

Chapter 2

Governance of school resource use in Kazakhstan

The Kazakh education system is highly centralised. The governance of school resource use involves extensive central planning, a very detailed system of norms and a strong hierarchy in which different levels of administrative governance are subordinated to higher levels, both in their decision making structure and in the budgeting process. The main players are the President and his Executive Office, the Ministry of Education and Science, the Ministry of the National Economy (earlier called Ministry of Economy and Budget Planning), the Ministry of Finance, oblasts, rayons and schools themselves. Education is considered a top priority and ambitious reforms are underway (e.g. establishment of twelfth grade, new school funding model). This is guided through the vision set in strategic documents such as the Development Strategy Kazakhstan 2050 “One nation, one destiny” and the State Program for Education Development 2011-20. There is an apparent desire and potential to increase resources devoted to education and awareness that spending per student remains markedly lower than the OECD average and that of other neighbouring countries. Long-term central planning allows continuity of education policy while the comprehensive system of norms provides safeguards for schools against discretion by educational authorities. However, insufficient local and school autonomy hinders effectiveness of resource use as the ability to respond to specific local needs, taking into account local conditions and context, is more limited. Also, intergovernmental transfers account little for local needs and involve little equalisation which leads to considerable differences in spending per student across regions, localities and schools.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

This chapter is about the governance of resource use within school systems. It analyses how the effectiveness of resource use is influenced by key features of school systems such as distribution of decision-making, structure of schooling, level of parental choice and size of private sector. It also deals with the level of resources available for school education and revenue sources. Furthermore, it discusses the planning of resource use (e.g. definition of priorities and targets, distribution of responsibilities for resource use) and the implementation of policies to improve effectiveness of resource use (e.g. communication and consultation with relevant stakeholders about resource use).

Context and features

Distribution of responsibilities for school resource use

The Kazakh education system is highly centralised. The distribution of responsibilities for school resource use matches the overall governance of school education described in Chapter 1. The governance structure of the Kazakh education system follows closely that of the former Soviet model, in which different levels of administrative governance are subordinated to higher levels, both in their decision making structure and in the budgeting process. The distribution of responsibilities for resource use in schools is briefly described below by actor and in Table 2.1 by area:

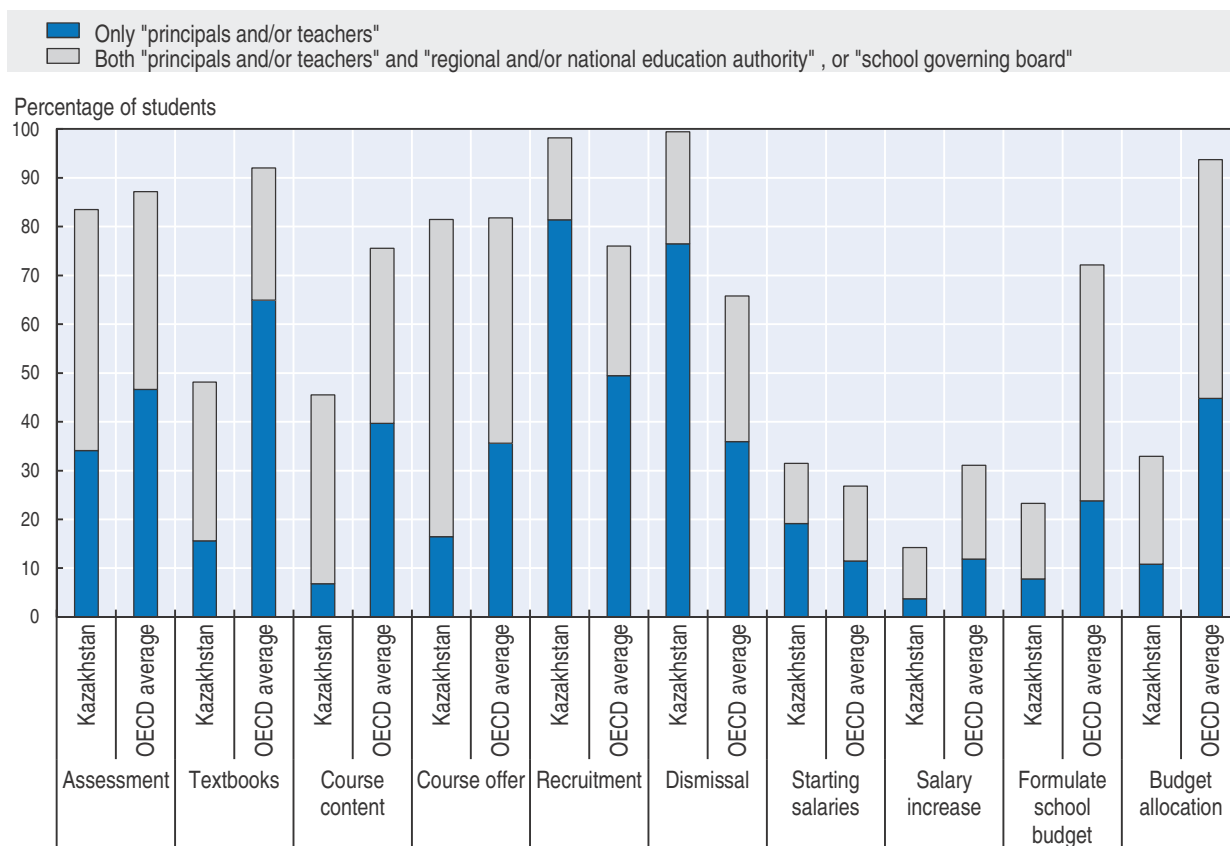
- *The President and his Executive Office* provide clear and detailed directions for the development of the education system, hold the Ministry of Education and Science accountable for its results and monitor directly some initiatives of special interest.
- *The Ministry of Education and Science* is the competent central authority on education matters. The Ministry is responsible for the implementation of the laws on education, as well as strategic planning, management and funding of the education system, including the preparation of draft education budgets. The Ministry of Education and Science regulates a whole range of key issues: curriculum development, educational plan and educational programmes, student assessment systems, and allocating and managing some financial resources (namely targeted transfers and republican budgets for specific programmes). Most decisions at regional, local and school levels are made within relevant regulations.

The Ministry has created several agencies and institutions, which are formally subordinated to the Ministry, to provide greater flexibility in the management of human and financial resources in the form of state enterprises (52 at the time of the Review visit), joint stock companies (8) and limited liability partnership (1). Most of these institutions have been created in the last 10 years and each is specialised in a specific area, such as quality assurance, statistics, or managing international projects. For example, the National Centre for Educational Statistics and Evaluation (NCESE) was created to undertake the collection and analysis of some educational statistics and evaluations.¹ Another relevant agency is the Financial Center, which is responsible for the formulation of a new school funding model. The Information-Analytic Center is responsible for international projects of the Ministry, such as the reviews of the

education system carried out by the OECD. The National Centre for Professional Development (Orleu) is responsible for the design and provision of professional development opportunities for teachers and school leaders. The Centre for Excellence at the Nazarbayev Intellectual Schools (NIS) is purported to design and foster pedagogical and institutional innovation in the NIS schools as well as to scale them up to other schools. Finally, the Centre for Development of Small-class Schools, which is part of the National Academy of Education, was created to monitor the performance of small-class schools and foster improvements.

- *The Ministry of the National Economy* (called, at the time of the Review visit, *Ministry of Economy and Budget Planning*) is responsible for developing the fiscal policy; creating an integral and effective system of national planning; developing the proposed annual budget, budget classification and the procedure for preparation and submission of budget requests; monitoring the implementation of investment projects; developing proposals to improve regional and local public administration; and, establishing reporting requirements on operations of central, regional and local authorities. Also, the Ministry of the National Economy plays an important role in the coordination of central, regional and local authorities.
- *The Ministry of Finance* is responsible for the administration and inter-sector coordination in the area of budget implementation, budgetary accounting and budget reporting on implementation of the national budget and, within its jurisdiction, local budgets. The Treasury Committee of the Ministry of Finance monitors the execution of the public budget and is established at the central, regional and local levels. The education departments of *oblasts* and *rayons* are subject to audits by financial control inspectorates of the Ministry of Finance. The Financial Control Committee is responsible for internal financial control and public procurement, audit activities, accounting, and financial reporting.
- *The Accounts Committee* is the supreme audit institution, which is the body with the highest authority in the control of the execution of the national budget. The Accounts Committee is directly subordinated and accountable to the President. At the regional and local levels, audit commissions were established in 2011 to improve the external public financial control of their budgets.
- *Oblasts* are responsible for education in vocational and professional schools as well as in special and specialised schools. *Oblasts* provide in-service teacher training and methodological, pedagogical, psychological and medical consulting services to schools. *Oblasts* organise the Olympiads and other student contests at the regional level. *Oblasts* are also responsible for distributing textbooks, maintaining school infrastructure, providing free and subsidised school meals for specific categories of students, and supporting orphan students.
- *Rayons* are mainly responsible for allocating and managing physical resources, determining class sizes and providing methodological support to schools. According to the Budget Code, local authorities are assigned primary responsibility for financing schools, evening education, and boarding schools. Local governments also have responsibilities in purchasing and delivering textbooks and instructional materials, organising school Olympiads and other student contests at the local level, providing free meals to students and logistical support to schools. School principals participate on a monthly basis in a meeting organised by the *rayon's* department of education which is purported to facilitate the implementation of norms and solve any existing problems.

- Schools have little autonomy in the management of school resources in Kazakhstan compared to other OECD countries, except for teacher resources (see Figure 2.1). Schools are mainly responsible for organising student learning, addressing low student performance and managing their teaching body. According to PISA 2012, a large proportion of 15-year-olds attend a school whose principal reports selecting teachers for hire (81%) and firing teachers (76%) (OECD, 2013a). However, a small proportion of 15-year-olds attend schools whose school principal reports establishing student assessment policies (34%), choosing which textbooks are used (16%), determining course content (7%), deciding which courses are offered (16%), establishing teachers' starting salaries (19%) and increases (4%), formulating the school budget (8%), or deciding on budget allocations within the school (11%). School principals are also unable to design their own organisational structure, both in terms of the number of deputies and in their functions. Regarding the “firing” of teachers it must be noted that, in a great number of instances, it might essentially involve assigning fewer teaching duties to the concerned teachers.

Figure 2.1. **School autonomy in Kazakhstan and OECD, 2012**

Note: This figure shows the in schools whose principal reported in PISA 2012 that the following groups have a considerable responsibility for the areas of autonomy displayed above: (i) only “principals and/or teachers” (indicated in dark blue); and (ii) both “principals and/or teachers” and “regional and/or national education authority”, or “school governing board” (indicated in light blue).

Source: OECD (2013a), PISA 2012 Results: What Makes Schools Successful (Volume IV): Resources, Policies and Practices, <http://dx.doi.org/10.1787/9789264201156-en>.

- *Boards of Trustees*, as a possible form of a collegiate body contributing to school management, were legally established in 2007 in the context of a policy seeking to decentralise decision-making within the education system and grant the school community with an opportunity to participate in school management. Membership of a Board of Trustees includes representatives of teaching staff, parents, graduates from the school, local businesses and civil society organisations. As of 2012-13, Boards of Trustees had been created in 3 259 schools (44.1% of schools). There is, however, great disparity across *oblasts*. While over 400 schools had created Boards of Trustees in East Kazakhstan and South Kazakhstan, fewer than 10 schools had a Board of Trustees in each Atyrau, Astana City and Almaty City. By 2020, 60% of schools are expected to have Boards of Trustees. The main functions of Boards of Trustees are still confined to the organisation of social and cultural events but Boards are expected to progressively take on further responsibilities in determining schools' developmental strategies, appointing key personnel, and overseeing the school's finances. The new school funding model (see Chapter 3) provides them with opportunities to allocate teacher bonuses.
- *Parents' Committee*, which is an informal group with no legal recognition, typically functions as an advisory group in a range of organisational school decisions and also assists in the organisation of school events. Prior to the introduction of Boards of Trustees, schools would freely find their own ways to foster collaboration with their surrounding communities. Most typically, such collaboration has taken the form of a *Parents' Committee*, which is elected by a general parents' meeting at the school.

The coordination between different education levels is ensured by extensive central planning, a very detailed system of norms and a strong hierarchy (see Chapter 3 for a detailed explanation of norms within the education system). The Development Strategy Kazakhstan 2050 "One nation, one destiny", which was adopted in 2012, provides a grand vision for the country in the long-run. In the education sector, it is complemented by the State Programme for Education Development in the Republic of Kazakhstan for 2011-20 (SPED), which was adopted in 2010. The SPED has a five-year implementation plan which, in turn, is operationalised into annual plans and other thematic strategies. In the short-term, the annual address of the President to the nation provides an opportunity to present new initiatives and redefine strategies, which then are usually developed into strategic sectorial documents and laws. Similarly, *oblasts* and *rayons* also define their general and sectorial plans at multiple time horizons on the basis of the national and *oblasts'* ones respectively.

The SPED sets out an ambitious strategic reform programme to boost the quality of the education system (see Chapter 1). Three key initiatives with significant impact on the planning and use of school resources have been launched: the extension of compulsory schooling from 11 to 12 years (with the establishment of the twelfth grade); the introduction of resource centres to support small-class schools; and a new school funding model.²

Table 2.1. **Distribution of responsibilities for school resource use by area**

Area	Distribution of responsibilities
Overall governance of the system	
Strategic development	The President and his Executive Office provide directions for the development of the education system which are further implemented into strategic and operational plans by the Ministry.
Curriculum	The Ministry establishes the State Compulsory Standard of Secondary Education, which determines the list of compulsory subjects, programmes and study plans. Each school develops its own educational plan, distributing hours across subjects and defining extracurricular activities.
Student Assessment	The Ministry is responsible for the development of the student assessment system, including the Unified National Test (UNT) and the External Assessment of Student Achievement (EASA). This responsibility has been delegated to the Committee for Control in the Field of Education and Science and the National Testing Centre. Schools define assessment criteria for teacher-based assessment.
Allocation of resources to schools	The Ministry establishes the rules and methodology for school finance. The Government provides <i>oblasts</i> and <i>rayons</i> with the funding to be distributed to schools. The Government decides on salaries of school staff, which can be complemented by funds coming from local education authorities.
Targeted groups	The Ministry and other central government bodies have the responsibility for determining which groups of students can receive a specific treatment (e.g. linguistic, gifted, with a disability, low income). The provision of support can be the responsibility of central, regional or local authorities.
School operations	
School network	The Committee for Control in the Field of Education and Science is responsible for issuance of licenses for school operation as well as closures. Local authorities can also close schools when the number of students is below the national requirement for operation or schools do not comply with security and health requirements. If no other schools operate in a locality, local authorities have to arrange free-of-charge transportation for students to the nearest school.
School calendar and instruction time	In observation of the required student breaks regulated by the Ministry of Health, the Ministry of Education and Science determines the calendar, list of subjects and number of hours allocated to them, and distribution of study load for students over a week. Schools form classes, adjust loads of subject teachers, and prepare the timetable.
Class size	The maximum class size and the circumstances under which it can vary are also centrally defined. <i>Oblasts</i> and <i>rayons</i> can modify class sizes within certain parameters.
Admission to schools and grouping of students	The Ministry regulates criteria for admission into schools as well as the grouping of students. The school principal decides on the admission of students.
Support to low performing students	The type, frequency and intensity of strategies to support students with learning difficulties are left at the sole discretion of schools.
Specific resources	
School leadership	The framework for school leadership is centrally defined. Local authorities are responsible for hiring and dismissing school principals in compliance with national norms. School principals appoint deputies for academic, methodological, educational and other work (depending on type and kind of school). The school principal is responsible for the elaboration of the school operational plan (e.g. defining school operations with indication of timeframes and responsibilities).
Human resources	The standard staffing of public educational organisations and the List of Teaching Positions and Equated Employees are centrally defined. The school principal selects teachers and support staff; approves the management structure, staffing tables and job descriptions of employees; creates conditions for their professional development; manages the teachers' council; conducts attestation of staff in accordance with the established procedure; rewards and imposes penalties to staff; and decides on the teaching load of teachers (in special cases this may lead to dismissal of teachers).
Physical resources	The Ministry regulates school infrastructure, equipment and instructional materials that should be available in schools. Local authorities are responsible for their delivery and schools are expected to use them for educational purposes. Schools are also responsible for reporting on their budget, staff and assets on a regular basis.

Source: Adapted from IAC (2014), OECD Review of Policies to Improve the Effectiveness of Resource Use in Schools: Country Background Report for Kazakhstan, www.oecd.org/edu/school/schoolresourcesreview.htm.

Finance of the school system

Public revenues

The Kazakh public finance system is very centralised, and overall public revenues are largely determined at the central level. A great deal of the subnational administrations' recurrent expenditure is financed through a system of assigned taxes and budget subventions. The country's 16 regions (14 *oblasts* and the 2 cities of Republican subordination, Astana and Almaty) are fully assigned personal income and related contributions collected within their territories. *Rayons* and cities of *oblast* subordination are fully assigned the property tax and certain excise taxes. Local budget financing of school education accounted for about 74% of all education expenditures in 2013, or 1.8% of GDP. Meanwhile, the Republican budget's share has remained relatively constant between 25-29% since 2006, having doubled from 12% in 2002 (IAC, 2014). Although the largest disbursements are made by local authorities, the areas in which they can exercise discretion in ensuring appropriate school resource levels are limited. Local authorities cannot determine rates or bases for taxation, except for the land tax.³ Taxes are collected directly by the Ministry of Finance and its territorial divisions, which do not report to any local government authority. Local authorities can only borrow from regional or national authorities, which limits their capacity to finance capital expenditures (Makhmutova, 2006).

Intergovernmental transfers play an important role in the budgets of *oblasts* and *rayons*. In 2011, tax revenues amounted to about 36% of local revenues while vertical transfers accounted to 61% (Makhmutova, 2012). Lack of own resources and a system of far-reaching norms governing nearly every aspect of school resource provision means that local governments have little discretion over their spending. The framework of intergovernmental transfers has been reformed several times since the split of the Soviet Union. Since 2005, the framework consists of (Makhmutova, 2006):

- *General transfers, targeted recurrent transfers, and targeted development transfers.* Unlike the targeted transfers, which can only be used for the specified purpose, general purpose transfers are not earmarked for a particular sector and thus become part of local governments' general revenues from which they may finance education or any other function within their purview. Targeted development transfers are used to finance specific programmes. For example, half of the KZT 98.7 billion (approximately USD 640 million) in targeted Republican transfers allocated in 2011 was directed toward the construction of education facilities in selected areas. The rest was spent on recurrent education programmes, which included the provision of pre-primary education, as well as skills development and retraining activities under the national Employment 2020 programme, among others.
- *Budget subventions and budget withdrawals* are purported to equalise variation in regional revenues (per capita) and ensure that all levels of governance have the necessary resources to perform their responsibilities. Subventions or withdrawals are labelled as general transfers and established in absolute terms for a three-year period. In 2011, 13 out of 16 regions (all except Almaty city, Mangystau and Atyrau) received budget subventions as their expected expenditures exceeded their potential revenues (Ministry of Economy and Budget Planning, 2011). The equalisation system is not based on clear criteria or a minimum standard and, as a result, the allocation per student or patient might be disproportional across the country (Makhmutova, 2006) and a considerable scope for negotiations and mutual adjustments exists.

The formulation of the national, regional and local budgets

The Budget law provides a clear description of the process and sets out the calendar for the formulation of the national, regional and local budgets (see Table 2.2). The potential revenues and expected expenditures are estimated to determine the overall budget envelope. In mid-May, *rayons* have to submit their budget proposal – which aggregates the budgets of all their schools – to *oblasts*, which in turn submit consolidated budget proposals to the Ministry. Projections are likely to have a significant margin of error as the number of students, classes, or full-time equivalent teachers needed are defined later in the year.

Table 2.2. **Timeline for the national, regional and local budget formulation in Kazakhstan**

Steps of the budget process	Central level	<i>Oblast</i> , Astana, Almaty level	<i>Rayon</i> level
Approval of national development plans and of macroeconomic forecasts for next budget year	April 15		
Submission of budget plans by budget programme administrators	May 15		
Initial budget submitted for review by the budget commissions	August 1	September 1	October 1
Corrected budget submitted for approval by executive body	August 15	October 1	October 15
Finalised budget submitted for approval by the assembly	September 1	October 15	November 1
Approval of the provisional budget for first quarter if the complete budget is not approved by the assembly	December 25		
Adoption of operating plans of state organs	January 10		
Final deadline for approval of the budget by the assembly	March 1		

Source: Adapted from Ministry of Economy and Budget Planning (2011), *Budget Guide: Budget of the Country – Budget for Everybody*, Astana.

The process for budget formulation takes place almost simultaneously to provide greater scope for negotiation. A given *oblast* might disagree with a budget proposal from a *rayon* and, at the same time, use the budget proposed to negotiate greater funds from the central government. Also, discussions take place at multiple forums (budget commissions, executive bodies and assemblies). At the same time, the approval of budgets is sequential from higher to local levels. The budget of *rayons* is only approved once that of the respective *oblast* has been approved which in turn follows the approval of the budget for the central government.

Other sources of funding

The review team did not receive congruent information on other sources of funding, including funds raised from fee-based services, sponsorships, and donations. The revenues raised through fee-based services are deposited in a Cash Control Account (CCA) of the Treasury and can be discretionally allocated by schools in consultation with the Board of Trustees or the Parents' Committee. Donations from parents, businesses and other benefactors are deposited in the CCA Sponsorship account of the Treasury and are spent at the sole discretion of schools (IAC, 2014). Revenues and expenditures related to fee-based services and donations are not recorded in the school budget. In contrast, in-kind donations are to be accounted in the school balance sheet. The review team was not given any estimation of amounts held in CCA accounts.

Public schools tend to provide few fee-based services (IAC, 2014).⁴ Most school principals and accountants reported that after-school non-pedagogical activities are provided to students free of charge and that school facilities are not generally rented out for a fee to community organisations or other outside parties. Several stakeholders

reported that the status of schools as “state institutions” (*Gosudarstvennyye uchrezhdeniya*, GU) forbids them from collecting fees and placing them in a special account to be used at the school’s discretion. Others spoke of an upcoming plan to grant schools the status of “state communal enterprises” (*Gosudarstvennyye kommunal’nyye predpriyatiya*, GKP), which have the right to open their own bank accounts and raise revenues that can be spent at the discretion of a newly established Board of Trustees.

In-kind donations seem to be widespread and typically include gifts of goods and services, such as learning materials, multimedia or ICT equipment, and small-scale rehabilitation or repairs of school facilities (IAC, 2014). In addition, there is evidence that families are increasingly contributing to pre-primary and school education: schools collected an average of about USD 300 from each family in 2009, an amount that might be lower in primary grades and higher in upper secondary grades (Singh, 2012). Similarly, a survey of 60 schools in four *oblasts* revealed that a significant proportion of parents give voluntary contributions to schools: 86% in urban schools, 69% in rural schools and 33% in small-class schools (Sange, 2008). The survey also found that lower fundraising in small-class schools was more associated to the inability of parents to contribute rather than lower needs (Sange, 2008).

Expenditure on education

The total volume of resources devoted to education has been relatively stable in recent years. After a brief decline following the 2009 financial crisis, public expenditure on education has hovered around 4% of GDP. By 2013, public education spending had recovered to approach pre-crisis levels, though the modest figure of 3.8% of GDP masks the rapid GDP growth that the country has experienced since the turn of the century. The share of overall public expenditures devoted to all levels of education has recently surpassed 20% (see Table 2.3). Overall private spending on education, at 1.1% of GDP, is mostly devoted to higher education as primary and secondary schooling only account for one-fifth of all private education spending.

Table 2.3. **Public spending on education in Kazakhstan, the OECD, and selected countries**

	% of GDP		% of total public expenditure		Per student as % of GDP per capita	
	Total education	Primary and secondary ¹	Total education	Primary and secondary ¹	Total education	Primary and secondary ^{1, 2}
Kazakhstan (2013)	3.8	2.1	20.5	10.4	16	11
Kazakhstan (2011)	3.8	2.1	18.4	10.7	14	11
OECD average (2011)	5.6	3.6	12.9	8.4	27	25
Selected OECD countries (2011)						
Mexico	5.2	3.5	20.5	13.6	19	16
Poland	4.9	3.3	11.4	7.5	31	28
Turkey	4.1	2.4	10.9	6.3	18	14
Selected non-OECD countries (2011)						
Brazil	6.1	4.5	19.2	14.3	26	24
Russian Federation	3.9	2.0	10.9	5.5	24	20

1. Includes technical and vocational education. Data on selected countries include post-secondary non-tertiary education (with negligible amounts) while data on Kazakhstan do not.

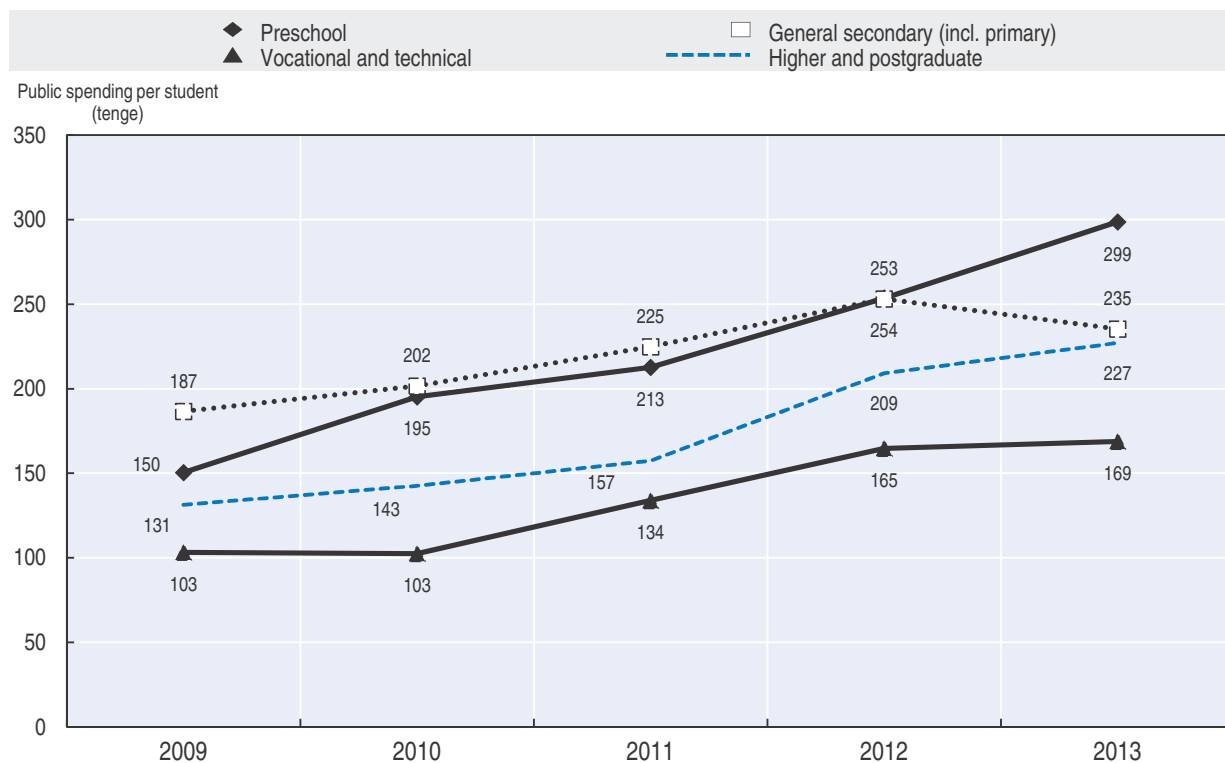
2. For selected countries, data are calculated as an average of primary and secondary education and refer to both private and public expenditure.

Sources: Authors’ calculations based on data provided to the review team by the Ministry of Education and Science and ASRK (2014), *Volume of services provided by educational organizations of the Republic of Kazakhstan*, Astana, and OECD (2014a) *Education at a Glance 2014: OECD Indicators*, <http://dx.doi.org/10.1787/eag-2014-en> (selected countries).

The proportion of public expenditure devoted to school education (10.4%) is above the OECD average. It accounted for half (51%) of all government expenditures in education in 2013, down from 58% in 2011. The relative decline comes as a result of growing public expenditure in pre-primary education, whose relative share in the education budget has tripled since 2009. In absolute terms, however, spending on school education has remained around 2% of GDP in recent years, which is significantly below the OECD average (3.6%) (see Table 2.3).

Spending per student in school education has grown in real terms but remained flat as a share of GDP per capita (the latter a result of increasing living standards in Kazakhstan). Spending per student as a proportion of GDP per capita stood at 11% in 2013, a percentage considerably lower than the OECD average (25%) in 2011. In 2013, per-student spending for schools was 27% lower than for pre-primary education, similar to that of higher education, and 28% greater to that of vocational and technical education. Inflation-adjusted spending per school-level student grew by 26% between 2009 and 2013; meanwhile that of pre-primary, vocational, and tertiary education saw increases of 98%, 64%, and 73%, respectively (see Figure 2.2).

Figure 2.2. **Annual public expenditure per student in Kazakhstan, by level of education, 2009-13**

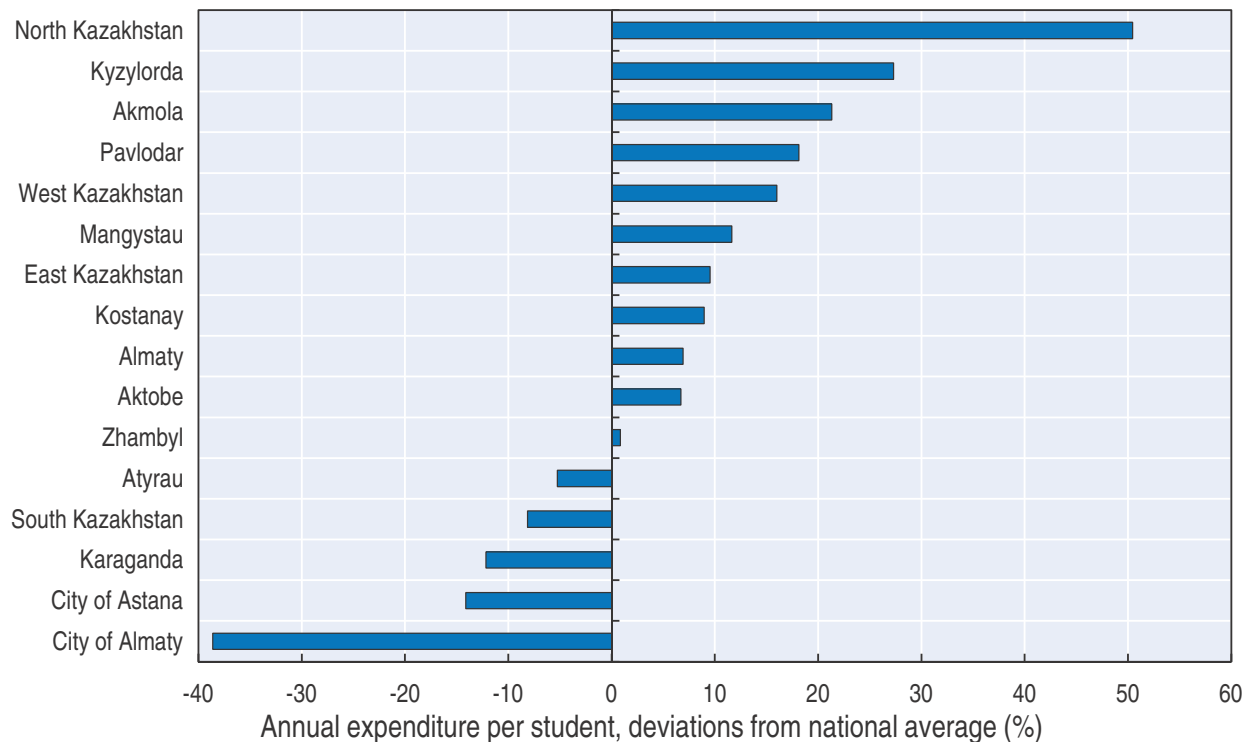


Source: Authors' calculations based on data provided by Ministry of Education and Science and Agency of Statistics of Kazakhstan (ASRK) to the review team.

Some regions spent significantly more of their resources on education than others. South Kazakhstan, for example, allocated 41% of its budget to education, while the city of Astana only spent 10% (OECD, 2014b). The costs of education provision (driven largely by the organisation of the school network)⁵ and the availability of alternative funding sources (such as Republican budget transfers) determine the priority given to education in the local

budgets. As a result, unit costs in schools are seen to vary significantly from KZT 170 000 in South Kazakhstan and the city of Astana to KZT 373 000 in North Kazakhstan (IAC, 2014).⁶ Figure 2.3 shows the variance in per student expenditure across regions, indicating considerable spending disparities.

Figure 2.3. **Variance in per student expenditure across regions in Kazakhstan (%), local budgets, 2011**



Source: Reproduced from OECD (2014b), *Reviews of National Policies for Education: Secondary Education in Kazakhstan*, <http://dx.doi.org/10.1787/9789264205208-en>.

Strengths

Education is considered a top priority and ambitious reforms are underway

Grand vision plans place education as one of the top priorities of Kazakhstan. A series of cascading strategic documents present a stable, predictable framework for the direction of the sector. The national development strategy “Kazakhstan 2050” lays out general education sector objectives, which are then translated into a series of quantifiable indicators to be monitored and achieved by 2020 in the State Program for Education Development 2011-20. The Strategic Plan of the Ministry of Education and Science 2014-18 subsequently lays out annual targets and actions, which are then linked to budgeting decisions. The threefold increase in funding for pre-primary education since 2009, for example, is a direct result of strategic planning that has prioritised the development of that subsector of education.

There is an apparent desire and potential to increase resources devoted to education and awareness that spending per student remains markedly lower than the OECD average and that of other neighbouring countries. The implementation of a wide range of reform initiatives established in the strategic documents governing the sector, such as the

transition to a 12-year school system or a wider use of information technologies, requires a significant amount of additional resources. A number of high-level stakeholders in Kazakhstan consulted during the course of this Review appeared favourable to increases in the medium to long-run in the education budget in order to achieve the strategic goals set for the sector. In a country that spends only about 4% of GDP on its education system while experiencing rapid resource-driven growth and with a great margin to improve education services, the expansion of public resources to schools seems not only feasible but possibly an efficient option. However, as explained earlier, public expenditure remains very vulnerable to global oil price shocks. Following the visit by the review team, oil prices decreased significantly in the course of 2014, limiting the ability of the Government to increase public investment in education.

The Kazakh government has recently launched an ambitious strategic reform programme to boost the quality of the education system. The reforms tackle key challenges in the Kazakh education system and can potentially improve the quality of the system. The plans to establish a compulsory twelfth grade in school education, postponed as of late 2014 as a result of new fiscal constraints, should provide Kazakh students with increased opportunities to reinforce their knowledge, abilities and skills before taking up further educational or labour market opportunities. The introduction of resource centres to support small-class schools provides a good example of emerging cooperation between schools, broadening the horizons and breaking the isolation of students from small-class schools and providing more contact between different groups of students (see Chapter 3). Also, the intended move towards a new funding model based on per student allocations will be a first step to increase efficiency and transparency in the allocation of resources (see Chapter 3).

Educational planning and norms provide clear expectations

The extensive central planning and a detailed system of norms are two key features of the Kazakh education governance system inherited from Soviet times. Educational plans and strategies set clear policy directions and norms transform them into operational actions to achieve them. All major strategies and norms have the personal imprint of the President and are considered part of the legislative framework.

Long-term central planning allows continuity of education policy

Kazakhstan is a country with an ingrained culture of central planning as heritage from Soviet times. Strategies and plans span in a top-down cascade to all time horizons and governance levels. The existence of plans at multiple time horizons (short, medium and long-run) ensures continuity in education policy and provides certainty to all actors. It enables education reforms to unfold in a constructive manner towards a well-established goal.

A comprehensive system of norms provides safeguards for individual schools

The great level of detail of norms for operation is a mechanism to ensure equality of treatment across the country and reduce potential risks (e.g. subjective decisions, errors, misuses, or even corruption). This means that there is little discretion at the local level in educational operations. The system of norms is adjusted or even extended as new educational policies are developed.

Schools must be funded at the level determined by the norms. Norms provide certainty and a legal protection to ensure that schools are given reasons at centrally determined levels, from the number of staff to the space per student (see Chapter 3 for further detail). If a school is not given reasons at the level determined by norms, the school principal has the right to ask local authorities to provide the missing resources. In parallel, the school licensing and attestation processes performed by the Committee of Control in the Field of Education and Science is purported to enforce the norms in schools. The Committee of Control seeks to identify violations to the norms and requires local authorities to rectify the infringements.

Mechanisms are in place to monitor progress towards education goals

Strong monitoring and enforcement mechanisms are in place to ensure that the existing educational plans are reached and that schools comply with the norms. The review team observed that agents in the school system are greatly aware and chiefly focused on making progress towards education goals and on complying with the operational norms. A thorough enforcement system has been established to put pressure on the achievement of the objectives set: vertically, each level of government is monitored directly by higher levels and monitors its immediate subordinated level; and horizontally, some departments monitor the achievements of others (see Chapter 5 for further detail). Regular reporting is complemented by inspections carried out by the central level directly through the Committee of Control in the Field of Education and Science.

Efforts have been undertaken to improve the administrative capacity

The Kazakh government is well aware that facing educational challenges requires improving the capacity of the education administration. Kazakhstan has a clear, hierarchical and rigid governance structure in which each level enjoys limited operational autonomy but is seen as a part of the unified administrative apparatus. It allows the central government to maintain good control of the system in the implementation of education policies and strategies. In times of crisis, while education provision was disrupted in neighbouring countries, this administrative apparatus has proven effective in making sure schools remained opened and teachers received their salaries.

Regarding the building of administrative capacity, the most relevant development within the Ministry of Education and Science in recent years was the creation of the Committee of Control in the Field of Education and Science, which included the creation of regional offices (in the *oblasts* and in Almaty and Astana). The Committee has become instrumental in identifying mismanagement in the system and promoting compliance with operational norms.

In addition, the creation of several agencies subordinated to the Ministry in recent years has opened promising avenues towards a more specialised and flexible central administration of the education sector. Examples include the Information-Analytic Center and the Financial Center. Most of them have a legal form that allows the Ministry to ease recruitment procedures and grant greater operating and financial flexibility. These new agencies operate in areas of special interest for the Ministry and in close coordination with the Minister. For example, the Financial Center was entrusted with monitoring the implementation of the per student funding formula pilot scheme (see Chapter 3).

Challenges

Public investment in education is low

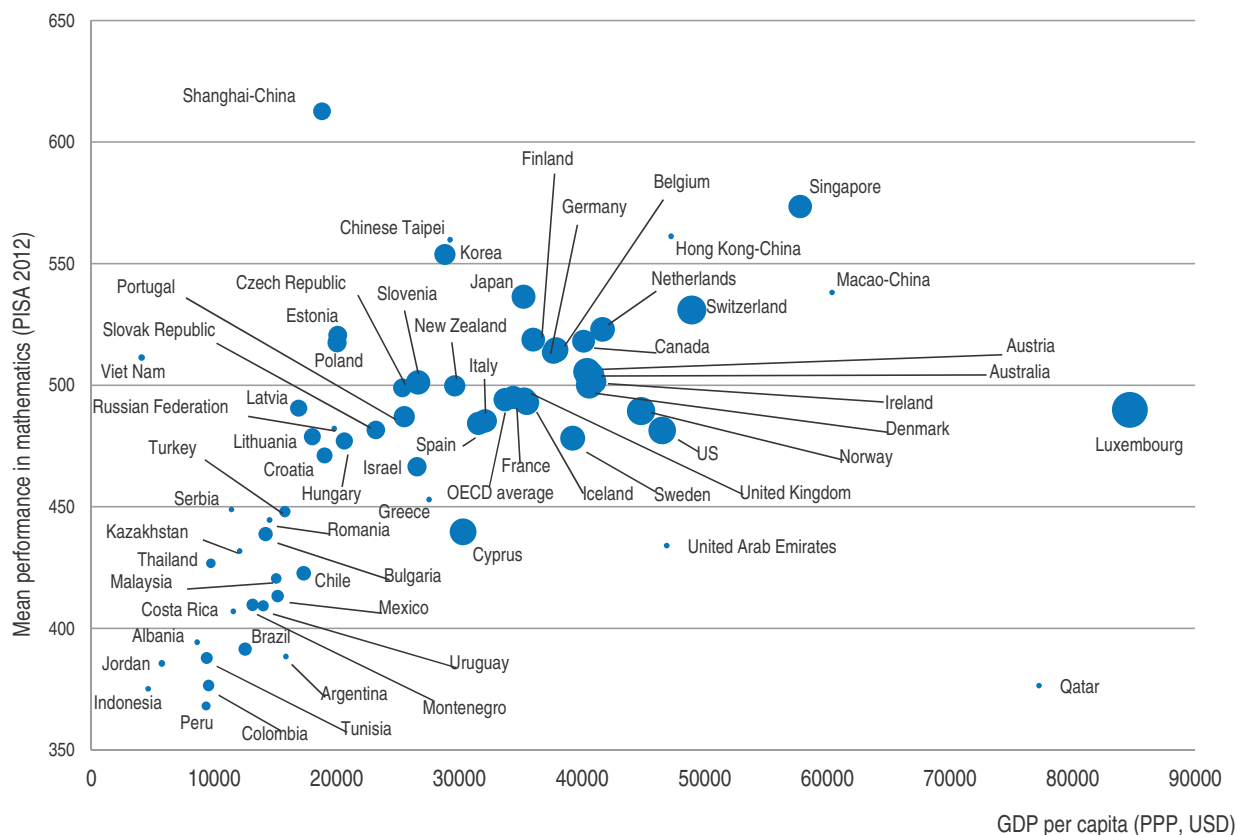
The overall level of public resources devoted to education is low compared to the OECD average as well as to that of other countries with similar levels of economic development. At 3.8% of GDP, Kazakhstan's education budget is substantially lower than the OECD average of 5.6%. The amount devoted to school education (including vocational education), 2.1% of GDP, is considerably below the OECD average of 3.6%, although the latter also encompasses post-secondary non-tertiary expenditures. At 11% of GDP per capita, Kazakhstan's 2013 public spending per student was significantly below the OECD 2011 average (see Table 2.3).

Among the 65 economies participating in the 2012 round of PISA, Kazakhstan finds itself in the bottom 20 both in terms of average mathematics performance and cumulative spending per student. Although the relationship between the learning achievement of 15-year olds and the amount spent on their schooling is not purely causal, research has shown that a minimum level of financing is required to ensure that students have access to materials and resources necessary for learning (World Bank, 2013). Moreover, countries that fall below the high-income threshold of roughly USD 20 000 in GDP per capita in purchasing power parity (PPP) terms are more likely to see a correlation between national wealth and PISA performance (OECD, 2012) (see Figure 2.4). Kazakhstan finds itself within this range, suggesting that further economic growth and increases in spending on education may both contribute to learning gains.

There is considerable scope to increase public expenditure on education in Kazakhstan. Countries with similar or lower levels of GDP invest proportionally more in the education sector. The lack of adequate resources in schools can hamper the quality of learning environments. While larger education budgets are no guarantee of better education quality, a minimum level of spending is necessary for ensuring good quality education provision. A school system that lacks quality teachers, adequate infrastructure and enough textbooks will almost certainly fail to promote quality education. Underinvestment in the school system can also result in educational inequalities, as scarce resources tend to concentrate in certain disadvantaged areas or schools. For example, the expansion of education funding in recent years in Kazakhstan has focused on some "points of growth", among which is the network of Nazarbayev Intellectual Schools (NIS) that target gifted students. The NIS currently enrol 0.4% of students at a unit cost of more than three times the national average. While NIS are meant to serve as a model for future education reform in Kazakhstan, the possibilities for scaling up their innovations seem limited within the current fiscal environment. Similarly, PISA 2012 shows significant differences in student achievement across Kazakhstan's schools, with some differences driven by variations in resource levels among schools (World Bank, 2014) (see Chapter 3 for further detail on current inequities in the distribution of resources across schools).

The official reluctance to expand public expenditure on education is linked to concerns about both the sector's efficiency and its absorptive capacity. A number of stakeholders consulted for this Review acknowledged the need to increase financing for education, but expressed scepticism about the sector's ability to use extra funds effectively. One concern is the lack of good quality performance measures that can inform the budgeting process. The main hurdles to an effective use of extra resources remain the lack of sufficient capacity at all levels of public administration and the ability to link strategic

Figure 2.4. **The relationship between GDP per capita, cumulative expenditure per student on school education and mean PISA performance in mathematics of 15-year-olds, 2012**



Note: The volume of the country's circle reflects cumulative expenditure per student between 6 and 15 years of age.

Note by Turkey: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".

Note by all the European Union Member States of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

Source: OECD (2014c), PISA 2012 Results: What Students Know and Can Do (Volume I, Revised edition, February 2014): Student Performance in Mathematics, Reading and Science, <http://dx.doi.org/10.1787/9789264208780-en>.

goals to measurable performance indicators, which translate into budgeting decisions (Dulatbekov and Assylbayeva, 2013). Despite a long list of monitoring indicators embedded in the sector's strategic documents, schools and local authorities are typically not held accountable for their achievement but, instead, for compliance with the norms (see Chapter 5).

Insufficient local and school autonomy limits the potential for improvement

Schools and local governments have little autonomy in Kazakhstan compared to OECD countries (see Figure 2.1). Little local and school autonomy hinders effectiveness in the use of resources as local authorities and schools are unable to match resources to their specific needs, and in consideration of their conditions and context. For example, one local education authority visited during this Review reported having trouble retaining qualified teachers but being unable to raise teachers' salaries because these are set at the central level. Instead of offering salary raises, the local authority had to find a way around by

providing teachers with salary bonuses. Again, the grounds for providing these bonuses and procedures for allocating them are defined in national norms, so it is not possible to use this trick without distorting the compensation system. Moreover, the existence of extensive norms reduces the responsibility for the effective use of resources of education officials at different governance levels. Teachers, school leaders and education local officials are focused on complying with the system of norms rather than on exploring ways to foster school improvement.

Local and regional governments have very little spending discretion for local development. Little variation has been found in the content and coverage of local services (Makhmutova, 2001), and indeed subnational governments are required to support national policies and interests in their own policies (Bhuiyan 2010). The budget cycle illustrates the little autonomy of subnational authorities, which prepare their budgets only after the higher-up authority has formed its budget. The decentralisation of the governance of primary and secondary schooling seeks to increase responsiveness to local needs, improve the quality of schools, spur innovation in education, and improve financial and human resource management in education (Oates, 1972; OECD, 2013c). Also, from a local development perspective, a high quality education system may help attract economic activity and residents interested in more and better opportunities for their children. However, lack of capacity at the local level may lead to greater inequalities and ineffectiveness. In other words, the central government might not know what to do but the local government may not know how to do it (Bird, 1995).

Intergovernmental transfers account little for local needs and involve little equalisation

Intergovernmental transfers rely mostly on regulated negotiations with limited account of local needs

Kazakhstan has undertaken significant reforms in the last 15 years to improve the intergovernmental fiscal relations, such as clarifying the budgeting processes and responsibilities for spending, but considerable challenges continue to hamper a more efficient and equitable governance of school resource use. One of the main concerns remains the importance of budget negotiations on the calculation of intergovernmental transfers and on defining education budgets at the subnational level. Intergovernmental transfers are calculated using a complex set of formulas that take into account the projected revenues and expenditures of local budgets, which are computed according to a long list of indicators and coefficients across all sectors (Government of the Republic of Kazakhstan, 2010). However, no portion of these general purpose transfers is earmarked for education and the corresponding budget negotiations end up leading to suboptimal allocations as objective indicators on potential revenues and expenditure needs are given little importance. The formulation of education budgets at the local level mainly consists of a negotiation in which lower levels underestimate revenues and overestimate expenditures in their budget requests. However, regulatory norms play an important role in the negotiations by establishing the amount that local governments are entitled for education which, as argued before, may not correspond to local education needs.

Other concerns have also been raised on the intergovernmental transfers and budgeting process. Bhuiyan (2010) argues that subnational governments have limited autonomy in resource use as intergovernmental transfers are not always predictable and could shift from one year to the next. Makhmutova (2006) identifies six additional pitfalls

of the current intergovernmental fiscal relations: (i) inadequate planning and forecasting of budgets at all levels; (ii) lack of stable income sources for local budgets; (iii) poor incentives for budget implementation at the local level; (iv) weak equalisation mechanisms; (v) weak management of public assets at the local level; and (vi) inadequate monitoring of implementation and control of local budgets.

Insufficient equalisation leads to large differences in spending per student across the country

There are some indications that intergovernmental transfers have an insufficient equalisation effect of education spending per student across subnational governments and thus schools. As documented earlier, expenditure per student varies greatly across *oblasts* – from 39% below the national average in Almaty to 50% above the national average in North Kazakhstan (see Figure 2.3). Marked differences in per student spending are also observed across *rayons*. The Ministry of Education and Science commissioned a report to UNICEF on the financing of 175 schools across Kazakhstan. The final report revealed important differences in spending per student between *rayons* of the same *oblasts* and between schools of the same type and size within the same *rayon* (UNICEF, 2012).

Some subnational governments spend significantly more of their resources on education than others and, while expenditure per student should not be equal across the country, the existing differences are not always associated to the costs of provision. A previous OECD report attempted to correlate spending per student and the costs of provision. The authors found that North Kazakhstan and Akmola, for example, are *oblasts* with a similar share of rural and small-class schools and with comparable average class sizes, student-teacher ratios and student transportation coverage, but their per student expenditure differs by almost 2.5 times (OECD, 2014b). The regions of Almaty and Zhambyl have very similar school networks and, although the proportion of students using transportation services is smaller in Almaty (48%) than in Zhambyl (80%), per student expenditure is more than 7 times lower in the Almaty region. The report also highlighted marked differences between the two biggest cities, Almaty and Astana, despite having similar average school and class size. The authors also found that expenditures per student do not seem to be correlated with the cost of living and report that while the cost of living in North Kazakhstan is the third lowest in the country, its average per student expenditure is the highest of all *oblasts* (OECD, 2014b).

The overreliance on intergovernmental transfers means that these are particularly relevant for education expenditure as the latter represented about 30% of local budget spending in 2011 (twice that of the next-largest sector). The resources available at the regional and local level determine the amount of resources to be distributed to schools as well as the quality of the support that *rayons* and *oblasts* provide to schools. As noted in OECD (2014b), the methodological school support teams, for example, are likely to be resourced with more trained and equipped staff in large and rich cities. In addition, small-class schools in areas with low capacity for resource generation often lack basic equipment and instructional materials. During the Review visit, school principals of small-class schools often reported that only salaries and basic facilities maintenance (such as heating and electricity) are funded and that there is no budget for purchasing library books, internet access and pedagogical equipment. Moreover, insufficient funding is allocated to maintenance of new school equipment and smart boards, raising the risk that this new equipment may soon fail to function properly.

Limited consultation and articulation hamper the potential of strategic planning

Little consultation might hinder the quality and legitimacy of planning processes. The strategic planning of resource use in Kazakhstan is essentially driven by the centre, in a top-down approach, and is controlled through a bureaucratic process of verification of whether specific norms have been followed. The planning does not include phases of discussions, and leaves little room to adjust overall strategic goals to specific local conditions. The lack of consultation with stakeholders means that education strategies might not fully reflect the rich diversity present in the country.

The engagement of a broad set of stakeholders is paramount for education reform in most OECD countries. Frequent and open communication and opportunities for participation can facilitate meaningful and ongoing engagement at the different levels. Stakeholders typically include teachers, representatives from teacher unions, school and local leadership, and other community representatives, such as business leaders and parents.

While substantial work has been done in developing a range of strategies for education in the country, a vision for education which encompasses the views and perspectives of a variety of stakeholder groups is missing. A well-thought-out and inclusive strategic vision is necessary to design long term legal and institutional changes, to plan effectively the human and financial resources needed in different territorial and administrative areas of the system, and to adopt a clear implementation path.

Also, many of the new policies, as formulated in strategic documents, are not thoroughly analysed in terms of their short-term and long-term benefits and cost implications or in terms of the future need for resources. The Action Plan of the Ministry contains some of the key actions and financial implications but major reforms seem not to be subject to in-depth cost-benefit or financial scrutiny. Similarly, school budgets are rarely altered when new investments lead to increase of recurrent costs (by increasing space per student, for example) or to their decrease (by increasing class sizes, for example).

Policy recommendations***Increase overall public spending on education, while addressing key efficiency concerns***

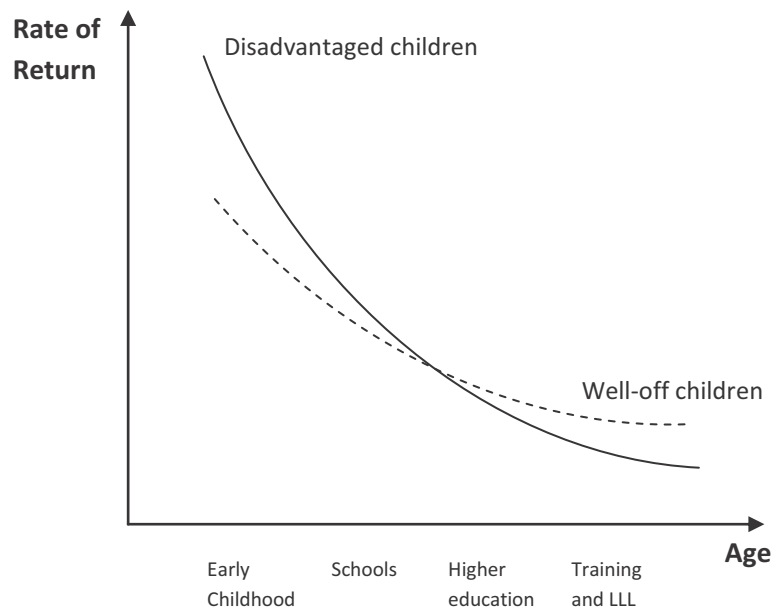
Compared to other countries with similar income, Kazakhstan underinvests in education. The level of resources currently invested in education does not match the ambitions set out in the sector's strategic documents. As a result, a gradual expansion of public spending on education toward OECD standards (5-6% of GDP) as a long-term objective should be considered to support the sector's strategic plans. While certain periods of fiscal stress on the national budget, as with the fall of national revenues resulting from lower oil prices in 2014 and 2015, will not facilitate the achievement of this objective, the Government should be determined in its ambition of gradually increasing public investment in education. This also highlights the importance of exploring ways to protect education expenditure from oil shocks as these tend to hit the education sector hard. An underinvestment in one generation of students can have long-lasting effects on the country's economic prospects.

The gradual expansion of public spending on education needs to be accompanied by a reflection about the specific areas that should receive priority for further investment, particularly in situations of fiscal constraints. This is a complex decision which requires

comprehensive analysis in the system and wide consultation among stakeholder groups. Part of the analysis should assess which areas provide greater opportunities for efficiency improvements before further investment is granted. This analysis would allow the Government to develop a strategy for how to use additional funds, if they become available in the years to come. The present report provides some suggestions for this debate but does not seek to point to definite directions for further spending.

One area in which Kazakhstan clearly needs to invest more is in early educational years, in particular early childhood education. This should be part of further investment in strategies to support disadvantaged students. While spending more on elite “points of growth” (such as Nazarbayev Intellectual Schools) may stimulate educational innovation, this approach alone does not benefit the majority of students. Evidence from the United States (Cunha et al., 2006) and Europe (Woessmann, 2008) shows that investing as early as possible in high quality education for all, and particularly in supporting students from disadvantaged backgrounds, yields larger returns because early cognitive development makes it easier to acquire skills and knowledge later in life (see Figure 2.5). The substantial long-lasting effects of early education on economic and social outcomes are particularly high for children from disadvantaged backgrounds, whose home environments may not provide them with the foundational skills necessary to prosper at later educational stages. Providing equal opportunities to gain necessary skills for all individuals is particularly important in an economy in transformation and with a small workforce, such as Kazakhstan, in order to sustain high growth levels. More education is likely to increase employability, productivity and provide greater flexibility to cope with technological transitions.

Figure 2.5. **Efficiency and equity of investing early in education**



Sources: Cunha, F. et al. (2006), “Interpreting the Evidence on Life Cycle Skill Formation”, in Hanushek, E. and F. Welch (Eds.), *Handbook of the Economics of Education*, Chapter 12, Amsterdam, pp. 697-812; Woessmann, L. (2008), “Efficiency and equity of European education and training policies”, *International Tax Public Finance*, Vol. 15, No. 1, pp. 199-230.

Another promising area where additional investment may be very beneficial is increasing support to small-class schools through resource centres (see Chapter 3). Building on the experience gained up to now, it is possible to extend the system in two directions. The first is to invest in a number of new resource centres to cover all small-class schools in the country. The second, no less important, is to increase the scope of support provided by these centres to small-class schools. An additional area for further investment is certainly associated with policies to address the overcrowded urban schools. This involves the construction of new school infrastructure in urban areas and the maintenance of those schools which are in emergency condition. Also, as detailed later in this report (see Chapter 4), policies to provide systemic support for the improvement of low performing or disadvantaged schools should be a priority area for further resources.

In some countries, an option for further education investment has been increasing teacher salaries across the board. While it is certainly important for Kazakhstan to have teachers satisfied with their level of remuneration and not interested in seeking additional sources of income from outside the school system, it is also important to take into account that there appears to be no overall shortage of teachers. Hence potential salary increases might be targeted at potential groups of teachers (e.g. beginning teachers) rather than provided across the entire teaching body (see Chapter 3). A more pressing priority for spending in the teaching workforce relates to the resources needed in the move towards a workload system (e.g. 40 hours of work a week distributed across a range of tasks beyond teaching) from employment under a teaching load (*stavka* system), which does not recognise the whole set of professional activities of teachers and is detrimental to their engagement in schools (see Chapter 3). This reform requires considerable resources but could benefit from the overall reduction of teacher numbers possibly with better individual teachers (see Chapter 3).

Increasing public investment in education needs to go alongside improving the efficiency of public funds' use. Among measures that improve the latter are the strengthening of performance monitoring and the reinforcement of accountability to ensure the education system's equity and quality objectives are achieved. Reliable monitoring of use of resources in the education system is a necessary condition for planned expansion of education spending (see Chapter 5). It will also be useful for the Ministry to commission independent monitoring reports from outside the education system itself, for example from universities, from established NGOs or from international experts. It is not enough to rely on monitoring provided by the same people who are implementing the reforms (see Chapter 5). Some areas can be made more efficient, such as the organisation of the school network (including some consolidation in non-urban areas) (see Chapter 3), the reduction of the emphasis on top-performing students (see Chapter 3) and the management of human resources (with the need for more autonomy at the local level and the concerns the *stavka* system raises) (see Chapter 3).

Another important aspect involves the pacing of this change. The budget envelope should be increased only slowly, in parallel with the increase of the capacity of the system to absorb new programmes and new approaches. This slow process will give the Ministry time to adjust the process in light of the lessons provided by the monitoring system.

Gradually increase local and school autonomy

School autonomy has been the subject of heated debates in the international education and research community in the last fifty years. The relationship between

autonomy, performance and equity is a complex one. Since the 1980s, school reforms in several OECD countries have increasingly given schools greater autonomy, in an effort to increase performance. Woessmann (2003) finds that school autonomy in setting standards and the size of the school budget are negatively related to student performance, while school autonomy in personnel management and process decisions are positively related to performance. This may suggest that school systems should ensure external control of resource levels and performance standards, but give schools autonomy in process areas where school-level knowledge is more relevant, such as managing their personnel. In PISA 2012, students tend to perform better in countries where schools have greater autonomy over what is taught and how students are assessed (OECD, 2013a). However, school autonomy has been negatively associated with student achievement in developing and low-performing countries (Hanushek et al., 2013).

The consequences for Kazakhstan from this accumulated research need to be carefully analysed, using local experts and a better understanding of how schools operate in the country, but two lessons seem clear. The first lesson is that when thinking about local autonomy Kazakhstan reformers need to carefully analyse which spheres of autonomy should be entrusted to schools and to their principals, which spheres should be entrusted to *rayons*, and which spheres should remain with central level authorities. The second lesson is that granting of autonomy must always be associated with relevant and focused monitoring, especially monitoring of outcomes.

Kazakhstan could explore ways to gradually provide more autonomy to schools and lower levels of government in order to enable them to foster improvements in education. Certain decisions are best left to local authorities and school principals, who best know their schools' needs, to ensure a more optimal allocation of resources. In Kazakhstan, more autonomy can only come with relaxing the current system of norms. This can only be done very carefully, as the norms are the backbone of the current education system and any change is likely to generate uncertainty and might put schools under stress. Initially, the change may mean that instead of direct mandates the norms may be treated as minimum standards or suggested – but not enforceable – guidelines. A public consultation could be held to determine which norms or procedures generate hardest constraints for schools and should be relaxed first. Schools, for example, could be rather quickly allowed to decide on the number of deputy principals needed. Similarly, local governments could have greater flexibility in increasing teacher salaries, within some nationally mandated limits. As school leaders and *rayon* officials learn to exercise their new responsibilities and as monitoring systems gather more experience, the Ministry can proceed with further relaxation of the norms, stronger deregulation and increased autonomy. In other words, increasing autonomy must be associated by the process of mutual learning of school principals and of monitoring experts.

More school and local autonomy is also likely to exacerbate the existing differences between schools and between local governments in different parts of the country, including the urban-rural divide. Therefore some mechanisms to disseminate best practices, to identify risks and support those local managers whose performance is not improving should be introduced. In this regard, it will be necessary to strengthen the improvement function of school evaluation (see Chapter 4). A first step might consist of giving schools and/or *rayons* some specific freely disposable funds in the school budget to be allocated and used by the own decision of the school according to transparent procedures. Budget areas where such disposable funds can be introduced first include, for

example, teacher in-service improvement programmes and increased education support to vulnerable groups of students. Similarly, education resource centres can be gradually given increased autonomy in the services they render to small-class schools, allowing them to increase the scope of additional education provided to students of small-class schools.

It may also be necessary to create specific school improvement grants to intervene in cases when misused autonomy leads to weaker academic outcomes or undermines budget discipline. Without this type of new intervention tools the Ministry may find itself powerless in the face of the potentially negative effects of increased autonomy. At the same time, specific procedures and transparency of actions are needed to ensure that these tools are not used without good reasons.

Reinforce the role of evidence in the development of education policy

Kazakhstan needs to develop a culture of using evidence and performance audit as the basis for future reform initiatives, both in the design – to identify what policies would be more cost-effective – and in the implementation – to make change happen in schools. Previous initiatives could be further analysed in terms of the successes and limitations encountered in their implementation. The current major policy initiatives would also benefit from a thorough analysis. The new per-capita funding pilot model (see Chapter 3), for example, could be thoroughly reviewed in order to shed light on the impact of the new financial approaches on the functioning of schools. Before its national roll-out, it is key to fully understand its effects on school practices. The review could also cover the work of school accountants and the operations of the newly established Boards of Trustees. The lessons from the pilot should be used for the discussion of whether the new per-capita funding system is mature enough for immediate implementation across the country, or whether it should be further piloted, refined or amended. Similarly, the operation of the resource centres could be reviewed in terms of its benefits to students of small-class schools served, implementation difficulties, and aspects to be improved.

In OECD countries there is a growing understanding of the importance of informing education policy with evidence from research, programme evaluation and performance audits. This involves a strategic approach to research, analysis and evaluation, and information management activities in view of supporting the development of evidence-based policies. Disseminating the evidence basis underlying the policy diagnosis, research findings on alternative policy options and their likely impact, as well as information on the costs and benefits of reforms is also instrumental in gaining the support of key stakeholder groups. Indeed, individuals and groups are more likely to accept changes that are not necessarily in their own best interests if they understand the reasons for these changes, recognise the underlying evidence supporting the reforms, and can see the role they should play within the broad national strategy. This should be part of the effort of further engaging stakeholder groups in policy consultation.

Redesign the system of intergovernmental transfers

Kazakhstan should explore how to further reform the system of intergovernmental transfers in order to strengthen its governance system. While the design of the intergovernmental relationships goes beyond the education sector (and hence, the scope of this Review), getting the right system is particularly important for education as it accounts

for the lion's share of the local budgets. Steps could be taken towards greater clarity on responsibilities, a formula-based allocation and greater fiscal equalisation. Intergovernmental transfers should be commensurate to the distribution of responsibilities to foster fiscal co-responsibility and their effects should be evaluated in order to further refine the system. Box 2.1 provides some selected approaches to intergovernmental fiscal transfers in upper middle income countries.

Box 2.1. Selected approaches to intergovernmental fiscal transfers

In **Argentina**, the transfer of responsibility for secondary schools from federal to provincial level was accompanied by a system of federal tax transfers. Nationally, decentralisation appears to have improved local participation, strengthened monitoring and improved learning standards. However, test scores point to a widening gap between wealthier provinces with strong government capacity and poorer provinces with low administrative and institutional capacity; the latter performed worse under decentralisation. National efficiency has improved, but at the expense of equity.

When **Brazil** devolved authority from a highly centralised system to states and municipalities in the mid-1990s, it created FUNDEF to reduce the large national inequalities in per-student spending. State and municipal governments were required to transfer a proportion of their tax revenue to FUNDEF, which redistributed it to state and municipal governments that could not meet specified minimum levels of per-student expenditure. FUNDEF has not prevented wealthier regions from increasing their overall spending more rapidly than poorer regions, but it has played a highly redistributive role and increased both the absolute level of spending and the predictability of transfers. There is strong evidence that FUNDEF has been instrumental in reducing class size, improving the supply and quality of teachers, and expanding enrolment. At municipal level, data show that the 20% of municipalities receiving the most funds from FUNDEF were able to double per-pupil expenditure between 1996 and 2002 in real terms.

China's experience with fiscal decentralisation provides a cautionary tale for education equity. During the 1990s the central government gave more responsibility to local governments, schools and communities. The share of GDP allocated to education declined from 2.9% in 1991 to 2.2% in 1997. The ratio of highest-spending to lowest-spending province in per-student expenditure in primary education almost doubled from 5 to 9. Many schools and local authorities resorted to formal and informal household charges. Concerns over inequality prompted the Chinese Government to remove some tax powers from local government, continue to finance teacher salaries and maintain responsibility for parts of the capital budget. While the central government formally prohibits the charging of fees, still many local governments informally encourage it and large gaps in the quality of provision remain.

In **South Africa**, the financing formula for fiscal decentralisation incorporates a strong redistributive component aimed at overcoming inequalities inherited from the apartheid era. Around 95% of provincial government expenditure comes from central government. The largest component is known as an equitable share transfer, weighted to reflect levels of poverty and the costs of achieving minimum national norms in areas such as health and education. In education, financing is based on student numbers, with some additional weight given to poor and rural provinces. Provincial authorities are also required to rank schools by a poverty index, which is used to allocate funding for non-personnel inputs.

Box 2.1. Selected approaches to intergovernmental fiscal transfers (cont.)

In **Vietnam**, transfers are determined by a formula based on population, but with weighting for poverty, remoteness, health and education norms, and the presence of disadvantaged populations. A 2003 law recalculated the education norm on the basis of all children, rather than in-school children. Since the shares of school-age children enrolled are lower in poorer provinces, this has increased equity. Similarly, the education norm for a child living in mountainous areas (which have the worst education indicators) is 1.7 times that of an urban child. The commitment to equity is reflected in spending: richer regions have some twenty-five times the income of the poorest regions such as the North West, but budget spending per capita is roughly equivalent, reflecting large transfers from rich to poor regions.

In **Poland**, education decentralisation was part of the overall decentralisation process of the country initiated in 1990. The main transfer from the central to local budgets is called “general subvention” and is composed of a few separately calculated components. Two main ones are education component and equalisation component. The education component is calculated on the basis of student numbers (with numerous coefficients reflecting different costs of providing education to different groups of students), and thus reflects different costs of service provision (see also Annex 3.A2). The equalisation component is based on a formula and equalises poorer jurisdictions up to 90% of average per capita own revenues of similar local governments. It thus reflects revenue equalisation.

Sources: UNESCO (2008), *EFA Global Monitoring Report 2009: Overcoming inequality: why governance matters*, Chapter 3, Unesco, Paris, pp. 145-170; Swianiewicz, P. (2006), “Local government organisation and finance: Poland”, in Shah A. (ed.), *Local governance in developing countries*, The World Bank, Washington, DC, pp. 303-346.

Intergovernmental transfers should be determined on the basis of a formula in order to reduce the influence of political distortions on the allocations. The most promising way to limit rent seeking and political bias is a simple, transparent, and easy-to-understand equalisation formula with few indicators covering a country’s main fiscal disparities (OECD, 2012). In the case of education, transfers should be primarily based on a formula that captures the number of students, and takes account of the specific needs of students and schools (see Chapter 3). In addition, a number of OECD countries have developed various measures to limit the influence of special interests (see OECD, 2012, for further information). Denmark and Australia, for example, have introduced independent agencies and bodies to limit political bargaining and approach resource distribution from a technical rather than political perspective. Research has shown that independent agencies are less prone to political influence than ministries (Khemani, 2007). Similarly, many countries not only take into account the opinion of local governments, but also involve civil servants, politicians, and experts. Also, a two-stage budget procedure by setting the overall budget for equalisation and then negotiating the distribution formula has been successful in reducing rent-seeking pressures in some countries such as Norway.

Greater fiscal equalisation is key to ensure *rayons* and *oblasts* can provide similar services at similar tax levels. The equalisation transfer needs to be formula-based and take into account fiscal capacity (i.e. ability to raise revenue) as well as the costs of service delivery (e.g. price indices, geographical disparities, poverty). Most OECD countries have mechanisms to equalise either or both revenue-raising capacity and expenditure needs (OECD, 2012). The significance of fiscal equalisation is reflected not only in its extensive use in both federal and unitary countries but also in that its objectives and procedures are

often laid down in the constitution and form a central pillar of national fiscal policy. Across the OECD, fiscal equalisation transfers average around 2.5% of GDP, 5% of general government spending, and 50% of intergovernmental grants. In some countries – such as Australia, Germany and Sweden – revenue-raising disparities are virtually eliminated.

A clearer distribution of responsibilities over budget procedures between levels of government could be beneficial. This means that the law on local public finances must clearly delineate the revenues and expenditures of *rayons* and *oblasts*. The clarification of responsibilities will also shed light in the new role of *rayons* under the new funding scheme and pave the way towards their new functions. It will also be beneficial to introduce specific reporting categories in the budget classification to ensure that various targeted funds for different functions of the education system are adequately and fully reported. This will allow the Ministry to properly monitor the allocation of resources to individual schools and address arising inequities.

Notes

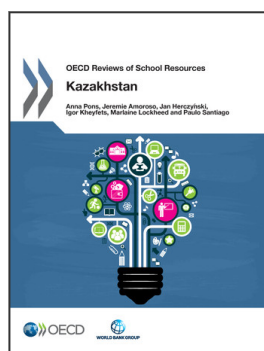
1. Subsequently to the visit by the Review Team, in December 2014, the National Centre for Educational Statistics and Evaluation (NCESE) was closed and its services were integrated in the Information-Analytic Center (IAC).
2. Subsequently to the Review visit, as a result of the fiscal constraints provoked by the 2014 drop in oil prices and the results of the evaluation of the respective pilot programmes, some of these reform plans have been postponed or curtailed. Thus the introduction of the new per capita funding scheme has been postponed to 2018 and restricted to grades 10 and 11; and the plans to establish a compulsory twelfth grade have been suspended, with resources being instead channelled to reinforce attendance rates of the final year of pre-primary education. These policy changes are not analysed in this report.
3. The land tax can be increased or decreased within the centrally regulated rates, but typically represents a very small percentage of local budgets.
4. Schools are allowed to provide “supplementary education” services on a contractual basis. Most schools visited by the Review Team provide these services, but were either unaware of the allowance or unclear regarding the kind of services they can provide for a fee. Charging fees for services that fall within the scope of state educational standards is forbidden, but schools are allowed to provide some services on a commercial basis: (i) additional education programmes (e.g. creativity, sports, culture and arts); (ii) additional more in-depth classes on curricular subjects; (iii) other activities (e.g. sports competitions, seminars, meetings, conferences, summer camps); (iv) lending musical instruments, school meals and Internet access; (v) energy surplus; and (vi) vocational training (IAC, 2014).
5. Table 5.9 in OECD (2014b) shows that the share of rural schools in a region explained 72% of the variation in the share of local budgets allocated to education (OECD, 2014b).
6. Unit cost figures include only local budget spending per student.

References

- ASRK (2014), *Volume of services provided by educational organizations of the Republic of Kazakhstan* (in Russian), Statistical Bulletin No. 13 (4th quarter 2013), Agency for Statistics of the Republic of Kazakhstan, Astana.
- Bhuiyan, H. S. (2010), “Decentralisation and public governance in Kazakhstan”, *International Journal of Public Administration*, Vol. 33, Issue 12-13, Routledge, London.
- Bird, R. (1995), “Decentralizing infrastructure: For good or for ill?”, in Estache A. (ed.), “Decentralizing infrastructure: advantages and limitations”, *World Bank Discussion Papers*, No. 290, pp. 22-51.
- Cunha, F. et al. (2006), “Interpreting the Evidence on Life Cycle Skill Formation”, in Hanushek, E. and F. Welch (eds.), *Handbook of the Economics of Education*, Chapter 12, Amsterdam, pp. 697-812.

- Dulatbekov, A. N. and A.S. Assylbayeva (2013), "Processes and problems of introducing performance budgeting on state administration level in Kazakhstan", *World Applied Sciences Journal*, Vol. 26, No. 1, IDOSI Publications, Dubai, pp. 97-102.
- Government of the Republic of Kazakhstan (2010), Resolution of the Government of the Republic of Kazakhstan on method to calculate intergovernmental transfers of a general nature, No. 54, dated February 2, 2010, Republic of Kazakhstan, Astana.
- Hanushek, E., S. Link and L. Woessmann (2013), "Does school autonomy make sense everywhere? Panel estimates from PISA", *Journal of Development*, No. 104, pp. 212-232.
- Information-Analytic Center (IAC) (2014), *OECD Review of Policies to Improve the Effectiveness of Resource Use in Schools: Country Background Report for Kazakhstan*, Information-Analytic Center of the Ministry of Education and Science of the Republic of Kazakhstan, Astana, www.oecd.org/edu/school/schoolresourcesreview.htm.
- Khemani, S. (2007), "The political economy of equalization transfers", in Martinez-Vazquez, J. and B. Searl, *Fiscal Equalization, Challenges in the Design of Intergovernmental Transfers*, Springer, New York.
- Makhmutova, M. (2012), *Децентрализация в Казахстане: стратегия развития местного самоуправления* (Decentralization in Kazakhstan: the strategy of development of local self-government), Public Policy Research Center, Almaty.
- Makhmutova, M. (2006), "Local government organisation and finance: Kazakhstan", in Shah A. (ed.), *Local Governance in Developing Countries*, The World Bank, Washington, DC, pp. 275-302.
- Makhmutova, M. (2001), "Local government in Kazakhstan", in Munteanu, I. and V. Popa, *Developing New Rules in the Old Environment: Local Government in Eastern Europe, Caucasus, and Central Asia*, Vol. 3, Open Society Institute, Budapest, pp. 403-68.
- Ministry of Economy and Budget Planning (2011), *Budget Guide: Budget of the Country – Budget for Everybody*, Astana.
- Oates, W. (1972), *Fiscal Federalism*, Harcourt, New York.
- OECD (2014a), *Education at a Glance 2014: OECD Indicators*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/eag-2014-en>.
- OECD (2014b), *Reviews of National Policies for Education: Secondary Education in Kazakhstan*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264205208-en>.
- OECD (2014c), *PISA 2012 Results: What Students Know and Can Do (Volume I, Revised edition, February 2014): Student Performance in Mathematics, Reading and Science*, PISA, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264208780-en>.
- OECD (2013a), *PISA 2012 Results: What Makes Schools Successful (Volume IV): Resources, Policies and Practices*, PISA, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264201156-en>.
- OECD (2013b), *Education at a Glance 2013: OECD Indicators*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/eag-2013-en>.
- OECD (2013c), *Fiscal Federalism 2014: Making Decentralisation Work*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264204577-en>.
- OECD (2012), "Does Money Buy Strong Performance in PISA?", *PISA in Focus*, No. 13, OECD Publishing, Paris, <http://dx.doi.org/10.1787/5k9fhmfzc4xx-en>.
- Sange (2008), *Rural Schools: Financing for Development*, Sange Research Center, Almaty.
- Singh, K. (2012), Report of the Special Rapporteur on the right to education in Kazakhstan, United Nations, New York. Mission report presented in the Twentieth session of the Human Rights Council, www.ohchr.org/Documents/HRBodies/HRCouncil/RegularSession/Session20/A-HRC-20-21-Add1_en.pdf.
- Swianiewicz, P. (2006), "Local government organisation and finance: Poland", in Shah A. (ed.), *Local Governance in Developing Countries*, The World Bank, Washington, DC, pp. 303-346.
- UNESCO (2008), *EFA Global Monitoring Report 2009: Overcoming inequality: why governance matters*, Chapter 3, UNESCO, Paris, pp. 145-170.
- UNICEF (2012), *Разработка методики подушевого финансирования организаций общего среднего образования и пилотная апробация предложенной модели* [Developing and piloting the methodology for a per capita financing scheme in general secondary education in Kazakhstan and piloting the proposed model], UNICEF, Astana.

- Woessmann, L. (2008), "Efficiency and equity of European education and training policies", in *Tax Public Finance*, Vol. 15, No. 1, pp 199-230.
- Woessmann, L. (2003), "Schooling resources, educational institutions, and student performance: The international evidence", *Oxford Bulletin of Economics and Statistics*, Vol. 65, No. 2, pp. 117-170.
- World Bank (2014), *Strengthening Kazakhstan's Education System: An Analysis of PISA 2009 and 2012*, World Bank, Washington, DC.
- World Bank (2013), "What matters most for school finance: A framework paper", *SABER Working Paper Series*, No. 2 (April 2013), World Bank, Washington, DC.



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