one of the most relevant for the entire education system of the Russian Federation. Ensuring the global competitiveness of Russian education, becoming one of the ten leading countries in the world in terms of the quality of general education, are the main goals in the field of education defined by the Decree of the President of Russia (President of the Russian Federation, 2017).

The basis of this study is the analysis of international practice of regulating the issues of assessing the quality of general education in Finland, Canada, and Hong Kong. The program documents developed in recent years in these countries are aimed at developing the education system through its reform, the main criterion for the effectiveness of which is the assessment of the quality of general education.

In all the studied countries, documents have been developed that regulate the system of assessing the quality of general education, and the object of assessment is the entire system of general education (internal and external evaluation).

Table 1 is a compilation of general information reflecting the international practice of regulating the quality assessment of general education in Finland, Canada, and Hong Kong.

**Table 1.** The regulatory system for assessing the quality of general education in Finland, Canada, and Hong Kong.

<table>
<thead>
<tr>
<th>Analyzed indicators</th>
<th>Finland</th>
<th>Canada</th>
<th>Hong Kong</th>
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</thead>
<tbody>
<tr>
<td>Availability of federal educational standards</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>
| Document reflecting federal educational standards | New core curricula for preschool and basic education | No              | 1. A new academic structure.  
2. Guides for the development of curricula for schools. |
2. Memorials of the Department of Education |

Source: Compiled by the Authors.
A structural analysis of the regulatory documents listed in Table 1 allows us to say that the principles and approaches to assessment in these countries differ and depend on the goals and objectives of the program document that defines the development strategy of the education system (including general education).

**Finland**

Thus, the assessment of the quality of education is part of the daily school work in Finland. The main types of student assessment are continuous assessment throughout the course of study and final assessment. The goal of continuous assessment is to help students build their own educational path. Based on the results of the assessment, which takes place at least once a year, each student receives recommendations (Finlex, 1998).

Finland does not have national tests for students in basic education. Instead, the assessment of the quality of student education is carried out by subject teachers. It is they who are responsible for the assessment in their subject area, on the basis of which students are selected for further education. The same applies to grades in the certificate of basic education at the end of grade 9. On the basis of grades made by subject teachers in certificates of basic education, students are selected for further education.

The new curriculum, developed and approved by the Ministry of Education and Culture, emphasizes the importance of a variety of student assessment methods, especially assessment, which guides and facilitates learning (CMEC, 2020). Particular attention is paid to feedback from students, their parents about individual progress in teaching students, not only through certificates and reports but also in other ways of providing information on the progress of each student. At the end of each school year, students receive a report on the results of the school year, which gives a quantitative assessment in each subject about how well the student achieved the goals set for the school year.

It should be noted that the nature of the assessment of learning outcomes in schools is encouraging and supportive. Finland does not have national tests, school ratings, or inspection systems.

However, in order to further improve the education system, as well as to obtain objective information about the state of the education system and the quality of education in Finland, the Government of Finland and the Ministry of Education and Culture approved the National Plan for assessing the quality of education for 2016-2019 (CMEC, 2019; CMEC, 2020; Government of Canada, 2014). This national plan was prepared by the expert agency “Center for the Assessment of the Quality of Education in Finland”. This is a strategic document aimed at assessing and improving the functioning of the educational system of Finland for a number of indicators that are most significant in the national context. The document was developed on the basis of regulatory acts of Finland, containing provisions on assessing the quality of education and measures to improve it on the basis of this assessment: the law on childcare, the basic law on education, the law on high school, etc.

This plan consists of a description of the areas that should be evaluated in the education system in order to improve the quality of training of students. The assessment of each area is highlighted in a separate project and corresponds to the schedule approved by the Ministry of Education and Culture on March 2, 2016 (CMEC, 2020).
The projects proposed in the plan include twenty-nine activities to audit the quality of education in universities, ten of them assess the results of training in vocational education programs (including those being implemented in high school), and five of them focus on general education. The plan also involves an audit of the self-assessment procedure and quality control of work in organizations of general secondary (basic) education (1–9 grades) and the senior level of education (10–12 grades).

In terms of assessing the quality of education, one can identify four areas that have complementary goals and prevailing for the education system in Finland (Sahlberg, 2007; Shirshova, 2015):

- Improving the quality of student training and developing competencies through the assessment procedure: improved assessment tools should be introduced, the purpose of which is to identify the quality of learning outcomes (student training) and develop competencies at all levels of education;
- Developing the education system through the evaluation procedure: evaluation activities are needed to provide information on the functioning of the educational system and its policies;
- Attracting interest in socially significant topics through the assessment procedure: it is necessary to conduct an assessment aimed at socially significant phenomena that affect educational goals;
- Support for educational organizations in assessing quality based on improved methodologies: it is necessary to support educational organizations seeking to independently assess the quality of education and training of students and disseminate best practices based on the results of such an assessment at all educational levels. The procedure for assessing the quality of education should include, in particular, such criteria as “attracting interest in socially significant topics.”

Canada

The Pan-Canadian Assessment Program is the main tool for assessing the education system at the federal level (CMEC, 2019). This program provides extensive testing of students throughout Canada. It is designed as part of the work of the Council of Ministers of Education of Canada to understand how well the education system meets the needs of students and society. The results of the Ministry of Education of the provinces are used to analyze the effectiveness of training programs and improve assessment tools. Since school programs are different in different parts of the country, it is difficult to compare student performance. Therefore, this test allows one to compare the results of students in different parts of Canada.

The program tests students’ knowledge in three areas: reading, math, and science. Each time, special attention in testing is given to one of three types of literacy: mathematical, reading, or natural science. In 2019, this direction was “mathematical,” and the other two were studied less thoroughly. About 32,000 eighth-graders took part in testing, which was conducted in April-May 2019 (CMEC, 2020).

The sample size allows evaluating the results both at the state level and at the provincial level. These tests do not replace territorial assessment tools, but they complement them. At the school curriculum level, local governments can compare their results with the results of Canada-wide testing and PISA testing.
The program also explores the conditions in which students study math, reading, writing, and science. This information is collected through a survey of students, teachers, and school leaders. Students answer questions regarding their learning environment and the relevance of the subject to them.

Schools and classes are selected for participation randomly in each province and territory. There are two types of questions in the tasks (closed and open). There are questions on knowledge and skills, as well as questions about the students themselves, their life in the school and beyond. Testing also includes questions for school directors and teachers regarding their teaching methods, school life, etc. In total, testing takes about 2 hours, special training is not required. The results are anonymous and do not affect student grades.

It should be noted that the policy in the field of assessing the quality of education is carried out by each province and territory on the basis of federal recommendations, but it has its own characteristics.

**Hong Kong**

The unified system for assessing the quality of general education in Hong Kong is multilevel and allows monitoring students’ knowledge at various levels of school education. Also, each of its main stakeholders is able to solve problems and achieve goals (Hong Kong Examination and Assessment Authority, 2013).

Within the framework of this educational system, students should: (1) understand their own learning objectives and the level of their own progress; (2) understand your own strengths and weaknesses in learning; (3) develop the ability to identify one's own learning needs and ways to improve learning strategies.

Then, teachers and school administrations are required to: (1) understand the strengths and weaknesses of students in the learning process; (2) provide quality feedback to students about ways to improve their learning outcomes; (3) evaluate the developed curricula and applied pedagogical practices, take the necessary measures to correct them to increase the effectiveness of teaching; (4) understand and consider the needs of specific students in the learning process.

In addition, parents should: (1) understand the strengths and weaknesses of their children; (2) to collaborate with the school in order to improve the educational attainment of their children; (3) to formulate correct (reasonable) expectations from their children.

As for the Government, it should: (1) evaluate students’ achievement of approved standards in specific areas; (2) receive information on the quality of education and the effectiveness of the education system (Education Bureau, 2009; Education Bureau, 2014; Education Bureau, 2017).

In accordance with the above goals, the assessment of the quality of general education can be divided into two types – internal (intra-school) and external assessment. An internal assessment is carried out in order to obtain information on the course of training, on the educational needs of students. It is used to formulate/adjust the curriculum, teaching methods and develop recommendations for certain categories of students. In addition, this type is aimed at improving the effectiveness of training and teaching. The main principle is to minimize quantitative assessment,
more attention to flexible formative (formative) assessment. A written exam is only one way of assessment, which is conducted in accordance with the school curriculum.

An external assessment is carried out at the state level and includes an assessment of the level of basic competencies of students and an assessment of the education system. The purpose of the external assessment is to monitor the effectiveness of educational policies.

Basic competency assessment includes the territory-wide system assessment mechanism, the student assessment repository, as well as the web-based learning and teaching support. Based on the results of this assessment, experts prepare recommendations for taking measures aimed at improving the education system (for the short, medium and long term).

Conclusion

Assessment of the quality of general education is the main criterion for the effectiveness of the functioning and development of the education system in these countries, which is reflected in government programs that regulate activities in the field of education.

At the same time, Finland and Canada use softer levers of education management, which give educational institutions more freedom. While in Hong Kong, more “tough” ones are used. In particular, Hong Kong relies on strictly regulated standards and procedures for ensuring the quality of education.

In the field of education of the Russian Federation, to ensure the quality of general education, both “hard” (laws, by-laws) and “soft” (methodological recommendations, newsletters, etc.) measures are used to control education (Tikhonov, 2016; Beans, 2019; Waldman, 2015).

Therefore, the practice of regulating the assessment of the quality of education in the studied countries should be taken into account in the development of regulatory and instructive documents governing activities to assess the quality of general education in the Russian Federation.

In Finland, one should focus on the new main curricula for preschool and basic education, in which special attention is paid to the transversal competences of students, focuses on joint practice in the classroom, where students can work with several teachers at the same time during the study of projects based on phenomena; as well as the National Education Quality Assessment Plan for 2016-2019. In Canada, Russian law-makers and government experts in educational management could methodologically benefit from the Pan-Canadian Assessment Program. In the practice of Hong Kong, we highly recommend studying how the assessment is conducted by looking into SBA (school-based assessment), HKDSE (Hong Kong Diploma of Secondary Education Examination), and STAR (Student Assessment Repository).

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