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Accountability in education: Meeting our commitments

Student accountability in Post-soviet countries

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Abstract

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This paper covers the issues of student accountability with special regard to post-Soviet countries, especially Armenia, Belarus, Kazakhstan, Latvia, and Russia¹. Primary, secondary, and tertiary levels of education are examined. These countries share a common past but have also taken different paths regarding policy choices on student performance evaluation, assessments, and the introduction of national policies on student accountability (e.g. nation-wide examinations).

Key words: student accountability, post-Soviet, higher education, secondary education

¹ The selected states represent the geographical diversity of the former USSR and to some extent its socio-cultural variety as well: South Caucasus (Armenia), Central Asia (Kazakhstan), Northern Europe (Latvia), Eastern Europe (Belarus), and Eurasia in general (Russia).

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1. Introduction

1.1 Definition of student accountability

Student accountability refers to the responsibility of students for their actions, productivity, and results. In this sense, student accountability is the basic concept grasped by the education laws in all countries. The literal translation of the term ‘accountability’ in Russian (*podotchyotnost’*) and Belarusian (*padspravazdačnasć*) consists of two parts: ‘under’ and ‘report’. Generally, it means ‘the obligation to be held to account/report to somebody.’ According to Ilyin et al. (2014), synonyms for the Russian language concept of ‘accountability’ in policy discourse include ‘responsibility’ and ‘obligation.’ Related concepts in government are the notions of punishment for wrong actions and public censure (blame) for mistakes.

Direct translations of ‘accountability’ are rare and cannot be found in the key legislation on the education system. In the major education legislation of Armenia, Belarus, Kazakhstan, Latvia, and Russia, student accountability appears as the “responsibilities of the students.” System-level legislation also frames this responsibility of students as ‘obligations.’ For example, these include the obligations of the student to gain knowledge and to take care of their health. The legislation also includes articles on disciplinary and administrative penalties, which will be discussed later in further detail.

1.2 Types of student accountability

In this report, we focus on external and teachers’ assessments. The latter implies continuous assessment of students’ learning outcomes by the teachers working with a given group of students. It most commonly includes such assessment methods as oral presentations, in-class tests, written homework, portfolios, etc. A variety of assessment tools and criteria are also used to inform students of their progress: average weighted scores, criterion scores, reviews, comments, peer assessments, etc. The usual pattern of this “internal” accountability is formative assessment, a set of formal and informal procedures executed by a teacher to evaluate student progress in order to enhance their further academic attainment and to modify teaching techniques and learning approaches. Continuous (formative) assessments used by teachers include such assessment methods as tests, observations, homework, and oral questioning (Rey, 2010). Formative assessments are more valid than external tests from the perspective of the period observed and cumulative achievements measured. For instance, on the problem of formative assessment (see Black and Williams, 2009).

However, teacher-based assessments have also been criticized as being unreliable because of their biased nature. Grading practices also commonly vary widely from school to school and cannot be compared (OECD, 2011).

By ‘external assessment,’ we mean the assessment tools and mechanisms that are used outside of schools, usually by a national or non-commercial agency. The usual forms are standardized examinations (administered in written form), independent monitoring, and testing.

A considerable part of this report discusses external national testing and high-stakes assessment (high-stakes standardized examinations). The consequences of these tests determine the ability of a student to transition between levels and pursue future education and professional goals.

1.3 Description of the primary, secondary, and post-secondary levels in Post-Soviet countries

Children usually enrol in the basic education program between the ages of 6 to 8 years old and graduate at the age of 17 or 18. Table 1 shows the design of the education systems in five selected countries.

Table 1. The design of the education systems in Armenia, Belarus, Kazakhstan, Latvia, and Russia

	Duration of Compulsory Education	Primary Education (ISCED 1 Level)	Basic Secondary Education (ISCED 2 Level)	General Secondary Education (ISCED 3 Level)	Professional Secondary Education (ISCED 4-5 Level)	Higher and Postgraduate Education (ISCED 5-8 Level)
AM	1999 - 10 years 2014 -11 years	Grades 1 to 4 Age level from 7 years	Grades 5 to 9 Certificate/diploma awarded: <i>Himnakan yndhanur krtutyann attestat</i> (Certificate of Basic Education)	Grades 10 to 12 Certificate/diploma awarded: <i>Mijnakarg Yndhanur Krtoutian Attestat</i> (Certificate of full Secondary Education)	After grade 9 - from 2 to 3 years After grade 12 - from 1 to 1.5 years	Higher education: Bachelor's degree Specialist's degree Master's degree Further education: Candidate of science PhD
BY	1999 - 9 years 2014 -9 years	Grades 1 to 4 Age level from 6 years	Grades 5 to 9 The National Certificate of Educational Achievement, which gives access to complete general secondary, basic vocational education or specialized secondary education.	Grades 10 to 11 Diploma of complete general secondary education.	After 9 or 11 from 1 to 3 years Diploma of vocational education or Diploma of specialized secondary education	Higher education: Specialist's degree Master's degree Further education: Candidate of Science Doctor of Science
KZ	1999 - 9 years 2014-10 years	Grades 1 to 4 Age level from 6 or 7 years	Grades 5 to 9 The National Certificate of Educational Achievement, which gives access to complete general secondary, basic vocational education or specialized secondary education.	Grades 10-11 Diploma of complete general secondary education.	After grade 9 Initial vocational education - from 2 to 3 years Secondary vocational education - from 3 to 4 years	Higher education: Bachelor's degree Further education: Master's degree PhD

LV	1999 - 8 years 2014-11 years	<p>Grades 1 to 9 Age level from 6 years Students receive a certificate of basic education and a transcript of their school record. These documents attesting primary education entitle the student to continue education in any secondary level education program.</p>		<p>Grades 10 to 12 Pupils receive a diploma of general secondary education and a transcript of their school record. Assessment in subjects that have a centralized examination is attested by a certificate of general secondary education.</p>	<p>Basic education last 1-2 years. Students get a certificate of vocational basic education. Vocational secondary education for those who completed general (4 years) or vocational (last 1-2 years). Students get a diploma of vocational secondary education.</p>	<p>Higher education: Bachelor's degree Master's degree BA and MA can be professional and academic Further education: PhD</p>
RU	1999 - 10 years 2014-11 years	<p>Grades 1 to 4 Age level from 6 to 7 years</p>	<p>Grades 5 to 9 The certificate/ diploma of basic general education, which gives access to complete general secondary, basic vocational education or middle-level professional education.</p>	<p>Grades 10 to 11 Certificate/diploma of complete general secondary education.</p>	<p>after grade 9 or 11 Diploma of vocational college Program for skilled workers and employees: after 9 - 3 years after 11 - 1 year Program for mid-level professionals after 9 - from 3 to 4 years after 11 - from 2 to 3 years</p>	<p>Higher education: Bachelor's degree (applied and academic) Specialist's degree Master's degree Further education: Candidate of Science Doctor of Science</p>

Source: developed by the authors

Table 2 shows key indicators of the development of the education system in five countries. In Armenia, Belarus, Kazakhstan, Latvia, and Russia, tertiary education has become universal, although the share of full-time students varies from 46% in Russia up to 73% in Latvia. Thus, the majority of 17-25 year-olds go through the tertiary admission system.

In the Baltic states, including Latvia, the higher education system is binary (universities and colleges). Two tracks (professional and academic higher education) also exist in Latvia and Russia. In both cases they are not institutionalized, thus HEIs can run both types of programs.

Table 2. Key indicators of the education systems in Armenia, Belarus, Kazakhstan, Latvia, and Russia¹

	Gross enrollment ratio, primary, both sexes (%)		Gross enrollment ratio, lower secondary, both sexes (%)		Gross enrollment ratio, upper secondary, both sexes (%)		Gross enrollment ratio, tertiary, both sexes (%)		Effective transition rate from primary to lower secondary general education, both sexes (%)	
	2000	2014	2000	2014	2000	2014	2000	2014	2000	2014
AM	98,5	..	93,6	..	83,0	88,1	34,9	44,3	..	99,9
BY	113,1	99,0	98,1	104,5	..	113,2	54,6	88,9	99,9	98,4
KZ	96,4	111,3	91,7	108,8	98,1	98,0	31,7	48,5	98,9	99,7
LT	99,9	100,4	87,8	115,3	96,9	115,4	56,6	67,0	99,5	98,3*
RU	102,8	98,6	92,4	98,7	..	105,1	55,8	78,7	99,3	99,8*

¹Data given are for 2013

Source: Based on UNESCO statistics (<http://uis.unesco.org/>)

2. National legal frameworks including student accountability

2.1 The Soviet legacy

In general, one cannot underestimate the significance of dependence on the Soviet model in education or the efforts of post-Soviet states to rid themselves of it. Thus it is relevant to describe the crucial determinants of the Soviet legacy.

In the 1930s, the new Soviet state claimed its authority over the educational system and unified teaching methods and curriculum. Several agencies (party, trade unions, pioneers, etc.) attempted to act as social institutions, but in fact they functioned as supervisory bodies with the ability to regulate and penalize (Kasprzhak and Levit, 1994).

Pedagogical theorists aimed to curtail teachers' freedom of action. The Soviet Union had a common curriculum and schedule for all cities and rural areas throughout the country: every school shared the same unified academic year. The government introduced uniform requirements for scheduled training sessions for teachers (accompanied by a reduction in teaching load) and completely eliminated all in-class pedagogical experimentation. The main goal was to unify and standardize the entire educational process and to abandon pedagogical innovations in favour of the strict administration and regulation of all school life (Gurkina, 2001).

The government's rationale was that only such conservative schooling could educate "students in the spirit of communist morality" (Medynskiy, 1952), thereby adding to the numbers of "Soviet cultural workers." Under such a system, inspection bodies were needed to ensure that the learning process did not deviate from the unified

plan, which guaranteed quality assurance and the desired results. The teacher issued grades and provided written assessments of students, which were then signed by the school principal.

Any description of Soviet student accountability would be incomplete without mentioning the responsibility of children and youth to the wider society based on All-Union ‘non-institutional’ organizations, especially the All-Union Pioneer Organization (*pioneriya*). This organization engaged people ages nine to fifteen. Before that age, at seven years old, first-graders were accepted into the children’s “October” movement (members were called *oktyabrayata* [*Little Octobrists*]). Young Pioneers were responsible for his or her own moral character as well as other members of the community. Honesty, strong work ethic, patriotism, and devotion to the Communist Party were among the main commitments that a Pioneer must carry out. Graduation from the organization was followed by entering the *Komsomol* organization (All-Union Leninist Young Communist League) between the ages of 14 to 28. *Komsomol* was a youth wing of the CPSU (Communist Party of the Soviet Union). Like the Pioneers and Octobrists, the members of this organization had moral and ideological obligations. Expulsion from the organization served as one of the major penalties available to the authorities at the school or local level to manage the behaviour of the children and youth. Mostly, this ‘community part’ of student life covered personal non-academic activities, as well as ethics and morality, yet these boundaries were not always entirely distinct.

The ‘academic’ portion of student life was regulated as well. Although the Soviet post-secondary admission system was unified, the requirements between different institutions varied significantly. The admission system specified that disciplinary exams would be proctored at particular HEIs. Thus, each HEI conducted face-to-face exams in several subjects based on the specified field of study. Exams could be written, oral, or both.

HEIs usually held examinations at the same time, so it was difficult for students to make a second attempt to take an exam at another HEI. Thus, prospective students who failed the entrance exam had to wait until the next year to try again. The face-to-face format limited the opportunities to take exams in a region or city outside of a student’s home region. The territorial restraints significantly restricted mobility and mandatory job placement after graduation from HEI forced people to move from one place to another. Yet equality of access was one of the government’s priorities; the government sought to achieve this goal through multiple affirmative action tools. Nevertheless, the highest-achieving high school graduates usually had the chance to get into top-tier universities.

The dissolution of the USSR opened the door for reforms to the examination system. All the former republics faced severe economic decline after gaining independence. Thus, in most cases, governments liberated the education sphere to attract private funds, coinciding with the general move to the new market economy (Platonova and Semyonov, 2017). The labour market became tighter and the cost of leaving the education track for a student, either by dropout or entrance examinations, grew substantially (Bethell and Zabulionis, 2012). In order to maximize the chances for their children to succeed in education, families often turned to private tutoring.

High demand for higher education along with marketization led to corruption, especially at the transit stage from school to university (see e.g. Heyneman, 2009). Osipyan (2009) claims that the university entrance process sometimes transformed even public universities into “family enterprises” where scholarship slots were distributed based on social ties (relatives and friends of HEI administrators and academic staff).

The lack of public trust in university entrance procedures caused governments to attempt to enhance transparency by introducing more meritocratic mechanisms protecting the rights of students (Bethell and Zabulionis, 2012). Bethell and Zabulionis state that reforms often adopted technological solutions which are not commonplace even in more ‘liberal,’ older (e.g. Western) systems (Ibid, p.12). The authors explore the principles behind these technologies in the aforementioned paper.

From a common sense point of view, these changes can be considered part of the liberalization of the rules of the game. The public attitude to the validity of traditional “Soviet -style” exams also changed. Along with the abovementioned arguments that justified the post-Soviet governments’ reformation of the examinations systems, these changes were nevertheless accompanied by significant public debates and resistance from professional communities. Belarus, Kazakhstan, and Latvia introduced national examinations in 2004, Armenia in 2005, and Russia piloted national examinations beginning in the 2000s and incorporated them nationwide starting in 2009 (see Table 4).

2.2 Student accountability in educational legislation in Post-Soviet countries

Over the past decade, there has been a general tendency towards greater evaluation and assessment of educational performance in post-Soviet countries. The general frameworks are provided by the Laws on Education in the case of Kazakhstan and Russia, the Code on Education in the case of Belarus, and the Laws on particular level of education in the case of Armenia and Latvia. Regarding student accountability, these laws regulate the students’ educational standards, rights, responsibilities, and penalties as well as the general admission requirements for students and pupils.

These system-level laws set the obligatory state standards for education in accordance with education level. Obligatory state standards of education determine the content of education and the students’ workload, attainment level, and duration of education². Moreover, the system-level laws oblige students and pupils to gain knowledge, skills, and competency in accordance with state standards of education. Students are obliged to fulfil the requirements of the internal disciplinary rules of the educational institute³. In Belarus, Kazakhstan, and Russia, among the student responsibilities obliged by education laws are responsibilities to maintain health and to seek moral, mental, and physical self-improvement⁴. Among other responsibilities, the education laws require students to respect the property of the educational organization⁵. Additionally, the legislation requires that disciplinary and administrative penalties, such as written notes on e-diaries, warning interviews, and, if necessary, reprimands, be imposed on students. In case of serious violations of discipline, police can be called and students could be dismissed from the school or higher educational institution according to proper procedure⁶.

The next level of the legislative framework regulating student accountability is educational standards. In Kazakhstan, the state obligatory standards of education (GOSO) establish general provisions, training requirements, and workload. These are developed according to the general rules guiding education in Kazakhstan⁷.

These rules on standard obligatory curriculum (GOSO) include requirements on the level of training that students will receive. Kazakhstan legislation approves six standards on particular levels of education: (1) pre-school, (2) secondary (primary, main secondary, general secondary), (3) technical and professional, (4) post-secondary, (5)

² In the case of Kazakhstan, see Article 56 of the Law No. 319-III ZRK dated 27/06/2007; in the case of Armenia, see Article 9 of the Law HO-160-N/10.07.2009/EN/I/29.05.2015 (official translation) dated 10/07/2009.

³ In the case of Kazakhstan, see Article 47 of the Law No. 319-III ZRK dated 27/06/2007; in the case of Armenia, see Article 20 of the Law HO-160-N/10.07.2009/EN/I/29.05.2015 (official translation) dated 10/07/2009.

⁴ In the case of Belarus, see Article 32 of the Code No.243-Z dated 13/01/2011; in the case of Kazakhstan, see Article 47 of the Law No. 319-III ZRK dated 27/06/2007; in the case of Russia, see Article 43 of the Federal Law No 273-FZ dated 29/12/2012).

⁵ In the case of Belarus, see Article 32 of the Code No.243-Z dated 13/01/2011; in the case of Kazakhstan, see Article 47 of the Law No. 319-III ZRK dated 27/06/2007; in the case of Russia, see Article 43 of the Federal Law No 273-FZ dated 29/12/2012).

⁶ For instance, in the case of Latvia see Article 54 of the Education Act LVA-1998-L-68560 dated 29/10/1998; in the case of Armenia, see Article 20 of the Law HO-160-N/10.07.2009/EN/I/29.05.2015 (official translation) dated 10/07/2009.

⁷ Order of the MoES of the Republic of Kazakhstan No. 484 dated 25/11/2014.

higher and (6) post-graduate. A similar composition of education levels is regulated by standards set in Belarus⁸. Besides GOSO, Model Regulations regarding the monitoring of student progress and testing in Kazakhstan outline basic rules of assessment for learning outcomes at all levels of education⁹. Three appendices explain the Model Regulations that provide (1) primary, main and general secondary education, (2) technical and professional education, post-secondary education, and (3) higher education.

Although all levels of education are regulated by these state standards, specification of assessment tools, criteria, and requirements differ greatly across the countries. In Belarus and Russia, educational standards for subjects at all levels of education are very specific and describe what students are expected to learn, how they should perform, and the tools for assessment of student knowledge, skill and competency (Worldbank, 2015). In accordance with the National Curriculum Framework and National Standards for General Education 2004, new reforms to student accountability were accepted into practice. They are the introduction of unified tests, the evaluation of trends in educational achievements, the combination of internal and external assessments of students' achievements, and the use of contextual information about learning conditions. However, the crucial problem for the implementation of a national standards goal is the absence of reliable standardized materials. Teachers must select and design measuring instruments, some of which may not be considered high-quality tests for progress assessment (Valdman et al., 2013).

Kazakh GOSO describes educational progress requirements, expectations of learning outcomes, and recommends classroom assessment activities, although detailed explanation of how to use these assessment tools and information on scoring criteria are limited (Worldbank, 2012).

In Latvia, there are also standards for each level of education, but in contrast to Kazakhstan they are quite specific. For instance, the State Standard of General Primary Education describes examination requirements and the Subject Standard specifies evaluation criteria for each specific subject (Catlaks, 2003).

In the Republic of Armenia, established state educational standards provide the basis for the assessment of the educational level and qualification of graduates irrespective of the form of education they have received and the institution in which they received it. The state standards for general education of the Republic of Armenia include: a) the state standard for preschool education; b) the state standard for secondary education; c) the state standard for special education; d) the subject standards for general education.

In Russia, Federal State Educational Standards 2012 regulate all levels of education. They provide requirements to the educational organizations that are accredited by the state. The standards include three major requirements for the structure of the education program, the financial and infrastructural conditions, etc., and learning outcomes. Given the variety of educational organizations and the scale of the system, public debate still remains on whether or not the federal standards should define the educational process to the extent they do. The standards are supposed to ensure the unity of the national educational system and coherence between the levels of education. These include requirements for program structure; requirements on the qualification of teaching staff, funding conditions, and sufficient facilities; requirements on educational outcomes.

Admission procedures are also regulated by the system-level legislation. In Russia, admission to the general secondary education and secondary professional education programs is free, while admission to higher education programs is competitive¹⁰. This is in contrast to Kazakhstan where the Law¹¹ establishes the competitive basis of admission to institutes that provide technical, professional, post-secondary, higher, and

⁸ Article 92 of Code No.243-Z dated 13/01/2011.

⁹ Order No. 125 dated 18/03/2008.

¹⁰ Article 55 of the Federal Law No. 273-FZ dated 29/12/2012

¹¹ No. 319-III ZRK dated 27/06/2007

post-graduate education programs. These differences in the admission process reflect different opinions of student entrance exams.

2.3 Institutions for student accountability: certifying and monitoring

The major institutions that monitor and assess students' learning outcomes are national agencies for quality assessment in education. Armenia makes use of a multidimensional system for ensuring student accountability. These administrative and research organizations aim to guarantee the development and implementation of student assessment. These include the MoES, the education programs center under the MoES, the National Institute of Education under the MoES, the Evaluation and Testing Center under the Prime Minister's office and the Education Management departments of the regional government (Valdman et al. 2013).

Bethell and Kaufmane (2005, 306-307) provide precise description of the entities responsible for student accountability in Latvia:

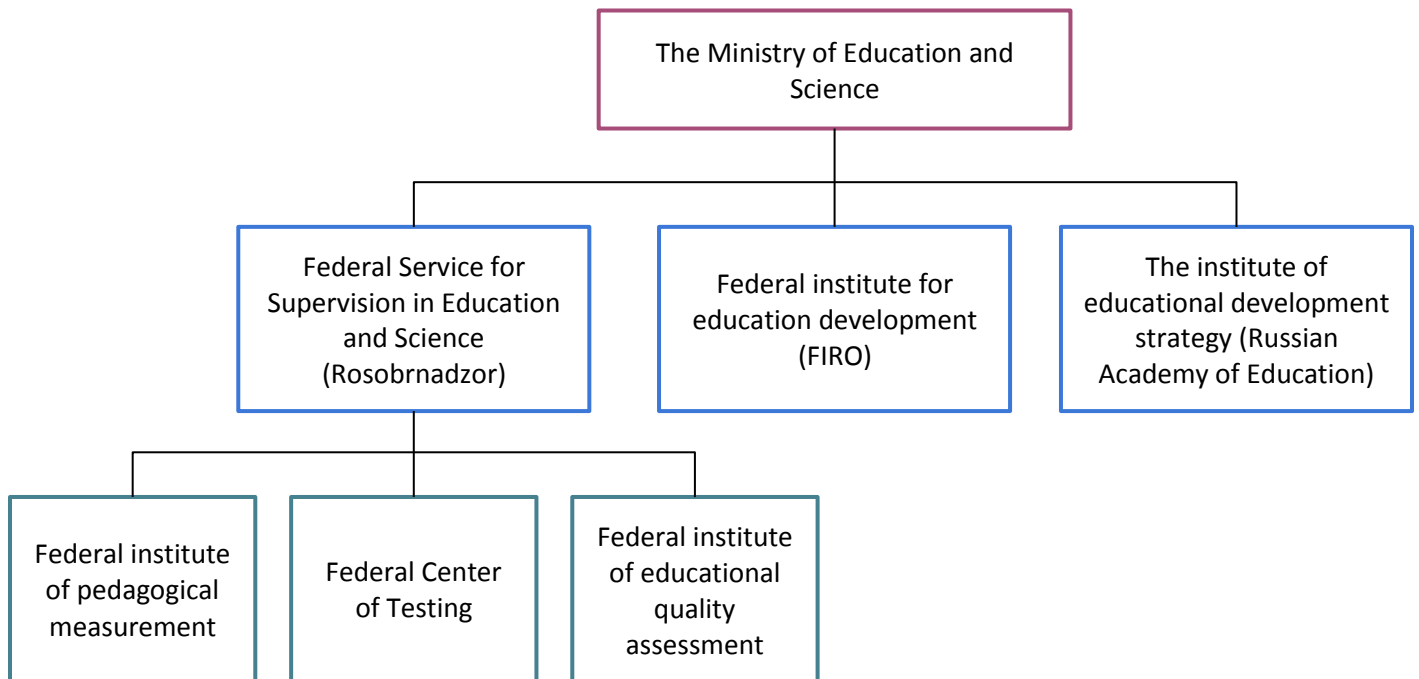
"In 1995, it was decided that a State Verification System should be developed so that uniform standards could be imposed and progress towards these standards could be monitored. Much of the work in developing the standards was delegated to the Curriculum and Examinations Centre, a new institution established in 1994 under the auspices of the Ministry. The Centre, known by its Latvian acronym ISEC currently has four main functions:

- *development of curricula and approval of teaching materials for general education;*
- *quality control through national examinations and tests;*
- *organizing the testing of state language skills for professional and official duties (from 2001);*
- *development of the system of further (in-service) education for teachers (from 2002) (MES, 2004).*

Within ISEC there are four 'units,' each responsible for one of the functions described above. The Examinations Unit is small with just ten permanent staff of whom six are subject specialists and four are technical staff. This unit's tasks include developing national examination programmes in accordance with agreed upon standards for general education and the preparation and conduct of national tests and centrally marked examinations. ISEC is also entitled to perform research in general education establishments—including the field of assessment (MES, 2004). The Examinations Unit is responsible for both formative and summative assessment of students in general education."

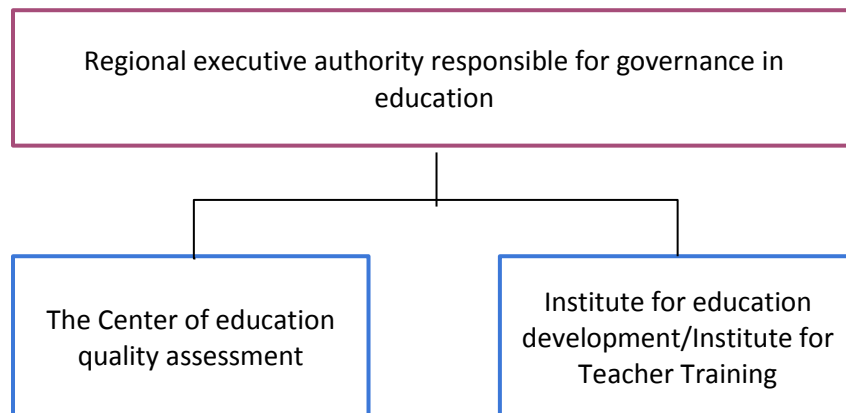
Due to its federal system, Russia has a hierarchical structure of assessment agencies. Figure 1 shows the federal Russian system of quality assessment in education (OSOKO). Figure 2 shows the most common regional-level system of OSOKO. Regional centres of educational quality assessment operate in at least 60 out of 85 regions (Bolotov et al, 2016). In 2012, *Rosobrnadzor* was established in Russia. The agency is responsible for quality assurance and fulfillment of educational legislation as well as the operation of national final attestation in the 9th and 11th grades. The Committee for Control in Education and Science of the MoES of the Republic of Kazakhstan has similar functions (Kaishygulova, 2012).

Figure 1. Federal-level system of education quality assessment in Russia



Source: Bolotov et al. 2016

Figure 2. Regional-level system of education quality assessment in Russia



Source: Bolotov et al. 2016

Table 3 shows the agencies that are responsible for university entrance exams in 15 former Soviet Republics. The authorities that are responsible for admission tests usually fall under the Ministry of Education (and Science), except the agencies in Azerbaijan, Armenia, and Uzbekistan. In Kyrgyzstan, the assessment centre is a non-government organization.

Table 3. University entrance exams: year of introduction and authority

	Year	Exam	Examination authority	Governance
AM	2005	The United Examinations (UE)	Evaluation and Testing Centre http://www.atc.am	Under the Prime Minister's Office
AZ	1992/2004	Standardized testing	The State Student Admission Commission http://www.tqdk.gov.az	Under the Office of the President
BY	2004	Centralized Testing (CT)	Republican Institute for Knowledge Control http://www.rikz.unibel.by	Under the Ministry of Education
EE	1997	Nationally standardised state exams	National Examination and Qualifications Centre http://www.ekk.edu.ee	Under the Ministry of Education
GE	2005	Centralized University Entrance Examinations (CUEE)	National Assessment and Examination Center http://www.naec.ge	Under the Ministry of Education
KZ	2004	Common National Testing (CNT)	National Center of Testing http://www.testcenter.kz	Under the Ministry of Education
KG	2002/2012	National Testing (NT)	Center for Educational Assessment and Teaching Methods http://www.testing.kg	Non-governmental organization
LV	2004	Centralised Examinations (CE)	National Examination and Curriculum Centre http://www.isec.gov.lv	Under the Ministry of Education
LT	2004	Matura examinations	National Examination Centre http://www.nec.lt	Under the Ministry of Education
MD	2006/2011	Central Baccalaureate Exam (CBE)	Agency for Assessment and Examinations http://89.32.230.147/noutati_ro/	Under the Ministry of Education
RU	2005-2009	Unified State Exam (USE)	Federal Centre of Testing http://www.rustest.ru	Under the Ministry of Education

TJ	2014	Central Entrance Exam (CEE)	National Testing Centre	Under the Ministry of Education
TM	-	No information available	No information available	No information available
UA	2006	External evaluation	Ukrainian Center for Education Quality Assessment http://testportal.gov.ua/	Under the Ministry of Education
UZ	1994	National Testing	The State Testing Centre http://www.dtm.uz	Under the Cabinet of Ministers

Source: Modified from Smolentseva et al. (forthcoming); Bethell and Zabulonis (2012).

3. Accountability tools: school level

3.1 School Entrance Procedures

Most post-Soviet countries have similar school entrance policies for primary students. Generally speaking, children enter school between the ages of 6 and 7.

For instance, parents in Latvia must send an application letter to school administrators when their children reach the age of 5. They may submit an application to several schools, but priority will be given to those who have a neighborhood residence permit or elder siblings in that particular school. Education Law, paragraph 17 stipulates that "each local government is obliged to ensure that children who have declared residence in the administrative territory of the municipality are able to obtain pre-school and primary education in the educational institution closest to the child's residence or the nearest educational institution" (Feldberga, 2012). Preschool preparation in Latvia is obligatory and in order to register a child at a preschool parents must go to the local government institution and submit an application.

A similar situation exists in Russia. For instance, in Moscow, parents can complete an application form for school as soon as their child is born via a special web-portal for provision of state public services. This service guarantees a high level of equal access to education for all and helps curb corruption. This integrated educational system will soon be introduced across the breadth of Russia¹². A few years ago in Moscow preschool was incorporated into the primary and secondary levels of education as part of a major reform process. The new organizational structure allows parents and school administrators to minimize the bureaucracy involved in the formal procedure of graduating from preschool and entering primary school.

According to the Belarusian Code of National Education, parents have the right to enroll their children at any comprehensive school. If they want their children to study in the gymnasium, they must first pass entrance exams. These include tests in Belarusian, Russian, and mathematics. An academic progress report is available upon request in the case of entry to a gymnasium or lyceum¹³.

¹² Article 5 The Law of Russian Federation of July 27, 2010 "The provision of state and municipal service."

¹³ Article 159 of the Code of the Republic of Belarus on Education No.243-Z of January 13, 2011.

According to “the admission rules for educational organisations and programmes of primary, basic secondary, and general secondary education” in the Government Resolution of the Republic of Kazakhstan (No. 127 or 19.01.2012 r.), all must attend preschool. It is compulsory and the family must choose one of three options for their child: preschool classes, preschool lessons in kindergarten, or short-time classes. From June 1st to August 30th, parents should complete a written application to the school or online form using the e-gov portal. Exams, tests, and competitions are not held in the case of comprehensive schools. However, children are interviewed by a teacher, psychologist, and social care teacher when they enter the gymnasium or lyceum.

In Armenia, parents must make a written application of admission to the school and sign an agreement with the school. Students may be dismissed from school or transferred if the agreement is broken¹⁴.

3.2 Teacher-based assessment tools

3.2.1 Grading systems

Typically, teachers use grades as an assessment tool in the classroom. In 1937, the traditional external assessment system based on a 5-point scale was introduced by the USSR Ministry of Education (Bolotov et al, 2016). Armenia, Belarus, Kazakhstan, and Latvia have implemented a 10-point scale grade system to replace the 5-point system as part of the post-Soviet reforms of their educational systems. In Russia, the 5-point scale still remains. The transformation in the aforementioned post-Soviet cases aimed to provide students with a fairer assessment procedure that is ideal for a written test where each task is assessed by a certain number of points and the final grade is calculated on the basis of the number of points earned. The 5-point scale has been criticized because of its tightness and inflexibility. In fact, when a 5-point system is in place, teachers must assign a grade of 3, 4, or 5 (positive marks). Thus, teachers must find alternative mechanisms to provide more nuanced assessments. Interestingly, in the Russian case teachers may assign a grade for a written assignment with a plus or minus sign. This additional evaluation is not reported in the gradebook, but it helps teachers provide students with more specific feedback.

Final grades at the end of each academic year are also awarded according to a scale determined in each country (i.e., annual grades for each subject). The only exception is the primary education level where each child's academic performance is not evaluated according to quantitative metrics but rather pictographically. In Russia, for instance, instead of 5 points, a 1st grade teacher's stamp depicts a sun on the report card (or a sun with clouds in the case of 4 points). In Latvia, 2nd grade marks are given in mathematics, Latvian language, minority language, and also in science in 4th grade. Starting from the 5th grade, all subjects are assessed on a 10-point scale (Feldberga, 2012). In Belarus, 1st and 2nd grade are not assessed by points¹⁵.

Descriptions for each point come out in the National Curriculum in Armenia and the national educational standards in Kazakhstan (GOSO), Belarus, Latvia, and Russia (FGOS)¹⁶. Grades between 4 and 10 will be counted as “passing” on a 10-point scale and grades between 3 and 5 will be “passing” on a 5-point scale (Table 4).

¹⁴ Article 16 of the Law HO-160-N/10.07.2009/EN/I/29.05.2015 (official translation) dated 10/07/2009

¹⁵ The Order of the MoE of the Republic of Belarus No. 674 dated 29/05/2009

¹⁶ National Curriculum Framework and General Education National Standards (2004).

Table 4. Description of scales

Grade	10-point scale	5-point scale
1	Very bad	Very bad
2	Bad	Moderate
3	Unsatisfactory	Sufficient
4	Satisfactory	Good
5	Average	Excellent
6	Above Average	
7	Good	
8	Very Good	
9	Excellent	
10	Exceptional	

Source: developed by the authors

3.2.2 Rules and regulations governing the assessment of student work in school and class gradebooks

Each country provides the basic normative requirements for in-class assessment and transition from grade to grade. They are divided between formative (by lesson and topic) and summative assessment. Formative assessments of lessons are carried out in order to verify and assess the acquisition of the educational material in each subject and serve motivational, educational, and corrective functions¹⁷ (Valdman et al., 2013). Assessment methods and tools for formative assessment in Russia, Latvia, Belarus, and Kazakhstan are defined by teachers themselves according to school norms and regulations and could vary from written tasks and tests to laboratory-based projects and experimental research¹⁸ (OECD, 2016). In Armenia, along with other tools, short 10-15 minute tests and 45-minute tests are required for formative assessment (Valdman et al, 2013). In recent years, traditional forms of assessment have been complemented with a new form of assessment – the “portfolio” in Russia, Latvia, Kazakhstan, and Armenia. A portfolio includes the registration, storage, and student assessment of individual achievements within a certain time period of learning not only in the academic sphere but also in the arts, sport, voluntary activities, etc. It is becoming a very powerful tool for students’ motivation and accountability.

Presently, total marks by subject for each semester and the whole year are calculated based on average scores in formative assessment (a student’s progress during the year) and the summative assessment score (more often carried out in test or written form)¹⁹ (Valdman et al, 2013; OECD, 2016; Bolotov et. al, 2016).

In Belarus, Russia, and Kazakhstan, if students are scored with negative marks (less than a 5 grade on the 10-point scale and less than a 3 on the 5-point scale) in summative assessment for one or more subjects, or are absent from examinations without any extenuating circumstances, they will first be re-examined after summer courses²⁰ (Valdman et al, 2013; OECD 2016; Bolotov et. al., 2016) or complete a pedagogical correction programme as in Latvia (OECD, 2016). In the case of failure, the student will repeat the grade at the same or another educational institution. Current information regarding the circumstances for transition between grades is not publicly available in Armenia.

¹⁷ The Order of the MoE of the Republic of Belarus No. 38 dated 20/06/2011; The Order of the MoE of the Republic of Armenia on in-school assessment; The Model Regulations for current progress monitoring, intermediate and final attestation of students (2008)

¹⁸ The Order of the MoE of the Republic of Belarus No. 38 dated 20/06/2011

¹⁹ The Order of the MoE of the Republic of Belarus No. 38 dated 20/06/2011; The Model Regulations for current progress monitoring, intermediate and final attestation of students (2008)

²⁰ The Order of the MoE of the Republic of Belarus No. 38 dated 20/06/2011; The Model Regulations for current progress monitoring, intermediate and final attestation of students (2008)

Though there are no official demerits in Russia that can be given to students in case of misbehavior or absences, in actual practice teachers can pressure students to behave by threatening to give them bad grades on their student report cards or informing parents by phone or email about any incidents or if they do not satisfy classroom expectations. A remarkable example of contemporary reforms is the Moscow project “Electronic Card in Education,” the card mechanism introduced a few years ago in the majority of public schools. All students from 1st to 11th grade are monitored by an electronic access system which automatically sends text messages (SMS) to parents when their children enter/exit the school campus. Additionally, this card also works as a credit card in the school cafeteria so parents can control their child’s dietary regime. Similar systems have been established in a few schools in Yekaterinburg and Novosibirsk²¹. When fights or thefts occur, parents are called to meet with the school principal or to take part in parent-teacher councils.

Formal tools defining the expectations of student behavior are in place in Kazakhstan, Latvia, and Belarus. According to Article 111, “non-fulfillment of duties by parents or other legal guardians,” and the Code of the Republic of Kazakhstan on Administrative Offences, parents may be fined if their children are regularly absent from school. In Latvia, the penalty for truancy varies from EUR 140 to 350²². Assessment of student behavior is based on 8 criteria, including public spirit, partnership and teamwork, respect for elders, kindness, honesty, thrift, industry, and discipline. The degree to which these criteria are displayed is expressed as “exemplary conduct”, “satisfactory”, “unsatisfactory”, etc. Class teachers are responsible for behavioral assessment every quarter, semester, and for the entire year. The results of the evaluation are discussed at parent-teacher meetings and educational councils.

Gradebooks (*dnevnik*) are the most common tool for teacher-based assessment. Currently, post-Soviet countries are transitioning to electronic versions called “E-gradebooks.” In Latvia, the “E-gradebook” project was integrated into schools more than 10 years ago. In most cases policy regulations do not dictate their use, but sometimes ministries and departments of education require schools to use them. The cost of “E-gradebook” services are usually covered by the schools or parents. Only in Moscow is this service provided free of charge and sponsored by the government. “E-gradebook” helps simplify school management and make it more effective. In general, parents and students can see information about academic progress, homework assignments, absences, messages from the teacher, etc. online by logging into a special portal that can also send SMS messages. In practice, however, these services sometimes fail because of a technical glitch, so teachers are advised to continue to fill out paper gradebooks in addition to the e-report cards²³.

3.3 External national testing and monitoring

External evaluation in post-Soviet countries aims to monitor the fulfillment of the national educational standard. Tests enable summaries of a school’s, class’s, and the individual student’s progress. There are two main monitoring orientations: assessment of non-subject skills (for example, information and communication skills, critical and inventive thinking, financial literacy, etc.) and assessment of educational achievements (subject knowledge). In Belarus, National Monitoring started in 2003 in 3 areas (Bolotov et al., 2016):

- Self-development and level of etiquette;
- Work capacity and fatigue levels;
- Educational achievements by subject;

²¹ RG.RU. <https://rg.ru/2015/07/15/nouhau.html>

²² The National Standards of Compulsory Education, Cabinet of Ministers, 2014; The Order of the MoE of the Republic of Belarus No. 674 dated 29/05/2009 on Criteria and indicators for assessing student behavior

²³ Official website of E-gradebook project in Russia. (Accessed 15 February 2017.) <http://eljur.ru/normativnye-dokumenty>

Local authorities take responsibility for the preparation of tests and organization of the procedures. Thus, tests may vary between regions, but must accord with the curriculum and standards. In Russia, a national monitoring programme for quality of education (NIKO) was introduced by *Rosobrnadzor* in 2014²⁴. The first National Monitoring of Armenian Language, Armenian Literature, and Armenian History (HAAS) was held in 2010.

Various forms and types of assessment provide students the ability to show their knowledge and skills. At the individual level of assessment, the external assessment provides a picture of each student's individual progress, which can be compared to the teacher's subjective view. Typically, the external testing is not the same as high-stakes testing (Centralized Admission Exam, Unified State Examination). The results of external testing do not serve as the sole or principal basis for making consequential decisions about the student's achievements.

Table 5 presents the description of external national testing in Armenia, Belarus, Kazakhstan, Latvia and Russia.

Table 5. External national testing and monitoring levels

	Name	Level of External National Testing and Monitoring	Subjects	National Monitoring Authority
AM	National Monitoring of Armenian Language, Russian Language, Armenian History (HAAS)/ National Monitoring of Physics and Chemistry (BAAS)/ National Monitoring of Foreign Languages (OLAS) National Monitoring of IT (ICT)	8,10 level /9,11 level (optional)	Armenian language, Armenian literature, Armenian history, Chemistry, Physics/Biology, Geography (optional), Russian language, English language, IT	Centre of Assessment and Testing
BY	National Monitoring of Secondary Education ²⁵	3,4 level	Belarusian language, Russian language, Mathematics	National Educational Institute http://www.adu.by
		8,11 level	Belarusian language, Russian language, Mathematics, Physics, Chemistry, History of Belarus, World History, Social studies	
KZ	The National System of Education Quality Assessment/ The Region System of Educational Assessment	4 level	Two subjects, defined by MoES	National Center for Educational Assessment ²⁶ http://www.naric.kz

²⁴ NIKO website: www.eduniko.ru

²⁵ Article 2 of the Resolution of the Council of Ministers of the Republic of Belarus "Program development of general secondary education in 2007-2016" № 1532 dated 15/10/2008.

²⁶ National State Program of Education of the Republic of Kazakhstan № 448 dated 30/09/2000.

		9 level	Kazakh language (obligatory) and two subjects, defined by MoES	
LV	use PISA, TIMSS and etc.			
RU	Independent tests of metasubject achievements Independent tests of subject achievements	4 level	Mathematics, Russian language, English language, Science	Institute of Educational Development or Regional Centre for Quality in Education
		7 level	Mathematics, Russian language, English language, Biology, Geography, Russian History	
		8 level	Mathematics, Russian language, English language, Chemistry, Physics, Russian History, Literature	
		10 level	Mathematicss, Russian language, English language, History, Social studies	

Source: Developed by authors.

3.4 International external student assessment

Much progress has been made since 2000 in the sphere of external international student assessment (see Table 6). Participation in such comparative international assessment studies as PISA and TIMSS has been a major focus of educational policies in recent years. Russia and Latvia, for example, have participated in PISA since 2000. Kazakhstan joined in 2009 and Belarus now plans to take part in the study in 2018.

Table 6. Years of Participation in the International External Assessment

Country	PISA	TIMMS	PIRLS
Armenia	-	2003, 2007, 2008 (Advanced), 2011, 2015	2011, 2016
Belarus	Expected in 2018		
Kazakhstan	2009, 2012, 2015	2007, 2011, 2015	2016
Latvia	2000, 2003, 2006, 2009, 2012, 2015	1997, 1999, 2004, 2007	2001, 2006
Russia	2000, 2003, 2006, 2009, 2012, 2015	1997, 1999, 2004, 2007, 2011, 2015	2001, 2006, 2011, 2016

Source: Developed by authors.

International assessment studies provide educational systems and schools with objective feedback about student performance at the international level. These tests do not affect students directly, but they do influence educational policy to the extent that they help change educational standards and teacher practices to ensure that students are being prepared at a level that is comparable with other countries.

3.5 *Academic olympiads and academic competitions*

The culture of academic competitions has remained from the Soviet period when it was developed. It is not the output of the Olympiad system itself but the spirit of academic excellence embedded in it that touches on the issue of student accountability. Selectivity and competition are inherent to the process at the school level where a delegate of a particular grade on the specific subject is selected to the national level from which institutes of higher education look for gifted prospective students. With regard to student accountability and the educational process in general, the Olympiad movement provides a kind of landmark of academic excellence for relatively high-achieving pupils; not a standard, but a possible pathway.

One of the priorities of educational policy in Russia has been to identify gifted children and offer them support under a special program approved by the president. This is the concept of a nationwide system of identification and development of young talent approved by Russian Federation President D. Medvedev on 3/04/2012. All students have the right to participate in various competitions, Olympiads (including international ones), and other special events for talented and motivated young people, including summer schools, conferences, and special education programs. They have an opportunity to study in part-time or distance education programs, which makes it possible to receive specialized education regardless of one's place of residence.

The winners of science Olympiads and science competitions are granted admission to higher educational institutions avoiding entrance examinations in accordance with the level of the Olympiad. Alternatively, up to 10 points can be added to test scores²⁷.

There are four rounds of the All-Russian Olympiad of School Students: school, municipality, region, and final²⁸. It covers 21 subjects and is conducted across 4 stages (school, municipal, regional, and national). More than 7 million students from grades 5 to 11 take part in the Olympiad each year. The All-Russian Olympiad is supervised by the Ministry of Education and Science of the Russian Federation and funded by the federal and regional budgets. Winners of the All-Russian Olympiad can go on to participate in international competitions. The winners of the final round have the right to avoid the USE (unified state exam) and be accepted without entrance examination according to the profile of the Olympiad.

Kazakhstani gifted children participate in the special “*daryn*” (gifted) program. They are given pedagogical, psychological, and social support²⁹. Winners and participants in international science Olympiads and presidential Olympiads and competitions are also excused from having to take national tests.

According to the Regulations of the Ministry of Education of the Republic of Belarus³⁰, there are 19 subjects in the Olympiad. The winners of the final round are accepted without entrance examinations and have the right to get special financial grants from the fund for social support of the President of the Republic of Belarus³¹.

²⁷ Order №1147 dated 14.10.2015

²⁸ Regulations on the All-Russian Olympiad of School Students N 695 dated 02/12/2009.

²⁹ Regulations on specialized organizations for gifted children №289 dated 19/07/2013.

³⁰ N 73 20.11.2003; reduction N 257 13.09.2011

³¹ Order “The Special Fund for the social support of President of the Republic of Belarus” № 19 dated 12/01/2008 (Reduction dated 29/02/2008)

Students may participate in various intellectual Olympiads in Latvia (Baltic Olympiads, European Subjects Olympiad, International Science Olympiad, etc.). In accordance with Regulation No. 384 regarding subject Olympiads (05/12/2012), the National Center of Education organizes and coordinates 15 subject competitions.

3.6 National Standardized Examinations

External measurements of student accountability are conducted before students can advance to the next education level in the form of national standardized examinations. Contrary to national independent testing and monitoring, standardized examinations are high-stakes exams. They are especially valuable in determining whether students can graduate from secondary school and enroll in higher education institutions. Moreover, high-stakes examinations are held after middle school (general basic education) as students choose between high school and vocational schools. In Russia, after 9th grade pupils take exams on Russian language and Math (compulsory) and choose two more subjects. The exams are in test form. In Armenia, after 9th grade pupils take exams on Armenian and English language as well as Math.

The majority of the post-Soviet countries have reformed their admission systems in the last 25 years (see Table 3). Usually, national admission testing combines university entrance exams with final high school graduation examinations. Table 7 describes the design of national standardized testing systems in depth. Exams on several subjects are compulsory to exit a school. Armenia has the longest list of compulsory subjects, although only Part A of the test is considered an exit exam. In Belarus, Kazakhstan, and Latvia, students must pass through four exams to graduate. Kazakhstan gives the opportunity to take exams in the Kazakh or Russian languages. Russian schools have the shortest list of subject exams for potential graduates: Russian language and Math.

Table 7. National standardized testing: school outcome assessment and university entrance exams

Cou ntry	Organization	Grade	Name of the Exam	Exams to Exit a School	Exams to Enter a HEI	Introduc tion year
AM	The Assessment and Testing Center (ATC)	12th Grade	United Examinations (UE)	UE (Part A of the Test) Armenian language and literature, Mathematics, social studies, Armenian history and Russian language (for Russian classes), foreign language compulsory to get a certificate. Test consists of two parts, A and B. Only results of part A used in final decision for issue of certificate. Students may retake the examination, but only for the graduation certificate and not for university entrance.	UE (Part A and B of the Test) There is no information about the number of tests required for entrance to a HEI. Both results of part A and B of exams counted for entrance to HEI level.	2006
BY	Republic Institute for Knowledge Control (RIKC)	11th Grade	Centralized Testing (CT)	In-school Exams Written Math, Belarusian or Russian language and oral exam in foreign language and Belarusian history.	CT + grade point average Belarusian or Russian language is compulsory and 2 elective subjects according to specialization.	2004
KZ	National Testing Center of Ministry of Education and	11 th Grade	Common National Testing (CNT)	CNT Could be passed on Kazakh or Russian language. 4 exams are compulsory for the applicants for the Certificate of General	CNT Compulsory exams plus one elective subject: Physics, Chemistry, Biology,	2004

	Science of the Republic of Kazakhstan			Secondary Education "Altyn Belgi" : Kazakh or Russian (language of tuition), Math, History of Kazakhstan, Kazakh for schools with Russian language of tuition or Russian for schools with Kazakh language of tuition + 1 elective subject.	Geography, World History, Literature (Kazakh, Russian), Foreign language (English, German, French).	
LV	Centre for Curriculum Development and Examination	12 th Grade	Centralised Examinations (CE)	CE + Centrally Set Examinations Four examinations have to be passed to get certificate of general education. Three of them are compulsory (mathematics, a foreign language, and Latvian language) and one examination is optional. The optional examination can be passed in two forms: centralised examinations (History of Latvia, World History, Chemistry, Biology, Physics) or Centrally Set Examinations administered and marked by school (Informatics, Geography, Economics, Russian language and literature in minority schools.	CE One or more entrance examinations taking into account the results of centralised examinations.	2004
RU	Federal Education and Science Supervision Agency	11th Grade	Unified State Exam (USE)	USE Russian language and Mathematics are compulsory to get a certificate.	USE Russian language is obligatory for all specializations. Optional: Mathematics, Biology, Geography, Chemistry, Physics, Russian History, Literature, English, French, German, or Spanish language, Social studies, Informatics. Choice of subjects based on university requirements for concrete specialization (3-4 exams including Russian language).	2009

Source: Marinosyan 2015; Bolotov et al. 2016; Order No. 506 dated 05/12/2011; Latvian Secondary Education.
http://visc.gov.lv/en/exam/qse_in_latvia.pdf (Accessed 15 February 2017.)

4. Accountability tools: post-secondary level

4.1 Entrance examination at the post-secondary level

4.1.1 Design of entrance examination system

After completion of middle school, students can decide between pursuing the “academic” track (enrollment in a high school followed by university) and “non-academic” track (enrollment in a vocational school). Vocational schools enroll students on the basis of centralized exams (after middle school) and specific exams conducted by the individual vocational school. A significant number of vocational school graduates go on to enroll in HEIs. The entrance procedures vary. Students may enter HEIs on the basis of their portfolios, which allow them to bypass the first and second academic years. In certain cases, vocational school graduates must pass the standardized national entrance exam. The “academic” track is more traditional and students who enroll in a college preparatory high school usually enter university.

All post-Soviet countries (except Turkmenistan) have implemented admissions systems that are broadly comparable, but there are still significant differences. Generally speaking, these admissions processes take the form of a test, as discussed above. Admission is contingent on the results of the test.

Armenia, Kazakhstan, Latvia, and Russia have introduced unified state exams that combine both the school outcome assessment exam and university entrance exam, although there are some modifications. In Armenia, for example, the state exam consists of two parts (A and B) and only A is considered as an exam for graduates. Belarus is an exception. The Central Test in Belarus is obligatory only for university enrollees and is fee-based.

It has taken post-Soviet countries a long time to introduce a standardized university entrance exam. Long debates challenged the comprehensiveness of such tests and their relevance to assessing student knowledge and preparedness to enter a university. For example, in Kazakhstan the Unified National Test (UNT) has been criticized for its lack of subject matter depth. *“There has been on-going discussion about cancelling both exams and replacing them with a more comprehensive and rigorous university entrance exam. In 2013, the Ministry of Education and Science (MoES) announced that the UNT would be cancelled by 2015”* (Lee, 2013). However, the MoES has yet to propose an alternative university entrance exam, which means that the UNT and CT tests continue to be administered” (Ahn et al., forthcoming).

The admission exams consist of compulsory subjects and one or two elective subjects according to specialization in a HEI (see Table 7). Moreover, Russia has modified the system of test scores recently. According to Order No. 1147 dated 14/10/2015 in Russia, individual achievements can add up to 10 points to test scores. Individual achievements include:

- champion and medalist status of sport competitions such as in the Olympic games, European championships, etc.;
- gold and silver medals for school achievements;
- excellent school diploma;
- volunteer activities;
- participation in intellectual and creative competitions;
- essay assessment, which is compulsory for graduates, by a HEI.

The assessment of individual achievements is intended to stimulate a student’s active position in general.

4.1.2 Examination results and educational trajectories

Some countries have introduced limited standardized tests for certain types of HEIs that influence student choices and trajectories. For example, although Armenia introduced a Centralized Admission Exam in 2005, non-state HEIs were not excluded until 2012/13.

Student performance on exams determines both admission and available funding. Two funding models exist in the post-Soviet space. Exam results can determine the HEIs and fields students may enroll in as well as the form of study.

A dual track tuition system exists in the majority of countries. This means that the tuition-free track retains many hallmarks of its Soviet origins (the state provides scholarships for a particular number of places at HEIs and recipient students do not have to pay tuition), but HEIs also accept tuition-paying students at both state and non-state HEIs.³² The dual track tuition system retains the perception of a free higher education system supplemented by tuition-paying students from a growing number of households (Johnstone, 2003). It also strengthens the merit-based admission system where better-prepared students receive state support. The student's performance has stronger effects on choices since it is an "all or nothing" game.

Two Waves of the Russian Admissions System

The Unified State Examination (EGE) project is considered to be one of the most influential institutional reforms in Russian higher education. University admissions reform started in 2001 and became nationwide in 2009. It included rejection of university-specific exams and the introduction of a universal standardized national exam.

The prospective student must choose several (3-4) subjects to be tested in when applying to an HEI. After the USE scores are submitted, the HEI collects and ranks the student's scores and it publishes them on a web page. Students can view the results and compare them with the scores of others.

The admissions process takes place over the course of "two waves." Prospective students are able to submit their USE scores to different HEIs (up to 3-5, the limits change almost every year) and various programs (5) simultaneously. The application process lasts about one month and in early August the HEIs publish lists of those students who have been recommended for admission. If the enrollee is shortlisted, they can choose which institution they would like to enroll in. However, frequently prospective students do not take a chance from variety of abilities (Ampilogov, Prakhov and Yudkevich, 2014). Those who have lower grades than the students who have been shortlisted can wait for the "second wave" to get enough points for admission as there could be some vacant slots after the "first wave." Due to the double-track tuition system, students who have lower grades usually choose to enroll as tuition-paying students.

This type of merit-based admissions and state support system limits educational opportunities. According to research, in Armenia 35% of students do not receive scholarships, although their performance results qualify them for such support and they have financial need. According to various indices, the share of students who have not received support but who are in need varies between 32 to 38% (Milovanovitch et al., 2014).

³² In Estonia, the tuition-paying track was abandoned at state HEIs in 2012.

However, in Russia some HEIs are allowed to provide special grants for talented students. Moreover, some of them introduce “discount” schemes for tuition-paying students on the basis of their academic performance.

Kazakhstan has implemented a scholarship system and so state support goes to individual students on the basis of merit. Students who have received grants are given flexible options during the admissions process, although the government limits the number of available grants in accordance with the country's priorities.

4.2 Accountability tools for monitoring student progress

Student progress is monitored throughout their program of study and as they complete specific courses. Student progress during the study program is recorded using the student record book (kept in paper form) and the electronic learning management system (LMS). Some universities have introduced an additional student ranking system to track student performance and develop a transparent and competitive atmosphere.

According to available information, Armenia, Belarus, Latvia, and Russia implement flexible standards for accountability tools in tertiary education. HEIs are responsible for the development of criteria for progress assessment during courses. Although in Belarus the assessment criteria are established by the Ministry of Education (see for example, the education standard of higher education, 2014), the document outlining these criteria for higher education is not publically available.

In contrast to other countries, in Kazakhstan, *the Model Regulations for Current Progress Monitoring, Intermediate and Final Attestation of Students* (Model Regulations, 2008) provides the system-level comprehensive summary of assessment tools in post-secondary education. The document is publically available. In the Model Regulations (2008) for technical, professional, and post-secondary education assessment of learning progress describes forms of assessment, particularly control works (test and reports with at least four variants). The forms of intermediate attestation is regulated by GOSO and education institute by itself, although different approaches are described (projects, pass/fail exams, etc.). Students who failed intermediate attestation on three and more disciplines are dismissed. Final assessment takes a form of oral/written exam on specific disciplines and/or defence of the project. Achievements are assessed by the examination board.

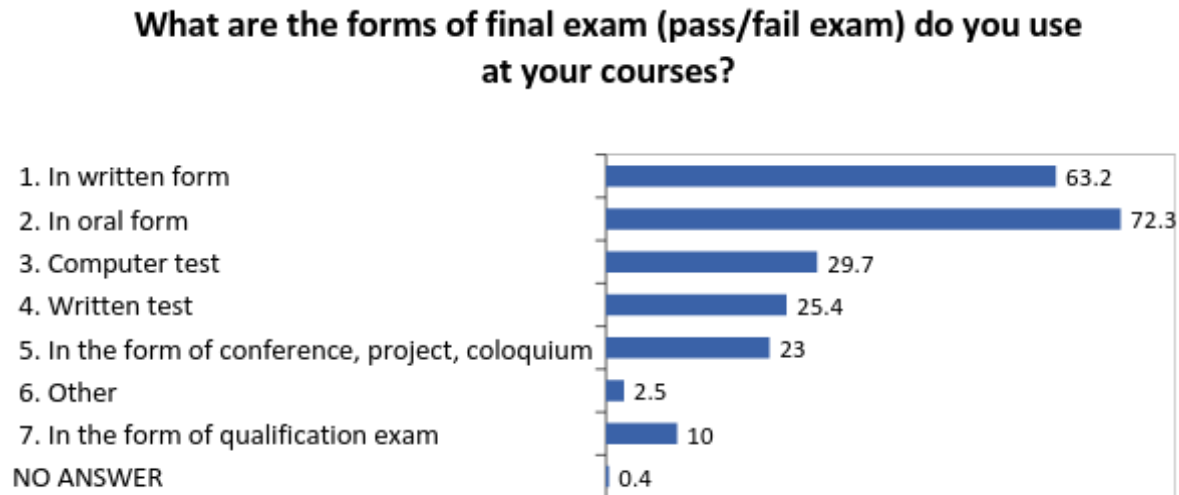
The Model Regulations for higher education assessment of learning progress is maintained within each course and include assessments of both classroom activity and projects. According to the GOSO, all progress achievements are assessed by grade-rating letter system (A-, A "excellent"; B-, B, B+ "good"; D-, D+, C-, C, C+ "satisfactory"). Final achievements on the course consist of an at least 60% aggregate progress assessment and at least 30% on the final exam. Final attestation includes a state exam and defense of thesis.

In Russia, the Monitoring Study of the Education Economy is a useful survey to analyze accountability tools in higher education. Cumulative grades, pass/fail exams, and final exams are the basic tools that are used to assess student performance in specific courses. The national standards do not limit the number of forms of assessment that may be used. According to the annual Monitoring Study of the Educational Economy, 77% of faculty members said that cumulative grades are taken into account when assigning the final grade (Table 1 in Appendix).³³

³³ This study is conducted by the Russian Ministry of Education and Science (MoES) and the National Research University Higher School of Economics (2006 – present).

Oral exams are still the most popular form of final exam (Table 3 in Appendix) despite their subjective nature. Figure 3 (and Table 2 in the Appendix) shows the use of different forms of student performance assessment that are used during courses.

Figure 3. The Forms of Progress Assessment



Source: *The Monitoring Study of the Educational Economy, Russia, 2014.*

4.3 Student behavior assessment: code of ethics

Ethical codes are recognized as a useful tool for undercutting the problem of dishonest behavior, including cheating and plagiarism. It is always the choice of a university whether or not to introduce a code of ethics. In most cases, the codes provide a description of students' responsibilities and rights, as well as the list of penalties for misconduct. For instance, the Student Code of Ethics of the American University of Armenia mostly addresses the issues of academic dishonesty and adherence to academic integrity is the main principle of student behavior. Detailed lists of possible violations is complemented by the range of disciplinary measures, from verbal warning to dismissal, yet the choice of punishment depends on the case and the severity of the offence (American University of Armenia n.d.)³⁴.

The Code of Honor for the students of Gomel State University include 12 articles that describe the desired behaviour of students and do not include any mention of punishment. Students should respect the traditions of the university, carefully attend classes, be polite with other students and faculty, and avoid ribaldry. Moreover, students should also maintain a healthy lifestyle and not smoke and drink alcohol on the grounds of the university. Nothing is said about cheating or other unethical behaviour.

The Code of Honor of the Al-Farabi Kazakh National University includes some peculiar items of misconduct among the "common core" of academic dishonesty. Article 5 prohibits the usage of ties with relatives and colleagues to obtain a higher score. Bribing the teacher is also mentioned.³⁵

³⁴ American University in Armenia - Student Code of Ethics. http://aua.am/wp-content/uploads/2012/02/stud_code_ethics.pdf (Accessed 15 February 2017.)

³⁵ The Code of Honor of the Al-Farabi Kazakh National University. <http://www.kaznu.kz/ru/11510/page/> (Accessed 15 February 2017.)

Another example, the Academic Ethics Codex of the University of Latvia, includes students in the broader “UL community” and provides the principles of academic behavior for all members of that category. Student behavior is specified in item 3.2. Among other regulations, it states, “studies form a duty with highest priority for students. Students do not use work or other foreseeable circumstances as a justification for unsettled liabilities” (item 3.2.1)³⁶³⁷.

Student behaviour is the focus of several studies in Russia. According to the Monitoring Study of Student Characteristics and Trajectories, students are quite tolerant of cheating, plagiarism, and other unethical academic behavior.³⁸ Only 12% of respondents agreed that students should be penalized for cheating (by receiving a negative grade). More than 50% of respondents think that when cheating is discovered the teacher should do no more than comment upon it publicly. Only 2% of respondents think that cheating should be reported to the department (Shmelyova, 2016). According to this study, such attitudes are partially informed by the teachers’ own judgments about the unethical behavior of students (Ibid).

The Monitoring Study of the Educational Economy provides evidence on how students perceive and assess unethical behavior (see Table 4 in Appendix). Only a few respondents (0.4%) thought that plagiarism deserves expulsion, but the majority of respondents believed that plagiarized work should not be accepted. In contrast to their opinions about cheating, only 12% of respondents stated that they would not accept the work (“I would give it a failing grade”).

Some faculty members believe that taking measures to seek out student plagiarism is not a common practice when assessing student performance and ethical academic behavior. According to the same survey, 13% of respondents reported that there are no mechanisms in place to check assignments for plagiarism at their HEI and they, as an academic faculty member, do not check for plagiarism themselves (Table 5 in Appendix). The majority of faculty members believe that checking for plagiarism is a voluntary measure when assessing student performance.

5. Challenges facing students in meeting their requirements

5.1 *Balancing internal and external student assessments*

5.1.1 *Links between teacher-based assessments and National standardized examinations*

One of the core issues facing the implementation of a national standardized examination system is the need to enhance links between the national curriculum, educational standards, real teaching practices, and learning outcomes in the classroom. Indeed, the school curriculum and the assessment procedure do not fully correspond with the requirements and content of unified testing. Students are in limbo between the two tiers of assessment. The differences between the requirements of the internal and external examinations may reflect the mismatch between expectations and examination outcomes as well as differences in preparation processes. Therefore, the final grade that has been assigned to the Certificate of Completed Secondary Education according to the teacher’s assessment is not a predictor of whether the student will be able to successfully pass the examination.

In Russia, moreover, correlations between external and internal assessments exist only for medalists and students with lower grades. If gold or silver applicants do not get enough points on the exam, they lose the

³⁶The Academic Ethic Codex of UL. http://www.lu.lv/fileadmin/user_upload/lu_portal/eng/general-information/documents/regulations/The_Academic_Ethics_Codex_of_UL.pdf (Accessed 15 February 2017.)

³⁷ Council of Europe: http://pjp-eu.coe.int/en/web/eap-pcf/news/-/asset_publisher/nG9HzdetPOul/content/codes-of-ethics-in-higher-education-in-armenia?_101_INSTANCE_nG9HzdetPOul_viewMode=view/

³⁸This monitoring study took place in 2013 at eight Russian HEIs.

chance to be rewarded. In Kazakhstan and Belarus, in contrast, the final grades awarded in the school Certificate of Completion correspond to the points achieved on the unified tests. Performance on these tests also determine the student's admission to university and eligibility to receive grants.

The curricula of high schools in countries with mass post-secondary education are significantly focused on higher education, meaning on external assessment. In order to reduce the risks of poor results at this stage, sometimes school administrators informally pressure average students to transfer to the vocational education track on the basis of teacher-based assessments.

Basically, thanks to years of high-stakes exams and teacher efforts, the education program tends to minimize the disparity in examination scores, and yet the problem has not been totally resolved. For example, the Armenian Millennium Development Goals for 2005-2009 Report indicates that students are often forced to seek private tutors (instead of attending classes at school) in order to obtain the knowledge enshrined in educational standards and gain entry to higher education³⁹. Thus, some researches have revealed that the post-Soviet period has been characterized by the expansion of “the shadow education system of private supplementary tutoring.” (Bray and Lykins, 2012) On the one hand, private tutoring provides students with opportunities for proper individual academic development and successful examination preparation. On the other hand, shadow education may increase social inequalities and promote new forms of corruption.

The United Nations Development Programme stated that in Armenia 47% of secondary school students employ private tutors, often for two or more subjects and spend an average of 30–35 hours per week. Kalikova and Rakhimzhanova (2009) asked 1,004 first year university students in Kazakhstan about their experiences in the last year of secondary schooling. They found that 59.9% of students had received tutoring (private lessons, preparatory courses, or both) (cited from Bray and Lykins, 2012). The issue of private tutoring is crucial for the picture of trends within the education system, especially with respect to the challenges that students face while transitioning from one level to another (see below).

5.2 Challenges of high-stakes assessment

5.2.1 The role of student socioeconomic status

The inequality of access that is produced by the design of the admissions system is one of the main challenges of high-stakes assessment. The impact of socioeconomic status on success in unified examinations is consequential from its very nature; the stakes are high. Thus, socioeconomic inequality can spread to all educational levels.

The first factor that determines the importance of high-stakes examinations is the opportunity for intergenerational mobility. According to a study of Russian pupils, parents' level of education is a valuable indicator determining a students' trajectory:

“87% of children whose parents have higher education are enrolled in 10th grade, compared to 47% of students whose parents do not have a higher education. The probability differs significantly even for students with similar academic achievements. Statistical control for grades and test results leaves a gap of 14% in the probability of transition to high school between those students whose parents have a higher education and those who do not have a higher education. Thus, we can observe both primary and secondary effects of socioeconomic inequality in choosing educational trajectories after 9th grade.” (Bessudnov and Malik, 2015).

Despite the absence of academic work on intergenerational mobility across the post-Soviet space (including the selected countries), we may assume that variation between the states is not crucial (for differences between Latvia and Russia see Verashchagina, 2010).

³⁹ Armenia, Millennium Development Goals, National Progress Report, 2005 – 2009

Secondly, the gap between learning standards, student achievement, and the standards of national admission tests generates socioeconomic inequality due to the need for additional preparation. Hence, private tutoring is a common practice in the majority of countries (Bethell and Zabulionis, 2012; Milovanovitch et al., 2014; Prakhov, 2015; Bethell and Harutyunyan, 2015). Students from wealthier families are more secure and are better prepared to make large investments in out-of-school preparation. In Kazakhstan, almost half of students with parents who obtain higher education and about a quarter of those who do not consume private tutoring (Silova, 2010). More than half of students in 7th grade in Latvia reported that they take private tutoring (Wolf, 2002 cited in Silova and Bray, 2006, p.31).

Russian case researches have revealed that the likelihood of admission to selective universities has a positive correlation with the father's level of education, economic status, and cultural capital, as well as the type of school (specialized school) and additional investments in tutoring to prepare for taking national tests (Prakhov, 2015). Test preparation tutoring is especially important for achieving better results on obligatory school exams in the subjects of Russian language and math. Although the performance improvements may be small, they can be significant when applying to selective HEIs (Prakhov, 2016).

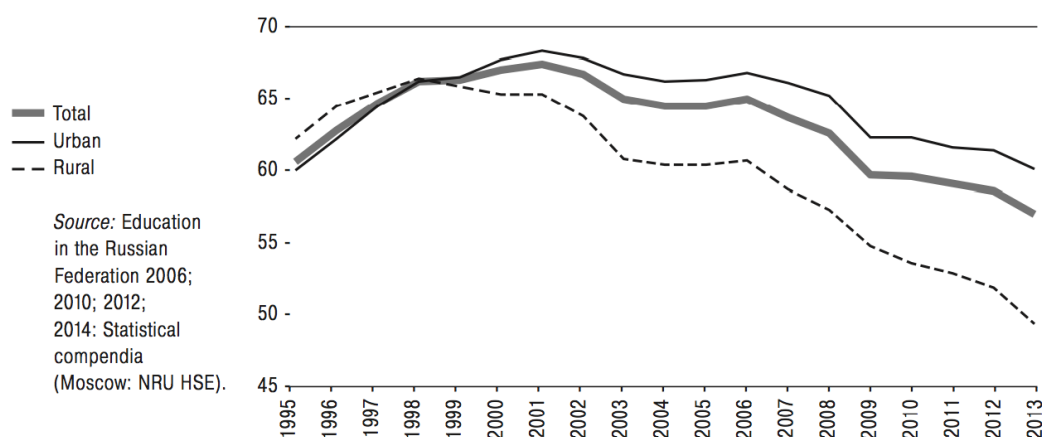
The effects of the socioeconomic status of the student's family on performance on high-stakes exams can be seen even from simple data. For example, in 2013 there were three times as many students from the top income quintile than the number of students from the lowest income quintile at public HEIs in Armenia (Milovanovitch et al., 2014).

One more effect emerges for the male prospective students. Four of five of the selected countries (excepting Latvia) have preserved obligatory military service and underperformance on the exam may be a result of this duty required by the state. Armenia, Belarus, Latvia, and Russia provide the legitimate state-guaranteed delay of service for the continuation of education. Thus, the failure to pass levels of education postpones for a young man entry to higher education (due to coincidence of the age of school graduation and military conscription). Moreover, this delay may never result in the actual entrance of the student.

6.2.2 Previous education and location

There is no significant evidence that confirms the significance of location in track choice in the countries with relatively small spatial differences, while some data is available for Russia. In this latter case, the share of students who are choosing the "academic" track is declining. Figure 4 shows the difference between rural and urban locales. The share of matriculating students from rural areas is dramatically lower.

Figure 4. The proportion of middle school graduates enrolled in High School, Russia



Source: Bessudnov and Malik, 2015.

The spatial inequality of higher education access in Russia is still one of the major points of discussion in admissions procedures. Recent research has revealed that only high achievers are mobile and do not face substantial barriers. As Prakhov and Bocharova (2016) have emphasized, “income still plays an important role in decisions about whether to move to study at university, which is crucial in the absence of additional financial student support.”

6. Policy Recommendations

The following policies could have an impact on loosening the tensions of the current state of affairs in the observed states regarding student accountability:

1. Adjustment of internal and external assessment.

Education practitioners and the public claim that the contents of education programs do not fully meet the requirements of nation-wide examinations. One example which might be replicated is provided by Belarus. In this country, the state provides opportunities for the diversification of pathways: the national examination is not obligatory for graduates, but is obligatory for entrance to university. The discussion over detachment of the national examination in Kazakhstan also shows a possible way. Yet, these direct solutions also have risks that can diminish the strengths of nationwide coverage. Thus, the most relevant solution seems to be found in the diversification within the examination procedures with regard to national situations (e.g. scale, concentration of schools and HEIs, etc.).

2. More affirmative action in transitions from one stage to another.

In the observed transitional states, the risk of reproducing socioeconomic inequality via education is rather high. Family income differences make it more likely for a student with higher socioeconomic status to succeed at all stages in terms of achievements, as well as during the transitions (e.g. unified school graduation and university entrance). Possible solutions should include the development of more affirmative-action tools and the enhancement of publicly funded supply for extra-curricular education.

3. Modernization of the instructional design of educational programs, including methods of teacher-based assessment.

The legacy of outdated methods of teacher-based assessment could be overcome by adjustment of the methodological basis of education. As was described, dishonest student behavior, especially in higher education, is still a problem almost everywhere in the post-Soviet space. The range of globally recognized solutions is wide. Nevertheless, policy-makers should seek opportunities for significant change beyond the implementation of normative frameworks, e.g. codes (which are effective, but only to a certain extent). Updates of the instructional design along with the intensification of discussion on the assessment tools within the professional communities might greatly serve a gradual development of content. Support from the external stakeholders, such as governments and international organizations, would be highly valuable incentives for this.

4. Bringing more transparency into the examination procedures and availability of results.

Given the operational centralisation of national examinations, full disclosure of examination results (excepting personal data) is not a technical problem. Thus, it reveals the opportunity for practitioners, researchers, and policy-makers to explore the data for the sake of improvement. In this sense, transparency is not simply a concept but the “rule of the game” that serves the public good.

7. References

1. Ilyin, M., Ubozhenko, I., Vorobyev, A., Ivanov, E., Poretzkova, A., and Samorodova A. 2014. The Concept of Accountability in the English and Russian Political Discourses. *Working paper WP14/2014/06.; National Research University Higher School of Economics*. Moscow: Publishing House of the Higher School of Economics. (Series WP14 «Political Theory and Political Analysis»). 64 p. (In Russian)
2. Rey, O. 2010. The use of external assessments and the impact on education systems. *Beyond Lisbon 2010: Perspectives from Research and Development for Education Policy in Europe*. pp. 137-157.
3. Black, P. and Wiliam, D. 2009. Developing the theory of formative assessment. *Educational Assessment, Evaluation and Accountability*. Vol. 21, No. 5. doi:10.1007/s11092-008-9068-5.
4. OECD. 2011. *Evaluation and Assessment Frameworks for Improving School Outcomes: Common Policy Challenges*. Policy Note. <http://www.oecd.org/education/school/46927511.pdf> (Accessed December, 12, 2017)
5. Kasprzhak, A. and Levit, M. 1994. *Curriculum and Russian education in an era of change*. Moscow: Miros (in Russian)
6. Gurkina, N. 2001. *Istorija obrazovaniya v Rossii (X-XX veka) [The history of education in Russia (X-XX century)]*. SPbGUAN (in Russian)
7. Medynsky, E. 1952. *Narodnoye Obrazovaniye v SSSR [Education in the USSR]*. Izdtel'stvo Akademii pedagog. nauk RSFSR (in Russian)
8. Platonova D., and Semyonov D. (forthcoming) Russia: the Institutional Landscape of Russian Higher Education. Smolentseva A., Huisman J., and Froumin I. (Eds.) *25 Years of Transformations of Higher Education Systems in Post-Soviet Countries: Reform and Continuity*. London: Palgrave Macmillan UK
9. Bethell, G. and Zabulionis, A. 2012. The evolution of high-stakes testing at the school–university interface in the former republics of the USSR. *Assessment in Education: Principles, Policy & Practice*. Vol. 19. No.1. pp. 7-25.
10. Heyneman, S. 2009. The failure of education for all as political strategy. *Prospects*. Vol. 39, No. 1
11. Osipian, A. 2009. Corruption Hierarchies in Higher Education in the Former Soviet Bloc. *International Journal of Educational Development* Vol. 29, No. 3, pp. 321–30. doi:10.1016/j.ijedudev.2008.08.006.
12. World Bank. 2012. *SABER student assessment country report : Kazakhstan 2012. Systems Approach for Better Education Results (SABER) country report ; 2012*. Washington DC:World Bank. <http://documents.worldbank.org/curated/en/346291468038347210/SABER-student-assessment-country-report-Kazakhstan-2012>
13. Valdman I., Ivanova E., and Reshetnikova O. 2013. Sistema ocenki kachestva shkol'nogo obrazovaniya v

Respublike Armenija. [System of School Education Quality Assessment in the Republic of Armenia] *Upravlenie obrazovaniem: teorija i praktika*. Vol. 2, No. 10, pp. 145-165 (in Russian)

14. World Bank. 2015. *SABER student assessment country report : Belarus 2015. Systems Approach for Better Education Results (SABER) country report* ; 2015. Washington DC : World Bank. http://wbfiles.worldbank.org/documents/hdn/ed/saber/supporting_doc/CountryReports/SAS/SABER_Student_Assessment_Belarus.pdf
15. Catlaks, G. 2003. Curriculum development and teacher training in Latvia. *Teacher training and curriculum reform in the South Caucasus region. From vision to practice*.
16. Bethell, G. and Kaufmane G.. 2005. Assessment and centralized examinations in Latvia. *Assessment in Education: Principles, Policy & Practice*. Vol. 12 No. 3. pp. 301-314. doi: 10.1080/09695940500337272
17. Ministry of Education and Science (MES). 2004. *Byelaws of the Curriculum and Examinations Centre (ISEC) of the Ministry of Education and Science*. Riga: MES.
18. Bolotov V., Gorbovskiy R., Zakhir Yu. and Mertsalova T. 2016. *Kljuchevye voprosy razvitija nacional'nyh i regional'nyh sistem ocenki kachestva obrazovanija (jekspertnyj obzor) [Key issues of the development of national and regional education quality assessment systems (expert review)]*. Moscow: National research university Higher School of Economics. (in Russian)
19. Kaishygulova. 2012 Procedura gosudarstvennogo nadzora v sfere obrazovanija v Respublike Kazahstan [Procedure Public Oversight in Education in the Republic of Kazakhstan] *Fundamental research* Vol.3. p. 33-37 URL: <https://www.fundamental-research.ru/ru/article/view?id=29332>
20. Smolentseva A., Huisman J., and Froumin I. (forthcoming) *25 Years of Transformations of Higher Education Systems in Post-Soviet Countries: Reform and Continuity*. London: Palgrave Macmillan UK
21. Feldberga E., Fridrihsone E., and Jansone A. 2012. *Education in Latvia*. Riga: Latvian Red Cross Youth
22. OECD. 2016. *Education in Latvia*. OECD Publishing, Paris. DOI: <http://dx.doi.org/10.1787/9789264250628-en>
23. Marinosyan, T. 2015. O sovershenstvovanii kachestva obrazovanija v stranah postsovetskogo prostranstva (na primere Armenii) [Quality improvement of education in post-soviet countries (by the example of Armenia)]. *Problemy sovremennogo obrazovanija* Vol. 5 (in Russian)
24. Lee, D. 2013. Unified National Testing to be Replaced by Two Different Tests by 2015. *Astana Times*, September 23. <http://www.astanatimes.com/2013/09/unified-national-testing-to-be-replaced-by-two-different-tests-by-2015/> (Accessed December, 23)
25. Ahn, E., Dixon, J. and Checkmareva, L. (forthcoming) Looking at Kazakhstan's higher education landscape: From transition to transformation between 1920 and 2015. Smolentseva A., Huisman J. and Froumin I.

(Eds). *25 Years of Transformations of Higher Education Systems in Post-Soviet Countries: Reform and Continuity*. London: Palgrave Macmillan UK

26. Johnstone, B. 2004. The economics and politics of cost sharing in higher education: *Comparative perspectives*. *Economics of Education Review* Vol. 23, No. 4, pp. 403-410. doi: 10.1016/j.econedurev.2003.09.004
27. Ampilogov, A. I., Prakhov, I. A., and Yudkevich, M. M. 2014. One or Many? Using the New Opportunities of the Unified State Exam in Russian University Admissions. *Widening Participation and Lifelong Learning*. Vol. 16. No. 1. pp. 34-49.
28. Milovanovitch, M., Ceneric, I., Avetisyan M. and Khavanska T. 2014. *Strengthening integrity and fighting corruption in education: Armenia. Report*. Open Society Foundations. http://www.osf.am/wp-content/uploads/2016/01/Integrity-report_final_en_12.11.2015.pdf (Accessed December, 12, 2017)
29. Shmeleva, E. 2016. Plagiarism and Cheating in Russian Universities: The Role of the Learning Environment and Personal Characteristics of Students. *Voprosy Obrazovaniya (Moscow)*, No. 1, pp. 84–109. doi:10.17323/1814-9545-2016-1-84-109. (in Russian)
30. Bray, M. and Lykins, C. 2012. *Shadow education: Private supplementary tutoring and its implications for policy makers in Asia*. Asian Development Bank.
31. Kalikova, S. and Rakhimzhanova, Z. 2009. Private tutoring in Kazakhstan. *Private Supplementary Tutoring in Central Asia: New Opportunities and Burdens*. Paris: UNESCO International Institute for Educational Planning (IIEP), pp. 93-118.
32. Bessudnov, A. and Malik, V. 2016. Socio-Economic and Gender Inequalities in Educational Trajectories upon Completion of Lower Secondary Education in Russia. *Voprosy Obrazovaniya (Moscow)*, Vol. 1., p. 135–67. doi:10.17323/1814-9545-2016-1-135-167.
33. Veraschagina, A. 2012. *Education and socioeconomic mobility in post-communist countries*. Social Exclusion pp. 67-91
34. Prakhov, I. 2015. Barriers Limiting Access to Quality Higher Education in the Context of the USE: Family and School as Constraining Factors. *Voprosy Obrazovaniya (Moscow)*, Vol. 1, pp. 88–117. doi:10.17323/1814-9545-2015-1-88-117 (in Russian)
35. Bethell G., and Harutyunyan K. 2008. Assessment and examinations in Armenia. *Assessment in Education: Principles, Policy & Practice*. Vol. 15. No.1, pp.107-119. doi:10.1080/09695940701876243
36. Silova, I. 2010. Private Tutoring in Eastern Europe and Central Asia: Policy Choices and Implications. *Compare: A Journal of Comparative and International Education* Vol. 40, No. 3, pp. 327–44. doi:10.1080/03057920903361926.

37. Wolf, A. 2002. Does education matter? Myths about education and economic growth. *Perspectives*. Vol. 6, No. 4, pp. 115-118.
38. Silova, I. and Bray, M. 2006. Implications for policy and practice. *Education in a hidden marketplace: Monitoring of private tutoring*. p. 99.
39. Prakhov, I. 2016. The Barriers of Access to Selective Universities in Russia. *Higher Education Quarterly*. Vol. 70 No. 2, pp. 170–99. doi:10.1111/hequ.12087
40. Prakhov, I., and Bocharova M. 2016. Socio-Economic Predictors of Student Mobility. *National Research University Higher School of Economics. Series WP BRP 34/EDU/2016 "Higher School of Economics Research Paper"*.

8. Appendix

Table 1. Final grade

Do you take into account students' study results during a module (cumulative mark) to determine final grade for the course?	
1. Final grade include both cumulative mark and final exam results	76,9
2. Final grade is based on final exam results only	8,4
3. Final grade is based on cumulative mark only	4
4. It varies correspondently to different courses	10,5
NO ANSWER	0,2

Source: *The Monitoring of the Economy of Education, 2014*

Table 2. The forms of progress assessment

What are the form of progress assessment do you use at your courses?	
1. Articles prepared at home	47,5
2. Articles prepared in class	14,2
3. Hometasks	46,6
4. Test	70,7
5. Colloquium, conference	32,1
6. Presentations in class	53,4
7. Class activity (answers to the questions, case studies etc.)	58,7
8. Practice, laboratory classes	46,1
9. Other	4,8
NO ANSWER	0,3

Source: *The Monitoring of the Economy of Education, 2014*

Table 3. The forms of final exams

What are the forms of final exam (pass/fail exam) do you use at your courses?	
1. In written form	63,2
2. In oral form	72,3
3. Computer test	29,7

4. Written test	25,4
5. In the form of conference, project, colloquium	23
6. Other	2,5
7. In the form of qualification exam	10
NO ANSWER	0,4

Source: The Monitoring of the Economy of Education, 2014

Table 4. The faculty attitudes to students' unethical behaviour

If you have noticed student's cheating at the exam, what you would do?	% of respondents
1. I will grade a student lower for several points	26,5
2. I will just make a comment	23,8
3. I allow to use all available materials during exams	13,5
4. I will give failing grade	12,1
5. Nobody can cheat during my exams	21,9
6. I will do nothing	1,5
NO ANSWER	0,6
If you have found plagiarism in the student's written work, what would you do?	
1. I would grade a student lower for several points	19,9
2. I would just make a comment	9
3. I would give failing grade and ask to re-do the task	64
4. I would give failing grade and will not ask to re-do the task	3
5. I would apply for expulsion of this student	0,4
6. I would do nothing	2,6
NO ANSWER	1,1

Source: The Monitoring of the Economy of Education, 2014

Table 5. The faculty opinions about the check on plagiarism

Is plagiarism check of thesis, articles etc. a common practice in your university? Do you check the written works by yourself?	
1. All written works are checked for plagiarism in my university	26,6
2. Only particular written works are checked for plagiarism in my university	34,9
3. In my university check for plagiarism does not exist, but I do it by myself using special programs	10,9
4. In my university check for plagiarism does not exist, but I do it by myself without any special programs	13,7
5. In my university check for plagiarism does not exist, and I do not do it as well	13,3
NO ANSWER	0,5

Source: The Monitoring of the Economy of Education, 2014