Education and the Crisis of Social Cohesion in Azerbaijan and Central Asia

IVETA SILOVA, MARK S. JOHNSON, AND STEPHEN P. HEYNEMAN

Of the 15 republics that emerged after the collapse of the Soviet Union in 1991, six have predominantly Muslim populations. These nations are Azerbaijan, in the southern Caucasus, and Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan in Central Asia, with a combined population of approximately 65 million people. As Soviet power declined and then finally collapsed, these six newly independent nations found themselves confronted with a world of competing philosophies ranging from the liberal secularism of Russia and Turkey to various moderate and reformist religious movements to varieties of fundamentalism and Islamist political movements emanating from Saudi Arabia, Kuwait, Iran, Pakistan, and Afghanistan. During the transition period since 1991, the region has been afflicted by acute problems, including endemic state crisis, crime and narcotics, ethnic tensions, corruption, and competition over energy resources. Some analysts have argued that these problems were exacerbated if not caused by the failings of the regimes themselves, which have been too often unable or unwilling to address the various "fault lines" of persistent or potential violent conflict (Rashid 2002; Oliker and Szyana 2003; UNDP 2006). In Kyrgyzstan, the political situation has become more volatile and polarized as the government struggles to assert control after the March 2005 uprising that ousted President Askar Akayev. A confrontation between Uzbek security forces and antigovernment protesters in the town of Andijon in May 2005 resulted in many deaths and raises the possibility of further conflict in the densely populated Fergana Valley, which is divided between repressive Uzbekistan, impoverished Kyrgyzstan, and fragile Tajikistan (International Crisis Group 2005b).

In the early 1990s, the general consensus among Western, Russian, and many local analysts was that the region would be politically stable and that extremist movements would gain little traction in Azerbaijan and Central

This article is based on research conducted by the authors, in various capacities, throughout Central Eurasia since 1991. This has included teaching assignments at the Kazakhstan Institute of Management, Economics and Strategic Research in Almaty, Kazakhstan, and Baku State University in Azerbaijan; and research and policy analysis for organizations including UNICEF, the U.S. Agency for International Development, the U.S. Department of State, the Open Society Institute/Soros Foundations, the World Bank, the Bureau of Strategic Research (Kazakhstan), and the Carana Corporation. Finally, the authors worked together on a project with the National Bureau of Asian Research.

Electronically published February 14, 2007

Comparative Education Review, vol. 51, no. 2.

0010-4086/2007/5102-0003$05.00

Asia. Reasons varied. Some observers cited the persistence of Soviet-style authoritarianism, the widespread secularization that characterized most industrial democracies, and the moderate religious beliefs in the region that had traditionally been shaped by Hanafi legal practices, popular spirituality, shamanism, and Sufi mysticism (Polonskaia and Malashenko 1994; Sagdeev and Eisenhower 2000; Abashin and Bobrovnikov 2003). With independence in the early 1990s, missionary groups appeared in the Caucasus and Central Asia sponsored by Saudi, Kuwaiti, Pakistani, and other organizations but found a limited following (Malashenko 1998). But as the economic crises across the region worsened throughout the 1990s, and as political and religious repression intensified, other analysts began to argue that the traditional forces of social cohesion were weakening and fragmenting, especially among young people and students (International Crisis Group 2001, 2003a; Rashid 2002). In fact, the Central Asian republics and Azerbaijan are among the world's least open societies, typified by increasingly authoritarian political systems, widespread corruption, growing poverty, and sharpening social inequality, all of which has led to rising social tensions and legitimacy crises.[1]

Constituting more than half the population in each country, young people have been negatively affected by intensifying political repression and worsening economic conditions.[2] Facing declining educational access and equity, deteriorating educational quality, unemployment, and poverty, young people are often characterized as a "generation at risk" (Bauer et al. 1998; Zouev 1999; International Crisis Group 2003b). Today, young Central Asians are clearly disadvantaged in many aspects of life compared with their parents' generation. The sharp economic decline of the 1990s has worsened poverty across the region, with the percentage of the population living below the poverty line constituting more than 80 percent in Tajikistan, 60 percent in Azerbaijan, 55 percent in Kyrgyzstan, and 35 percent in Kazakhstan (UNDP 2001). Furthermore, economic decline increased unemployment, particularly among young people. For example, UNICEF estimates of unemployment among out-of-school youth ages 15–24 are 57.9 percent in Uzbekistan, 49.3 percent in Azerbaijan, 40.6 percent in Tajikistan, 30.8 percent in Kazakhstan, and 24.8 percent in Kyrgyzstan (UNICEF ICDC 2002). In particular, the data reflect the fall in demand for low-skilled workers and employers' growing preference for youths with relevant vocational education and professional experience. Finally, throughout the region, there are few opportunities for young

[1] According to Freedom House (2005), the Central Asian nations are the least democratic in the former socialist bloc. Based on its 1–7 rating system (with 1 representing the highest and 7 the lowest level of democratic development), these countries have scored the lowest in terms of democratic development. In particular, Azerbaijan scores 5.86, Kazakhstan 6.29, Kyrgyzstan 5.64, Tajikistan 5.79, Turkmenistan 6.93, and Uzbekistan 6.43.

[2] The share of the population ages 0–24 constitutes 50 percent of the population in Azerbaijan, 47 percent in Kazakhstan, 55 percent in Kyrgyzstan, 61 percent in Tajikistan, 58 percent in Turkmenistan, and 59 percent in Uzbekistan (UNICEF ICDC 1999).

people to continue their education because of the obsolescence or closure of many professional-technical secondary schools and vocational training programs. As a result, young people are increasingly poorly educated and drop out of schools en masse, especially in rural and mountainous regions.

A key to understanding the challenges of education and social cohesion in Azerbaijan and Central Asia is to appreciate the profound "loss" of purpose that accompanied the collapse of the Soviet Union. For nearly 70 years, the goals of education were clearly articulated by the party-state regime and largely supported by much of the public: equality, achievement, and self-sacrifice for the nation. Though today circumstances differ from one country to another, each is struggling to replace the educational purposes of the past with new values and principles. The fit between these new goals is imperfect, and the process of finding new forms of social cohesion remains incomplete. Intranational differences in ethnicity, regional (clan) affiliations, religion, and language have suddenly emerged or reemerged, and the pull of "free-market" youth consumerism has complicated all traditional controls. Education policy officials, quite rightly, are worried: how can their new countries effectively utilize education to create a new sense of social cohesion and new unified national identities in the face of these challenges?

This article examines the role of education in the maintenance of social cohesion and the formation of new identities amid the economic decline and political volatility of these six new nations. One of the most acute questions is whether the degradation of the state-sponsored secular educational systems is approaching a "tipping point." This is the point at which institutional and professional capacity drain away so that the educational systems are no longer capable of regenerating themselves (Heyneman and De Young 2004; Johnson 2004b). If the state-sponsored secular educational systems continue to fail, will young people continue to emigrate or seek escape in drug abuse, illegal activities, or social alternatives in the form of nationalism, political radicalism, or religious extremism?

In this article, we first describe the historical legacies in education in the period before independence in 1991. Then we analyze the systemic crises in education since 1991, as well as the newly independent nations' often half-hearted attempts to embrace Islam and to find some place for religious and ethical thought and values in what had been aggressively secular educational systems. We pay particular attention to the ways in which the educational systems have deteriorated since 1991, examining economic deterioration, the degradation of educational infrastructure, and the decline in enrollment and retention, while considering the effects of these crises on social cohesion and political legitimacy. We conclude with some thoughts about the potential struggles that lie ahead as the peoples of Azerbaijan and Central Asia seek to reform their educational systems and thereby stabilize and revitalize the processes of social cohesion in their societies.

Pre-Soviet and Soviet Legacies in Education

The relations among identity, religion, and education in the southern Caucasus and Central Asia were complex before the coming of Soviet power. Islam arrived in what is now Uzbekistan, the Fergana Valley, and Tajikistan in the wake of the initial Arab conquests of the eighth and ninth centuries. But conversion did not come until the eighteenth or even the early nineteenth centuries for some of the nomadic peoples, especially those who would come to be known as the Kyrgyz and the Kazakhs, in northern and eastern Central Asia. Education in this period revolved around a dense and often informal network of *maktabs*, or primary schools, and a more limited number of madrassas, or Islamic higher schools. Even as the region experienced political fragmentation and external pressure in the early modern period, cross-cultural contacts persisted, and rich traditions of Islamic education and culture endured, if often in informal and highly "localized" practices (Allworth 1990; Shahrani 1991). As Azerbaijan and Central Asia fell under Russian colonial domination between the early eighteenth and the late nineteenth centuries, the role of religion and education in social cohesion became increasingly contested. There were several distinct educational movements in this period that retain legacies for the dilemmas since 1991. The traditional Islamic establishment and ulama embraced Hanafi traditions of Sunni Islam and were tolerant of popular customs and Sufi mysticism. This *Qadimist* ("old school") movement entailed the preservation of a pedagogically traditionalist form of Islamic education, focused on reading in Arabic and memorization of the Qur'an, and did not necessarily lead to functional literacy in either Arabic or the new national languages (Khalid 1998; Johnson 2004a). Finally, this period also witnessed more fundamentalist or self-consciously conservative Islamic revival movements, including militants from the Tatar regions of Russia and the emirate of Bukhara (Naumkin 2005).

After the conquests of the 1880s, Russian colonial power sponsored the creation of a parallel system of more modern secular schools for the Slavic settlers and "Russian-native" schools for the colonial subelites (Dneprov 1991). While these European-style institutions set the pattern for much of the subsequent development in state-sponsored education, with rigorous academic curricula, strict discipline, and a focus on technical and professional training, these schools were often also characterized by ethnic discrimination and an overt anti-Islamic bias. Perhaps most important, Russian colonialism also helped to foster modernist Islamic and nationalist reform movements, which focused especially on promoting *Jadidist* (or "new method") education, led by young intellectuals who sought to revitalize Islamic culture within more modern institutions and thereby to mobilize Islam as a force for national cohesion and modernization. These movements, often inspired by the pioneering efforts of Ismail Bey Gasprinskii (1851–1914), began in Azerbaijan and the Tatar regions of Russia to foster new method education and phonetic

reading instruction in the Turkic national languages (Swietochowski 1995; Khalid 1998). The *Jadids* struggled with both the traditional Islamic ulama and the conservative Russian colonial authorities, and then all parties across the region found themselves thrust into mass politics amid the violent conflicts and revolutionary upheavals after 1916.

When Soviet power was finally imposed in Azerbaijan and Central Asia between 1918 and 1920, many Islamic reformers and *Jadids* reconciled themselves to the new socialist regime, welcomed its commitment to popular "enlightenment," and shifted away from Islamic revivalism toward anticolonialism and ethnic nationalism. This accommodation in the 1920s led to efforts to reinvent social cohesion through modern, and thoroughly secular, educational systems that would encompass all children regardless of regional identity, ethnicity, class, or gender. This period also saw efforts to accommodate and even nurture distinctive ethno-territorial national identities (as Azeris, Uzbeks, Karakalpaks, Tajiks, Kazakhs, Kyrgyz, or Turkmen), which were intended to offset pan-Turkic or pan-Islamic social movements as well as to appeal to the oppressed masses in the European colonies (Bennigsen and Wimbush 1979; Martin 2001).

However, official Soviet policy toward the indigenous populations of the southern Caucasus and Central Asia then took another sharp turn during the Stalinist period after 1927, as Islam was violently rejected as a component of social cohesion. This "cultural revolution" led the Soviet regime to ban all formal Islamic education; to confiscate all *auqaf*, or charitable endowments and religious property, that supported such schools; and to violently repress private or informal religious training. The radical Stalinists attacked the traditionalist ulama, accused the reformist *Jadids* of fostering "bourgeois nationalism," sponsored aggressive campaigns against the veiling and seclusion of women, destroyed mosques and Sufi shrines, and suppressed religious practices and rituals such as pilgrimages (Keller 2001; Northrop 2004). After these increasingly severe campaigns of political and police terror against Muslim believers and educational practices in the 1930s, Soviet policy then moderated during the Second World War, when a general rapprochement with religion evolved as part of the regime's strategy for popular mobilization and social cohesion during the war (Ro'I 2000). While "militant atheism" received less emphasis than it had in the interwar period, the curriculum at all levels was nonetheless saturated with dialectical materialism, Marxism-Leninism, and scientific positivism, and all of this clearly contributed to a distinctly secular and heavily Russified mass culture throughout the region, especially in the urban areas and in Azerbaijan, Kazakhstan, and Kyrgyzstan.

It is also clear, however, that this facade of official secularism masked religious and national revival movements beneath the surface of late Soviet society. In other words, the processes of social cohesion remained complex and contested, but fundamentally peaceful. Driven by the relative opening to

the wider Islamic world that the Soviet authorities allowed for Muslims within the Soviet Union beginning in the 1960s, such as the admittedly limited but still influential opportunities for study abroad and participation in the hajj by Soviet citizens, and by the clandestine importation of literature from the Arab world, this revival took diverse forms (Poliakov 1992; Roy 2000). Sufism and other forms of popular spirituality became more overt, even some members of the party-state elite began to embrace religious practices and rituals, and a few disaffected members of the official state-sponsored ulama even began to articulate more radical or *Salafi* principles in part as a protest against the perceived decadence of Soviet modernity and the corruption of official religion. It also seems that these revival movements were woven together with late Soviet policies to empower "indigenous" or national elites, especially in local politics, the arts and humanities, journalism, and higher education.

To summarize, the legacies of the Soviet period in Azerbaijan and Central Asia contained both positive and negative elements. A solid infrastructure for educational provision and administration was established, although development admittedly lagged in the rural and mountainous regions, and especially in tertiary education and advanced research. There was a manifest emphasis on equality and interethnic tolerance, achievement criteria, and self-sacrifice for the larger community. For all the concerns about its quality and comprehensiveness, the mass provision of Soviet education undeniably helped to create a very real level of social cohesion as well as real and significant compensatory legitimacy for the socialist regime (Heyneman 1997a, 1997b, 1998, 2000). Soviet state-sponsored secular education also established a widely shared public expectation for the continued provision of mass coeducational schooling at little or no cost and on a fundamentally egalitarian basis. Unfortunately, most of these widely shared principles and Soviet-era processes of social cohesion have been profoundly degraded or simply repudiated since 1991.

Educational Transformation and the Search for New Identities after 1991

The reforms associated with perestroika (economic restructuring), glasnost (openness), and *demokratizatsiia* (democratization) in the late 1980s had contradictory effects. On the one hand, these reforms gave rise to national movements that often advocated for more autonomy from Moscow, for more democracy at the local level, and for the revival of Islamic practices and institutions, especially in education. On the other hand, the late 1980s also witnessed the emergence of long-suppressed ethnic and religious conflicts and prompted the party-state elites to begin expropriating or "privatizing" state property for their own benefit and to grope for new forms of legitimacy and social cohesion, through ethno-territorial nationalism and an often half-hearted embrace of moderate Islam (Fierman 1991; Jones-Luong 2004).

Overall, the period since independence in 1991 has been characterized

by an acute sense of drift or crisis in educational policy, as various internal actors and external or multilateral institutions struggled to create "new" and autonomous educational systems out of what had been a tightly integrated and highly standardized system in the Soviet period. In fact, many educational leaders and indigenous elites in Azerbaijan and Central Asia embraced, at least rhetorically, international policy trends such as decentralization and privatization, although often for their own purposes (Silova 2005). This embrace frequently entailed discursive strategies that evoked the power and influence of "external" authorities or allegedly universal models, as local policy makers and state officials referred to the alleged inexorability of "market forces" to justify essentially abdicating their responsibility for adequate educational financing and social equity and devolving much of the burden for educational finance and maintenance onto weak municipal and local structures (Steiner-Khamsi 2004; Silova 2005).

The "borrowing" and "lending" that have characterized the years since 1991 have not just involved state-sponsored secular education or the public sphere alone but have also taken place, often quietly or even covertly, in the sphere of Islamic religious and informal education as well. The early 1990s witnessed an increase in popular interest in Islam across the region, a surge in the reopening or establishment of new mosques, and proposals to project Islam into the state-sponsored secular schools throughout Azerbaijan and Central Asia. These efforts were often shaped and funded by external missionary influences, especially by Turkish, Saudi, Kuwaiti, Iranian, and Pakistani foundations and religious figures, as well as by members of the Uzbek and other diasporas around the region. Particularly prominent was a network of new schools, especially elite secondary schools and several universities that were founded by the *Fetullah Gülen* religious movement from Turkey (King and Melvin 1999–2000; Balci 2003; Yuvuz and Esposito 2003). Tragically, Tajikistan was then torn apart by civil war (1992–97), a struggle that had a nominally religious coloration given the prominent role of the Islamic Renaissance Party, although the conflict was arguably driven as much or more by regionalism and political factionalism as by militant Islam (Grare et al. 1998; Naumkin 2005). Nonetheless, the brutal and destructive Tajik conflict, the first war in Chechnya (1994–96), and the rise to power of the Taliban in Afghanistan were all invoked to justify the regimes' repression against any and all Islamic movements that threatened their monopoly on power and to assert increasingly authoritarian social controls.

The Sources and Consequences of Educational Deterioration

These debates and conflicts were intensifying at the very time that the state-sponsored secular educational systems throughout the region were experiencing profound systemic crises. Human capital theories do not usually encompass how once-developed educational systems can, in fact, deteriorate

so abruptly nor do such theories posit a case in which exposure to schooling may be detrimental to human development by exacerbating social tensions, threatening social cohesion, and driving civil conflict. However, the recent attention to the influence of radical madrassas, especially in Afghanistan and Pakistan, has helped to precipitate a general concern. The Pakistani and Afghan cases are both associated with the chronic weakness of the formal educational system, as many young people simply do not have any opportunity to attend a school of even minimum quality, and with the prevalence of private or informal Islamic education, often financed by international sources and with little public or state oversight (Warwick 1991; Rashid 2002). Although the educational heritage in post-Soviet Azerbaijan and Central Asia is quite distinct from that of modern Pakistan and Afghanistan,[3] severe economic decline since the late 1980s, political instability and repression, proximity to areas of chronic violent conflict such as Afghanistan, and exposure to new and diverse Islamic and other cultural influences from abroad during the transition period have all combined to raise serious questions about whether severe educational deterioration would undermine social cohesion across the region.

By "educational deterioration," one normally thinks of a decline in expenditures per student precipitated by overall macroeconomic crises or circumstances. Typical evidence of such systemic deterioration would include a severe decline in the availability of goods and services within the educational system. Textbooks and other essential educational supplies disappear from classrooms; teacher salaries decline in value and are often not disbursed for months, so that the quality of teachers' lives is reduced to subsistence levels; and the basic infrastructure begins to degrade beyond the point of repair—heat, water, and other utilities decline in availability and rise in cost beyond affordability. In essence, the state-sponsored secular school and university experience may become both painful and pointless. In these circumstances, the opportunity cost of formal education becomes higher than the anticipated benefits, attendance and student engagement drop, and public trust erodes (Berryman 2000; Dudwick et al. 2002). While central planners expected Soviet schools to build socialism by supplying technical expertise and *vospitanye* (social upbringing and a collectivist ethos), attempts have been made to replace this central purpose with traditional ethnic rituals and historic values, but the absence of the former "certainty" is universally felt.[4] Of all the problems and dilemmas faced by educators today, the absence of a common sense of purpose is often singled out as the largest challenge (De Young, forth-

[3] As detailed above, in most regions of the former Soviet Union, universal enrollment and gender parity in state-sponsored secular education had been more or less achieved by the 1970s. Until the late 1980s, the Soviet educational system was profoundly inefficient in its use of resources but was comprehensive and reasonably effective as an instrument of social cohesion.

[4] *Vospitanye* was the system by which schools passed on the reasons for sacrifice for the wider good—for honesty and fair treatment of fellow citizens.

coming). As one teacher said, "For many years we lived under the ideology of the USSR. When the country fell apart there was nothing to replace it. Young people today fill that emptiness with what they call 'values.' But I don't call them values. The students have a consumer mentality, even in their relations with each other" (quoted in Heyneman et al. 2006, 9).

The combination of these various forms of educational deterioration may continue to erode the state-sponsored secular educational systems' professional capacity and legitimacy, which may in turn prompt families to have their children educated by private tutors or in private or informal *maktabs* or madrassas or to encourage extended study abroad or emigration. Because educational systems necessarily play a central role in the fair allocation of talent and occupational responsibility, the collapse of trust and legitimacy poses an acute threat to social cohesion.

Economic Deterioration and Eroding Educational Finance

After the collapse of the Soviet Union, all of the newly independent nations of the southern Caucasus and Central Asia entered a period of massive economic decline, resulting from the loss of traditional economic networks and the end of budget subsidies and transfers from Moscow. In the first half of the 1990s, real gross domestic product (GDP) was in consistent decline across the region. Given the overall decline in national incomes, investments in the educational sector have remained chronically low compared with preindependence levels. Although the regimes have repeatedly made rhetorical commitments to maintaining the Soviet indicators of educational achievement, the decline in national incomes, the lack of central subsidies, and shifting budget priorities have led to steadily decreasing education expenditure across the region. By 2000, for example, the percentage of GDP spent on education had fallen by approximately one-third in Uzbekistan and by one-half in Azerbaijan, Kazakhstan, and Kyrgyzstan compared with preindependence levels. Compared with other Central Asian countries, Tajikistan has the lowest education expenditure as a percentage of GDP. In 2000, for example, Tajikistan contributed 2.3 percent of GDP for education expenditure compared with 3.2 percent in Kazakhstan, 3.7 percent in Kyrgyzstan, 6.8 percent in Uzbekistan, and an average of 4–6 percent in Organization for Economic Cooperation and Development (OECD) countries. One of the main reasons for the low education financing in Tajikistan is not necessarily low state expenditure on education but, rather, a large foreign debt. In fact, about 15–16 percent of state expenditure in Tajikistan is concentrated in the educational sector, while the average level in OECD countries is 13 percent.[5]

[5] The OECD countries differ widely with respect to the relative share of public funds devoted to education. According to OECD (2003, 225), Greece (8.8 percent), Germany (9.9 percent), Italy (10 percent), and the Netherlands (10.7 percent) had the lowest share of the educational budget in the total government budgets compared with Mexico (23.6 percent), South Korea (17.6 percent), and

For example, tax collection constitutes 14 percent of GDP in Tajikistan, and of that about 2.5 percent is reserved for covering foreign debt and only 11 percent remains for all public expenditures. As a result, Tajikistan spends more resources for paying off foreign debt (2.5 percent of GDP) than for education (2.4 percent of GDP).

Physical Deterioration and Eroding Educational Infrastructure

Predictably, this sharp decline in educational finance during the 1990s led to the serious physical deterioration of school and university facilities across the region. In all the region's countries, schools have deteriorated because of the insufficient maintenance of property (i.e., practically no resources were allocated for school building maintenance over the past 20 years) and the intensive use or overuse of school and university facilities (i.e., using schools in multiple shifts because of the growing school-age population).[6] In addition, Tajikistan has suffered from the property damage inflicted during the civil war of the early 1990s, which left 20 percent of all schools destroyed, looted, or severely damaged. Across the region, schools lack heating systems, which negatively influences school attendance.[7] For example, it has been observed that student nonattendance increases sharply during the winter season, especially in rural and mountainous areas, where schools lack the financial resources to provide adequate heating or transportation.[8] In the region, only Uzbekistan has invested in building new schools and other facilities, but even those efforts have been dogged by accusations of corruption, which has been acknowledged even in the state-controlled Uzbek media. During the period 1991–2002, for example, 2,178 new school buildings were

Norway (16.2 percent). Some of the difference in the share of the education budget in total public spending reflects differences among countries in the division of responsibility for education financing between the public and private sectors. In some countries, such as the United States and Japan, about 20–25 percent of education funding comes from private sources.

[6] In Uzbekistan, 65.9 percent of school directors from rural areas and 62.3 percent of school directors from urban areas surveyed responded that their schools were in need of capital repairs (Ministry of Public Education of the Republic of Tajikistan 1999). In Kyrgyzstan, almost 60 percent of schools need overhauls and repairs to roofing, sewage systems, water pipelines, and heating networks; 12 percent of those schools need emergency repairs (Ministry of Education of the Republic of Kyrgyzstan 2000). Eighty percent of schools in Tajikistan, 75 percent of schools in Azerbaijan and Kyrgyzstan, and 6 percent in Kazakhstan are used in multiple shifts (Ministry of Education of the Republic of Kyrgyzstan 2000; Statistical Agency of the Republic of Kazakhstan 2001; Ministry of Public Education of the Republic of Tajikistan 2002; Azerbaijan State Statistical Committee 2005). No credible comparable data are available for Uzbekistan and Turkmenistan.

[7] In Tajikistan, 68.2 percent of all surveyed schools do not have any heating systems, and a total of 92.9 percent have insufficient heating (Ministry of Public Education of the Republic of Tajikistan 2002); in Kyrgyzstan, central heating systems function in as few as 28 percent of all schools (Ministry of Education of the Republic of Kyrgyzstan 2000).

[8] Previously subsidized from the central budget, school heating is now covered from the local budgets in most of the countries of the region. Given economic hardships in rural and mountainous areas, it is painfully clear that poorer, usually rural regions have fewer financial resources for school provision (e.g., maintenance, transportation, heating, etc.) than wealthier, usually urban ones. For a detailed review of these issues, see Silova (2002).

built in Uzbekistan to accommodate a growing student population (Ministry of Public Education of Uzbekistan 2002). During the same period in Kyrgyzstan, however, fewer than 10 new schools were built, whereas more than 1,500 mosques were constructed or rebuilt, often with foreign or private funding. In Kazakhstan, the number of schools has decreased as a result of the "school optimization" reforms of the 1990s, which have left many children with no easy or affordable access to education.[9] For example, in 2001, 477 settlements in rural Kazakhstan did not have any schools, 889 villages had no secondary schools, and 977 villages had no elementary schools.

Enrollment Deterioration and Nonattendance

Marked declines in school enrollment across the region are in all likelihood related to the increased direct costs of education, reduced state subsidies for food and transport, and often sharply lower family incomes. For example, preschool enrollment has declined catastrophically over the past decade, threatening the health, nutrition, and school preparedness of children who no longer have access to these services. In 1999, the overall preschool enrollment rate in post-Soviet Central Asia was 14 percent, in contrast with 73 percent in postsocialist Central Europe. Similarly, in basic education (grades 1–9), enrollment rates appear to be dropping across the region, most dramatically in Tajikistan, which saw a drop in over half of the enrollment rate for ages 15–18, with a decline of almost 20 percent in Uzbekistan (UNICEF ICDC 2004). Compared with the rest of the former Soviet Union and Eastern and Central Europe, the Central Asian republics have some of the lowest student enrollment rates in secondary, vocational, and technical education and are only slightly ahead of the impoverished areas of the southern Caucasus.

In addition to declining enrollment rates, there are growing problems throughout the region with school nonattendance and students dropping out before completion. While official data often seem to mask this problem, perhaps because school budgets are dependent on "officially" recorded attendance levels, unofficial estimates and anecdotal evidence point to a significant crisis. It is widely known that rural schools close completely during the cotton-harvest season, so that children are able to work in the fields. An Asian Development Bank (2000) study reports that one-third of the children ages 7–15 in Tajikistan were absent from school for 2 weeks or more during the year. The same study showed a clear relationship between household income and the ability to pay for steadily rising costs and fees associated with

[9] The Kazakh program for the "optimization" of the school network, which was implemented from 1995 to 1998, led to a closure of many education establishments, particularly in rural areas. The declared purpose of the program was to "optimize" expenses for the maintenance, operation, and administration of education institutions by means of enlarging school classes and liquidating "cost-ineffective" institutions (Ministry of Economy and Trade of the Republic of Kazakhstan 2001; Silova 2002).

education, such as textbooks and uniforms. Several recent studies have suggested that children in Tajikistan, Uzbekistan, and Kyrgyzstan are increasingly used as family labor to supplement declining family incomes (Save the Children Foundation 2002; International Crisis Group 2005a).

Finally, according to a World Bank study, other reasons for school nonattendance were the perceived irrelevance of the curriculum, a lack of clothing and insufficient supplies, the high direct costs associated with education, frequent illness, and the simple absence of teachers (World Bank 2000).

Educational Deterioration and the Corrosive Effects of Corruption

State-sponsored education, provided that the mechanisms for selection and promotion are reasonably fair and transparent, can help to balance narrow or particularistic group interests with national interests and to foster social integration and social cohesion. In fact, economists have tried to estimate the sacrifice in economic growth if there is a serious bias in the selection of elites (Klitgaard 1986). It has been estimated that developing countries could improve their GNP per capita by five percentage points if they were to base their leadership on merit as opposed to gender or social status (Pinera and Selowsky 1981). But what if educational systems have become hopelessly corrupted or compromised by ethnic, regional, or other forms of discrimination? If the public does not trust the educational system to be fair or effective, much more may be sacrificed than economic growth. A lack of trust in educational systems may fatally compromise a nation's sense of social cohesion, which is arguably the principal ingredient of all successful and stable modern societies (Heyneman 2002–3; Temple and Petrov 2004).

An educational system that is free of corruption is characterized by a reasonable equality of access to opportunity, by fairness in the distribution of educational materials, by fairness and transparency in the criteria for selection to higher and more specialized training, by fairness of accreditation in which all institutions are judged by professional standards equally applied and open to public scrutiny, by fairness in the acquisition of educational goods and services, by balance and generosity in the curricular treatment of cultural minorities and regional neighbors, and by the maintenance of professional standards of conduct by both administrators and teachers. One key issue is the degree to which the technique chosen for selection and admissions can be corrupted. Since the 1940s, the technology of administering selection or admission exams has changed radically in most OECD countries, but in many parts of the former Soviet Union such technologies have not kept pace.[10] Prior to independence, and in most cases until today, each department or program within each secondary and higher educational institution administered selection examinations independently; most selection exams were

[10] Heyneman 1987; Heyneman and Fagerlind 1988; World Bank 1995; Leonteva et al. 1998.

delivered by oral means and were only available at the faculty where the tests were designed. This was judged to be unfair, inefficient, and of low quality, especially because questions were shaped more by obsolete or Soviet-era academic criteria than by changing labor markets or new fields of study.

Educational corruption has economic as well as social consequences (Heyneman 2002–3, 2003, 2004, 2006; Temple and Petrov 2004). Because of the mistrust in educational credentials, employers in Central Asia now have to establish independent screening mechanisms to distinguish the competent from the incompetent, though both may have identical formal credentials. In addition, attending a university where there is a high perception of corruption has a detrimental effect on lifetime earnings (Heyneman et al. 2006). Azerbaijan and several of the Central Asian countries have taken steps to shift from oral to computer-scored selection examinations. The Kyrgyz Republic has even shifted from a test that is curriculum based to one based on student aptitude, although, tragically, little state funding is then available to fund those admitted through this improved selection process (Drummond and De Young 2004). Chances for bribery in admissions may have declined as a result. However, the problem of corruption has continued to grow and has shifted from bribery for admission to bribery for access to particular scholarships, fields of study, and grades. There are innumerable accounts in the press and independent analyses of how grades may be changed by the professor or rector for a price, as well as how access to student housing, library reserve materials, student transcripts, and references can all be purchased. Educational institutions are often victims themselves, as they have to pay for accreditation from state officials, and since accreditation is still based on input rather than performance criteria, state-sponsored institutions with established reputations and infrastructures are at an advantage over new or private institutions.

Educational Quality and Attempted Curricular Reforms

Although the shift away from rigidly structured and standardized Soviet-era curricula was both inevitable and necessary, there has also been sharp deterioration in educational quality and in the content and rigor of the curriculum across the region. A recent study of Monitoring of Learning Achievement (MLA) in Kyrgyzstan (Ministry of Education of the Republic of Kyrgyzstan 2005) showed that only 44.2 percent of all surveyed fourth graders passed the minimum literacy test and 58.5 percent passed the mathematics tests. In Tajikistan, the same study showed that 63.1 percent of all surveyed students failed the literacy test and 50 percent failed numeracy tests (Ministry of Public Education of the Republic of Tajikistan 2002). In both Kyrgyzstan and Tajikistan, students from urban areas scored the highest, while students from the remote rural areas scored the lowest. Furthermore, the study results revealed significant variation in student achievement depending on the

language of instruction in school. In Tajikistan, for example, students from Tajik-language schools performed the worst (with 72.3 percent of the surveyed students failing the literacy test), while students from Uzbek- and Russian-language schools performed better (39.4 and 22.5 percent, respectively, failing the test; Ministry of Public Education of the Republic of Tajikistan 2002). In Kyrgyzstan, students attending Russian-language schools scored significantly higher than students attending Kyrgyz schools (Ministry of Education of the Republic of Kyrgyzstan 2005). As the MLA reports explained, learning achievement has been negatively affected by such factors as insufficient teacher qualifications, a lack of appropriate textbooks and teaching/learning materials, inappropriate teaching/learning methods, and a lack of education support at home.

Furthermore, in Turkmenistan and Uzbekistan, the education system has also been undermined by a high level of political control and indoctrination. In Uzbekistan, President Islam Karimov's numerous books are part of the secondary and higher education curriculum and must be mastered to enter university and pass graduation examinations. In Turkmenistan, the cult of personality of President Saparmurat Niyazov is imposed in schools via the compulsory and almost exclusive study of his book the *Rukhnama*. In Uzbekistan and Turkmenistan, this stultifying control is producing a generation fearful of open discussion and seldom able to form independent opinions.

It is not surprising, therefore, that many students in Azerbaijan and Central Asia are increasingly seeking the services of private tutoring to supplement (and, sometimes, to completely substitute for) education provided by state-sponsored secular schools. A recent survey on private tutoring, which was undertaken by the Open Society Institute in 2005–6, revealed that over 90 percent of surveyed students in Azerbaijan and over 60 percent of surveyed students in Central Asia (Kazakhstan, Kyrgyzstan, and Tajikistan) take private tutoring lessons or attend preparatory courses for entering higher education institutions. In all sampled countries, there was a strong belief that private tutoring was a response to the poor quality of education in state-sponsored schools. In the total sample, an overwhelming 85 percent of the respondents (with very small variations by countries) agreed or strongly agreed that "the quality of mainstream education system should be such that no one would need private tutoring." In Azerbaijan and Central Asia, private tutoring is becoming increasingly like school itself and often becomes a substitute for mainstream education for students who opt for skipping their regular classes in favor of private tutoring sessions (Silova et al. 2006).

Assessing the Risks of Educational Deterioration in Azerbaijan and Central Asia

In this article, we suggest that the combination of these multiple forms of educational deterioration has eroded the professional credibility and capacity of educational systems throughout Azerbaijan and Central Asia. The

political, economic, and social hardships of the transition period have made it practically impossible to provide basic education for all children, let alone to undertake a fundamental reform of the national educational systems. As detailed above, previously high enrollment rates have been decreasing, and academic quality has been declining. Furthermore, the capital infrastructure has rapidly deteriorated; pedagogical materials, equipment, and textbooks have fallen into short supply; there have been sharp conflicts over the language of instruction; and many qualified teachers and faculty have left the profession for more lucrative employment in the private sector or have simply emigrated. As a consequence, the issues of access and equity in education have become more pronounced: women and girls are worse off, rural areas more marginalized, and the students from low socioeconomic levels more under threat. In the case of Turkmenistan and increasingly in Uzbekistan, curricula are characterized by cults of personality, xenophobia, and a strident nationalism, and foreign degrees and international standards are being rejected or marginalized. In the case of Uzbekistan, Tajikistan, and Turkmenistan, abrupt shifts away from Russian and toward mandatory instruction in the national languages, often accompanied by the rejection of Cyrillic script, have meant that most teachers and extant teaching materials were suddenly declared obsolete or irrelevant, and there have not been sufficient funds or professional capacity created to make up for such deficits (Landau and Kellner-Heinkele 2001).[11] Perhaps most important, the state-sponsored secular educational systems across the region have, by all accounts, been corroded by endemic corruption.

The analyses of the existing data suggest that there is a need for a more nuanced and broader understanding of "the health status" of education systems in Azerbaijan and Central Asia in order to determine whether and to what extent the education systems are reaching their tipping points. This should include a combination of local as well as international efforts. On the local level, the quality and breadth of education statistics, particularly on expenditures, need to be augmented and brought up to international standards of access and transparency. It is important to initiate regular surveys of academic integrity, achievement, and adult literacy. No Central Asian nation has yet participated in an International Association for the Evaluation of Educational Achievement or OECD study or project (such as the World Education Indicators) to upgrade their education statistics to international comparability. But however important this information is for monitoring the status of a sector's health, it is also true that qualitatively new dimensions of

[11] While the use of a local, noninternational language is politically understandable, the experience in Asia and Africa in the 1960s in the context of decolonization and postcolonialism would have suggested a more staged approach and the possible retention of the lingua franca, at least in higher education. Thus, part of the curricular decline in Central Asia is the result of self-imposed policy mistakes.

educational deterioration have now emerged, which cannot easily fit into these statistical exercises.

Despite the limitations of the existing data, the analyses that have been summarized here illustrate that educational deterioration has eroded the professional credibility and capacity of educational systems in Azerbaijan and Central Asia in a variety of ways. In particular, the deterioration of the state-sponsored secular educational system is reaching a political tipping point in Uzbekistan and Turkmenistan amid repression and social stagnation. In these repressive countries, the authorities have been wary of, and sometimes openly resistant to, educational reforms that threaten to compromise either their entrenched positions or their perceived ability to control the young generation. While these states attempted to preserve key elements of the Soviet educational system, such as involuntary vocational tracking and political indoctrination, these "solutions" seem increasingly brittle and unsustainable as the underlying economic and political crises deepen. In the middle tier are Kyrgyzstan and Tajikistan, where education systems may be reaching an economic tipping point. In these countries, the stark severity of the crisis has generated an official awareness of the need for reform and significant international commitments. However, in both states widespread poverty, administrative incapacity, and endemic corruption have hindered domestic reform programs and squandered at least some international assistance efforts. With economies bolstered by energy exports, Azerbaijan and Kazakhstan seem to be the most able to at least potentially overcome the existing problems of their state-sponsored secular educational systems, which have declined but not yet reached crisis levels. In these countries, a belated consensus seems to be emerging of the need for comprehensive reform efforts, to be funded at least in part by state energy profits. However, serious questions remain as to whether endemic corruption can be overcome and whether the domestic political will can be found to overcome the seemingly steady decline of social cohesion and academic quality even in these relatively stable nations. Considering the region as a whole, there are only the most cautious grounds for optimism, and the trends in educational development hold ominous implications for social cohesion and political legitimacy.

What will be the result of these systemic crises and potential tipping points? Two trends, observed elsewhere, are likely to continue. One is the pressure from students seeking education outside the region. Similar to migrants seeking external employment opportunity in the face of local economic stagnation, when a public school system collapses—whether from poverty, moral corruption, or ideological backwardness—individuals will take extraordinary measures to find opportunities to learn from more viable and compelling sources. Second, there are some safe sanctuaries within local religious schools, which, although terminal, do offer a secure sense of purpose

and a welcome respite from the harsh inconsistencies of the failing state-sponsored secular systems.

In fact, many families seek to have their children educated in any institution that is outside of local control. They seek institutions that are recognized by foreign agencies, and they make efforts to flee their local circumstances in search of professional training. This collapse in professional credibility places the region at risk for two reasons. First, because school systems are supposed to play a central role in the fair allocation of talent and occupational responsibility, the collapse of trust may become a threat to national and social cohesion.[12] Second, the collapse of trust makes it likely that many young people might be tempted to seek solutions outside of mainstream society and state-sponsored secular education, either through migration or through private or informal religious education. In particular, one survey revealed that over 70 percent of young people in Central Asia are ready to migrate to "any country" in search of better educational and economic opportunities. Furthermore, 76 percent of respondents in Tajikistan and 81 percent of respondents in Uzbekistan would prefer to leave the country in order to get educated abroad, with the youngest respondents (ages 15–17) being the most eager to leave the country (UNESCO 2001; Fikr Centre for Public Opinion 2002).[13] Migration occurs at different socioeconomic levels and in different geographic patterns, including from village to city across the region; from southern Central Asia to the more prosperous north, especially to urban Kazakhstan; and outside the region, especially to Russia, Turkey, and the Persian Gulf. As the International Crisis Group (2003b) concludes, the best and the brightest are leaving the region, with those left behind worse educated and less equipped to handle the many complexities of the transition period.

Given the limited educational and economic prospects within their countries, young people that stay behind in the region are arguably the most likely to become disillusioned and embrace calls for radical change. Reasons for this include the search for meaning in the context of the institutional collapse experienced by all citizens, a heartfelt need for simplicity and clarity of purpose, and the search for a new social ethos and public morality in an environment of corruption, rising criminality, juvenile delinquency, and substance abuse. In Central Asia, this potential for the radicalization of young people is demonstrated by the rise of the Islamist movement *Hizb ut-Tahrir* (HuT), which has recruited heavily among disillusioned students and young people (International Crisis Group 2003a). Young people have also joined the radical

[12] Other means of allocating talent include partisan party loyalty, clan or ethnic monopoly over power, purchase price, or raw chance. Although education systems have been widely criticized for not being fair enough, no nation would publicly replace its education system with one of the other mechanisms.

[13] On these broader patterns across the region, see also Schiff (2005).

Islamic Movement of Uzbekistan, a Taliban-allied insurgency that was active in exile in Afghanistan in the late 1990s and that staged violent attacks in Central Asia between 1999 and 2001. Although the numbers of young people who actually get involved in potentially destabilizing groups is very small in Azerbaijan and Central Asia, behind those who actually join up there seems to be a much larger disaffected group that sees little hope in the future, except through migration (International Crisis Group 2003a, 2003b).[14]

From our perspective, the real problem—and a key fault line—in the crisis of social cohesion in Azerbaijan and Central Asia is not the presence of religious values or practices in education in either the public or private sphere. It is the severe deterioration of state-sponsored secular educational systems across the region that poses the greatest threat to social cohesion. Although the region does share a deep history of cultural syncretism, religious pluralism, and ethnic coexistence, all of those traditions are under strain because of educational deterioration, economic crisis, endemic poverty, and the intrusion of less tolerant external influences as well as the larger geostrategic rivalries that are playing out in the region. It often seems that little of that history of tolerance and pluralism is reflected in increasingly nationalistic and xenophobic curricula, exclusionary language policies, and emerging intranational inequities based on ethnicity, gender, clan, and religion. All of this suggests just how much is at stake in the educational arena and argues that secular or public educational systems may be among the few institutional structures that could either help to hold together—or contribute to the failure of—these struggling states. The ultimate question becomes whether the deteriorating educational systems of Azerbaijan and Central Asia can be revitalized and whether new national identities can be constructed that can then be drawn on for a new social ethos, for solace to the poor and the underprivileged, for guidance on issues of virtue and honor, for adherence to civilized rules of tolerance, for a deeper respect for human differences, and for enduring and sustainable social cohesion and human development throughout the region.

References

Abashin, Sergey, and Vladimir O. Bobrovnikov, eds. 2003. *Podvizhniki islama: Kul't svyatikh i Sufizm v Srednei Azii i na Kavkaze* [Followers of Islan: The cult of saints and Sufism in Central Asia and the Caucasus]. Moscow: Vostochnaia Literatura.

Allworth, Edward. 1990. *The Modern Uzbeks: From the Fourteenth Century to the Present.* Stanford, CA: Hoover Institution.

[14] For example, in Tajikistan, the majority of HuT members are unemployed youth, although the group has also attracted significant support among students. Of 118 alleged HuT members who were detained in 2000 by security services in one province, for example, 64 percent were between 21 and 30 years old, 72 percent were unemployed, 11 percent were students, 2 percent were teachers, and only 1 percent were active Muslim clergy (see International Crisis Group 2003a, 19; 2003b).

Asian Development Bank. 2000. *Women in Tajikistan: Country Briefing Paper*. Manila: Asian Development Bank.

Azerbaijan State Statistical Committee. 2005. *Educational Statistics*. http://www.azstate.org.

Balci, Bayram. 2003. "Fethullah Gülen's Missionary Schools in Central Asia and Their Role in the Spreading of Turkism and Islam." *Religion, State and Society* 31 (2): 151–77.

Bauer, Armin, Nina Boschmann, David Green, and Kathleen Kuehnast. 1998. *A Generation at Risk: Children in Central Asia*. Manila: Asian Development Bank.

Bennigsen, Alexandre, and S. Enders Wimbush. 1979. *Muslim National Communism in the Soviet Union: A Revolutionary Ideology for the Colonial World*. Chicago: University of Chicago Press.

Berryman, Sue E. 2000. *Hidden Challenges to Education Systems in Transition Economies*. Washington, DC: World Bank.

De Young, Alan. Forthcoming. "The Erosion of Vospitanye (Social Upbringing) in Post-Soviet Kyrgyzstan." *Journal of Post-Communist Studies*.

Dneprov, Eduard D., ed. 1991. *Ocherki istorii shkoly i pedagogicheskoi mysli narodov SSSR: Konets XIX-nachalo XX v* [Essays in the history of the school and of the pedagogical thought of the peoples of the USSR: Late nineteenth and early twentieth centuries]. Moscow: Pedagogika.

Drummond, Todd, and Alan De Young. 2004. "Perspectives and Problems in Education Reform in Kyrgyzstan: The Case of National Scholarship Testing." In Heyneman and De Young 2004.

Dudwick, Nora, Elizabeth Gomart, and Alexandre Marc, with Kathleen Kuehanst, eds. 2002. *When Things Fall Apart: Qualitative Studies of Poverty in the Former Soviet Union*. Washington, DC: World Bank.

Fierman, William, ed. 1991. *Soviet Central Asia: The Failed Transformation*. Boulder, CO: Westview.

Fikr Centre for Public Opinion. 2002. *Sotsialnyi portret molodezhi Tsentralnoi Azii v aspekte obespecheniia gosudarstvennoi i regionalnoi bezopasnosti* [Social portrait of youth in Central Asia in the context of ensuring national and regional security]. Astana-Bishkek-Dushanbe-Tashkent: Izhtimoj.

Freedom House. 2005. *Nations in Transit 2005: Democratization from Central Europe to Eurasia*. Washington, DC: Freedom House.

Grare, Frederick, Shirin Akiner, and Mohammad-Reza Djalili, eds. 1998. *Tajikistan: The Trials of Independence*. New York: St. Martin's.

Heyneman, Stephen P. 1987. "Uses of Examinations in Developing Countries: Selection, Research and Education Sector Management." *International Journal of Education Development* 7 (4): 251–63.

———. 1997a. "Education and Social Stabilization in Russia." *Compare* 27 (1): 5–18.

———. 1997b. "Educational Choice in Eastern Europe and the Former Soviet Union." *Education Economics* 5 (3): 333–39.

———. 1998. "Transition from a Party/State to an Open Democracy: The Role of Education." *International Journal of Education Development* 18 (1): 21–40.

———. 2000. "From the Party/State to Multiethnic Democracy: Education and Social Cohesion in Europe and Central Asia." *Educational Evaluation and Policy Analysis* 22 (2): 171–91.

———. 2002–3. "Defining the Influence of Education on Social Cohesion." *International Journal of Education Research, Policy and Practice* 3 (4): 73–97.

———. 2003. "Education and Social Cohesion." In *Encyclopedia of Education*, ed. J. Guthrie, vol. 6. New York: Macmillan.

———. 2004. "Education and Corruption." *International Journal of Education Development* 24 (6): 638–48.

———. 2006. "Higher Education and Social Cohesion." Paper presented to the American Society for the Study of Higher Education, Anaheim, California (November).

Heyneman, Stephen P., Kathryn Hart Anderson, and Nazym Nuraliyeva. 2006. "The Cost of Corruption in Higher Education." Paper presented at the Conference on the Economics of Education, Dijon (June).

Heyneman, Stephen P., and Alan De Young, eds. 2004. *The Challenge of Education in Central Asia*. Greenwich, CT: Information Age.

Heyneman, Stephen P., and Ingemar Fagerlind, eds. 1988. "University Examinations and Standardized Testing." Technical Paper no. 78, World Bank, Washington, DC.

International Crisis Group. 2001. "Incubators of Conflict: Central Asia's Localized Poverty and Social Unrest." Asia Report no. 16 (June), International Crisis Group, Brussels.

———. 2003a. "Is Radical Islam Inevitable in Central Asia? Priorities for Engagement." Asia Report no. 72 (December), International Crisis Group, Brussels.

———. 2003b. "Youth in Central Asia: Losing the New Generation." Asia Report no. 66 (October), International Crisis Group, Brussels. http://www.crisisgroup.org/home/index.cfm?id=2342&l=1.

———. 2005a. "The Curse of Cotton: Central Asia's Destructive Monoculture." Asia Report no. 93 (February), International Crisis Group, Brussels.

———. 2005b. "Uzbekistan: The Andijon Uprising." Asia Report no. 38 (May), International Crisis Group, Brussels. http://www.crisisgroup.org/home/index.cfm?id=3469&l=1.

Johnson, Mark S. 2004a. "The Legacy of Russian and Soviet Education and the Shaping of Ethnic, Religious and National Identities in Central Asia." In Heyneman and De Young 2004.

———. 2004b. "Trends in Secular Educational Development in Azerbaijan and Central Asia: Implications for Social Stability and Regional Security." *National Bureau of Asian Research Analysis* 15 (4): 7–58.

Jones-Luong, Pauline, ed. 2004. *The Transformation of Central Asia: States and Societies from Soviet Rule to Independence*. Ithaca, NY: Cornell University Press.

Keller, Shoshana. 2001. *To Moscow, Not Mecca: The Soviet Campaign against Islam in Central Asia, 1917–1941*. Westport, CT: Praeger.

Khalid, Adeeb. 1998. *The Politics of Muslim Cultural Reform: Jadidism in Central Asia*. Berkeley: University of California Press.

King, Charles, and Neil J. Melvin. 1999–2000. "Diaspora Politics: Ethnic Linkages, Foreign Policy and Security in Eurasia." *International Security* 24 (3): 108–38.

Klitgaard, Robert. 1986. *Elitism and Meritocracy in Developing Countries*. Baltimore: Johns Hopkins University Press.

Landau, Jacob, and Barbara Kellner-Heinkele. 2001. *Politics of Language in the Ex-Soviet Muslim States*. Ann Arbor: University of Michigan Press.

Leonteva, Marija, Tjeerd Plomp, and Joke Voogt. 1998. "Examination Practices in the Russian Federation: Present Situation and Perspectives for Development." In *Education Standards and Assessment in the Russian Federation*, ed. J. Voogt and T. Plomp. Amersfoort, Belgium: Acco.

Malashenko, Alexei, ed. 1998. *Islam v SNG*. Moscow: Russian Academy of Sciences.

Martin, Terry. 2001. *Affirmative Action Empire: Nations and Nationalism in the Soviet Union, 1923–1939*. Ithaca, NY: Cornell University Press.

Ministry of Education of the Republic of Kyrgyzstan. 2000. *Education for All: Kyrgyzstan Country Report*. http://www2.unesco.org/wef/countryreports/Kyrgyzstan.

———. 2005. *Monitoring of Learning Achievement*. Bishkek: Ministry of Education.

Ministry of Public Education of the Republic of Tajikistan. 1999. *Monitoring of Learning Achievement in Elementary Schools*. Tashkent: Department of Monitoring of State Educational Standards.

———. 2002. *Monitoring of Learning Achievement in Elementary Schools of Tajikistan and the Problem of School Non-attendance*. Dushanbe: Ministry of Education.

Ministry of Public Education of Uzbekistan. 2002. *Educational Statistics*. Tashkent: Ministry of Public Education of Uzbekistan.

Naumkin, Vitaly. 2005. *Radical Islam in Central Asia: Between Pen and Rifle*. Lanham, MD: Rowman & Littlefield.

Northrop, Douglas. 2004. *Veiled Empire: Gender and Power in Stalinist Central Asia*. Ithaca, NY: Cornell University Press.

OECD (Organization for Economic Cooperation and Development). 2003. *Education at a Glance: OECD Indicators—2003*. Paris: Organization for Economic Cooperation and Development.

Oliker, Olga, and Thomas S. Szyana. 2003. *Faultlines of Conflict in the Caucasus and Central Asia: Implications for the U.S. Army*. Santa Monica, CA: RAND Arroyo Center.

Pinera, Sebastian, and Marcelo Selowsky. 1981. "The Optimal Ability-Education Mix and the Misallocation of Resources within Education." *Journal of Development Economics* 8 (1): 111–31.

Poliakov, Sergei P., ed. 1992. *Everyday Islam: Religion and Tradition in Central Asia*. Armonk, NY: Sharpe.

Polonskaia, Ludmilla R., and Alexei V. Malashenko. 1994. *Islam in Central Asia*. Reading, UK: Ithaca.

Rashid, Ahmed. 2002. *Jihad: The Rise of Militant Islam in Central Asia*. New Haven, CT: Yale University Press.

Ro'I, Yaacov. 2000. *Islam in the Soviet Union: From the Second World War to Gorbachev*. New York: Columbia University Press.

Roy, Olivier. 2000. *The New Central Asia: The Creation of Nations*. New York: New York University Press.

Sagdeev, Roald, and Susan Eisenhower, eds. 2000. *Islam and Central Asia: An Enduring Legacy or an Evolving Threat?* Washington, DC: Center for Political and Strategic Studies.

Save the Children Foundation. 2002. *Child Labor in Uzbekistan*. Tashkent: Save the Children Foundation.

Schiff, Maurice, ed. 2005. *International Migration, Remittances, and the Brain Drain*. Washington, DC: World Bank.

Shahrani, M. Nazif. 1991. "Local Knowledge of Islam and Social Discourse in Afghanistan and Turkistan in the Modern Period." In *Turko-Persia in Historical Perspective*, ed. R. L. Canfield. New York: Cambridge University Press.

Silova, Iveta. 2002. *The Right to Quality Education: Creating Child-Friendly Schools in Central Asia*. Almaty: UNICEF Central Asian Republics and Kazakhstan.

———. 2005. "Traveling Policies: Hijacked in Central Asia." *European Educational Research Journal* 4 (1): 50–59.

Silova, Iveta, Virginija Budiene, and Mark Bray, eds. 2006. *Education in a Hidden Marketplace: Monitoring of Private Tutoring in the Nine Countries of the Former Socialist Bloc*. New York: Open Society Institute.

Statistical Agency of the Republic of Kazakhstan. 2001. *Statistics: Education*. Almaty: Statistical Agency of the Republic of Kazakhstan.

Steiner-Khamsi, Gita, ed. 2004. *The Global Politics of Educational Borrowing and Lending*. New York: Teachers College Press.

Swietochowski, Tadeusz. 1995. *Russia and a Divided Azerbaijan*. New York: Columbia University Press.

Temple, Paul, and Georgy Petrov. 2004. "Corruption in Higher Education: Some Findings from the States of the Former Soviet Union." *Higher Education Management and Policy* 16 (1): 83–99.

UNDP (UN Development Program). 2001. *Human Development Report*. New York: UNDP.

UNESCO. 2001. *Governance, Youth Values and Life Styles in Central Asian Countries*. Tashkent: UNESCO.

UNICEF ICDC. 1999. *After the Fall: The Human Impact of Ten Years of Transition*. Florence: UNICEF ICDC.

———. 2002. *Innocenti Social Monitor 2002*. Florence: ICDC.

———. 2004. *Innocenti Social Monitor 2004*. Florence: ICDC.

———. 2006. *Central Asia Human Development Report: Bringing Down Barriers; Regional Cooperation for Human Development and Human Security*. New York: UNDP.

Warwick, Donald L. 1991. *Teacher Training and School Effectiveness in Pakistan*. Cambridge, MA: Harvard Institute for International Development.

World Bank. 1995. *Russia: Education in the Transition*. Washington, DC: World Bank.

———. 2000. *Republic of Tajikistan: Poverty Assessment*. Washington, DC: World Bank.

Yuvuz, M. Hakan, and John L. Esposito, eds. 2003. *Turkish Islam and the Secular State: The Gülen Movement*. Syracuse, NY: Syracuse University Press.

Zouev, Alexandre, ed. 1999. *Generation in Jeopardy: Children in Central and Eastern Europe and the Former Soviet Union*. Armonk, NY: Sharpe.