

CURRICULUM & STUDENT ASSESSMENT, PRE-SERVICE TEACHER TRAINING

AN ASSESSMENT IN TAJIKISTAN & KYRGYZSTAN

GITA STEINER-KHAMSI
SINA MOSSAYEB & NATASHA RIDGE

TEACHERS COLLEGE, COLUMBIA UNIVERSITY
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TABLE OF CONTENTS

1. EXECUTIVE SUMMARY	2
2. CURRENT SITUATION	7
2.1. Practice Orientation of Reform	8
2.2. Peer-Training and Peer Mentoring	9
2.3. Quality Products	12
2.4. Networking of Innovative Schools	13
2.5. Country-Specific Adaptation	16
3. PART ONE: CURRICULUM	
3.1. Introduction	18
3.2. Current Situation	19
3.3. Barriers to Change	24
3.4. Underserved Areas	26
4. PART TWO: STUDENT ASSESSMENT	
4.1. Introduction	29
4.2. Assessment Reform Characteristics	29
4.3. Current Situation	32
4.4. Challenges of Student Assessment	33
4.5. Underserved Topics	35
5. PART THREE: PRE-SERVICE TEACHER EDUCATION	
5.1. Introduction	37
5.2. Current Situation	37
5.3. Teacher Education	41
5.4. Pre-Service Curriculum	42
5.5. Pre-Service Teacher Education Students	46
5.6. Underserved Topics	49
6. DONOR INVOLVEMENT	54
7. RECOMMENDATIONS	59
8. BIOGRAPHICAL INFORMATION OF REPORT AUTHORS	72
9. APPENDICES	
9.1. SoW for Pre-Service Teacher Education	73
9.2. SoW for Curriculum and Student Assessment	79

EXECUTIVE SUMMARY

The objectives of this assessment were “to provide a detailed review of needs and opportunities” in national curriculum, student assessment improvement and pre-service teacher education, and to “recommend appropriate activities to address the identified needs and opportunities in the next USAID program in basic education.” These Terms of References were formulated by USAID/CAR in anticipation of the end of the current USAID-funded program in basic education (PEAKS) in June 2007. The assessment was carried out by a team of experts in international and comparative education, based at Teachers College, Columbia University, New York. The team members had extensive experience in the region, in particular in Russia and Mongolia, and to a lesser extent also in Central Asia. The on-site assessment was completed in the month of January 2007.

This report presents an assessment of (1) curriculum reform, (2) student assessment, and (3) pre-service teacher education, and identifies potential needs and opportunities. In addition to analyzing existing donor involvement in the three areas mentioned above, the report also reflects in great detail on the strengths of the PEAKS project that deserve to be preserved and improved in the next USAID-funded project.

The three assessment chapters deal with the current situation in Tajikistan and Kyrgyzstan. Apart from educational statistics, curricular materials, policy documents, technical reports, and other studies, these sections of the report have been informed by numerous interviews and visits on-site (listed in the appendix). The assessment team visited not only current project partners and partner schools/institutions of USAID but also had numerous meetings with government officials and representatives of international organizations in Dushanbe and Kulyab (Tajikistan) as well as in Bishkek and Osh (Kyrgyzstan). The three detailed assessment chapters provide the background for the recommendations, presented in the last part of this report. The recommendations are grouped in three sections, listed in order of priority: (1) Sustaining the Network of Innovative Schools, (2) Pre-service Teacher Education, and (3) Curriculum and Assessment.

Sustaining the Network of Innovative Schools. The five strengths of the PEAKS project are identified as follows: practice orientation of reform, peer-training and peer-mentoring, quality products, networking of innovative schools, and country-specific adaptation. Rather than doing more of the same and at a larger scale, the assessment team recommends that the next USAID-funded project should help disseminate, consolidate, and institutionalize at systemic level or policy level what PEAKS succeeded to change in practice. Greater attention should be given to the development and dissemination of material on student-centered teaching as well as on student-centered assessment. The focus on dissemination, consolidation and institutionalization requires, however, a completely new project strategy. The current cascade model tends to require and reinforce a capacity gap between Professional Development Schools (PDS) and cluster schools. A flatter model is proposed that aims at a large scale dissemination of student-centered teaching and assessment material that would be supported by school-based peer-training and peer-mentoring. In contrast to the current satellite structure (one PDS school catering to 4-5 cluster schools), we propose an adoption strategy in which one schools only caters to 2 schools. In the following year, the adopted schools become adopters, and in turn, each adopt two new schools. By the end of the proposed 5-year educational project of USAID, each and every school in Kyrgyzstan and Tajikistan is “adopted,” that is trained and mentored, by other schools that already have had exposure to new, student-centered teaching and assessment methods. The new emphasis on developing, disseminating and implementing more student-centered material and assessment methods at the school-level will greatly resonate with practitioners. Another logical step forward is to specify student-centered teaching methods and assessment methods with regard to curricular standards and subjects. To date, the training of interactive methods has been cross-curricular and many teachers discovered them as a means to motivate students in class. At the same time, teachers were not prepared to creatively use them and adopt them to their particular grade and subject matter. The next USAID-funded project should help teachers to closely tie student-centered teaching methods with their particular subject and grade level. Rather than offering training in mixed groups only, workshops and conferences for subject and grade-specific should be organized. By implication, a greater emphasis will be placed on linking student-centered teaching with curricular standards and student assessment. The assessment team proposes that funds are made available to support subject-specific initiatives including the establishment of subject-specific teacher associations (New Association of Science Teachers,

New Association of Foreign Language Teachers, etc.) that are committed to innovative pedagogical practices. Throughout the report the need to move from interactive teaching methods to truly student-centered teaching methods is highlighted. The team noticed that PEAKS PDS and cluster schools are not necessarily more sensitive and integrative when it comes to students with special needs. This has to do with their inability, perhaps in some cases unwillingness, to focus on individual student progress. The next USAID-funded educational project should thus help practitioners to acknowledge and assess individual student progress and supply them with pedagogical materials for teaching and integrating children with special needs.

Pre-Service Teacher Education. Compared to other sub-sectors, pre-service teacher education is virtually “donor free.” It is a sub-sector orphaned by donors. The neglect has several causes: There is a huge gap that yawns between policy and practice in pre-service teacher education. As with curricular reform in general, many revisions are written on paper but not implemented in practice. The credit-system exists in principle in pre-service teacher education, but is nowhere to be found in practice. Furthermore, the pre-service teacher education institutions are higher education institutions, but yet have a very low prestige and are considered professional schools rather than academic institutions. Most importantly, there is a huge “wastage” in pre-service teacher education in that the majority of those trained to become teachers never become teachers or, if they do, do not stay in the profession beyond the duration they are required to serve as recipients of government scholarship. Thus, a careful selection of target groups is essential for any project that supports pre-service teacher education reform. Rather than identify potential pilot sites, the team has identified potential target groups for pre-service teacher education. The following three groups of students are most likely to become teachers and most likely to stay in the teaching profession, and should therefore be viewed as the target groups: (a) “budget students” who study with the (partial) support of a government scholarship, (b) correspondence students who work as non-certified teachers in schools, and (c) pre-certified teachers that received a government scholarship and completed their course work but need to accomplish their term of service requirements before receiving the diploma. These three target groups need to be addressed with priority when concrete initiatives for supporting pre-service teacher education are developed. The assessment team identified three areas that are most likely to yield effective and sustainable changes in pre-service teacher education: (1) Professional Development of University

Lecturers, (2) School-University Partnership, and (3) Pilot Project on Multi-Subject Teaching. The team recommends that a focus be placed on the reform of English language, math and physics teaching in lower and upper secondary school because these are the subjects with the greatest teacher shortage. In addition, lecturers in pedagogy should be included in professional development initiatives as they are the ones teaching methods courses. Consistent with our overall recommendation to avoid support for primary school reform (because of the already existing, strong financial support provided by development banks and FTI), the team recommends that those departments in colleges and universities are selected that prepare teachers of lower secondary school (grades 5-9) and upper secondary school (grades 10-11). All three areas, listed above, will draw from existing resources, both human and material, developed during the PEAKS project. For example, those colleges and universities should be selected as institutional partners that already participated in the PEAKS project. This way, there is a core of university lecturers that has been trained in PEAKS who will facilitate contacts and act as liaisons to the project. The team also makes many concrete suggestions on how to establish and foster a partnership between pre-service teacher education and the Network of Innovative Schools. This school-university partnership can take on several forms such as innovative schools serving as practicum sites for pre-service teacher education students, or innovative practitioners teaching part-time as “clinic professors” (professors of practice) at pre-service teacher education institutions. The U.S. notion of a “Professional Development School” (PDS), used in PEAKS, implies such a partnership model. In other words, the next USAID-funded project should make the PDS live up to their name as innovative schools that closely cooperate with pre-service teacher education. Finally, multi-subject teaching is a sore issue: all involved in educational development know of its necessity to resolve, once and for all times, the problem of teacher shortage and retention in rural schools, but the pre-service teacher education institutions lack technical support to effectively implement it. There is a stigma of pre-modernity or backwardness attached to multi-subject teaching that a well-designed and funded pilot project with multi-subject teaching, implemented in 4 colleges and universities in each country (2 classes per college and university) could successfully tackle.

Curriculum and Assessment. The initiatives proposed in curriculum and in assessment are much smaller and very specific, because the team has recorded a sizeable donor involvement in these

areas, in particular in curriculum reform. As mentioned before, the shift from interactive to student-centered teaching and assessment deserves to be treated as a top priority. It will significantly impact curriculum and assessment reform at school level, and eventually at systemic and policy level. USAID-funded assessment projects (such as CEATM in Bishkek) have an excellent regional reputation. The team recommends to draw on the assessment expertise built in USAID-funded project such as the one in CEATM, and host a series of regional roundtables on assessment that involve policy makers, practitioners, and assessment experts. The Ministry of Education of Tajikistan expressed a strong interest to learn from the USAID-funded experiences with standardized testing (university entrance exams) in Kyrgyzstan. Even though other donors are already strongly promoting standardized testing, it might help accelerate the process if USAID would provide technical assistance for actually implementing standardized tests for university entrance examinations in Tajikistan.

The assessment team proposes that the next USAID-funded education project is, similar to PEAKS, a regional project with close cooperation between the participating countries (Tajikistan, Kyrgyzstan, and other Central Asian countries, political constellations permitting), but at the same time one that takes into account country-specific variations at the level of project components. The emphasis should be on what USAID considers basic education, however, excluding primary school level. The various project components should help strengthen reform with regard to teaching methods and student assessment methods, and the preparation of lower and upper secondary school teachers, in particular in subjects that experience acute problems with teacher shortage and retention (English language, math and physics). The project should last five years. A thorough formative evaluation at the end of the first year should determine whether changes in the original project design are necessary.

CURRENT SITUATION

The objective of this study was “to provide a detailed review of needs and opportunities” in national curriculum, student assessment improvement and pre-service teacher education, and “recommend appropriate activities to address the identified needs and opportunities in the next USAID program in basic education.” The Terms of References were formulated by USAID/CAR (Central Asia Republics) in anticipation of the end of the current USAID-funded program in basic education: PEAKS (Participation, Education and Knowledge Strengthening) in June 2007. Thus, any evaluation of needs and opportunities has to reflect on the current policy context in Tajikistan and Kyrgyzstan as well as on USAID involvement in education. Furthermore, any set of recommendations for the next USAID program needs to incorporate suggestions as to how to sustain effective elements and features of the current PEAKS program.

We have identified five strengths of the current USAID educational project PEAKS:

- Practice orientation of reform
- Peer-training and peer-mentoring
- Quality products
- Networking of innovative schools
- Country-specific adaptation

The PEAKS program generated valuable resources that are worth sustaining in follow-up educational initiatives of USAID/CAR. The reputation of PEAKS in the two countries is excellent and the merits of the program are many. In the following we list a few of the positive outcomes of the program and reflect, at the same time, on how these five core achievements of PEAKS could be preserved and improved for a follow-up educational program funded by USAID. We propose that a regional educational program is designed with minor national modifications for the Central Asian countries that end up participating. Differences between the two countries are highlighted whenever required.

1. PRACTICE ORIENTATION OF REFORM

There was a fury of reforms in the 1990s that were released upon the educational sectors in Kyrgyzstan and, with a period of reform suspension during the Civil War, in Tajikistan. Some reforms were short-

sighted in that they remedied the problem in the short-run, but at the same time created bigger problems in the long run. One and a half decades after the introduction of fundamental reforms, the two educational systems either suffer from the consequences of ill-conceived reforms of the early reform period or face the existence of ineffective reforms that have only been implemented on paper. An example for an ill-conceived reform with great repercussions for pre-service teacher education reform is the distinction between “contract” and “budget” students in higher education. An example of the second type of reforms (those that encountered implementation problems) is the revision of curriculum standards in general education. These examples deserve brief mention as they illustrate the structural challenges that a USAID-funded program, focusing on pre-service teacher education, student assessment and curriculum reform, needs to consider.

Ill-conceived reform: the distinction between contract and budget students

Contract students are admitted to university not on the basis of their grades but on their ability to be able to pay tuition fees. The fees help to boost the salaries of university lectures, rehabilitate college and university buildings, and purchase equipment. In contrast, “budget students” are on the equivalent of academic scholarships and benefit from free higher education (Tajikistan) or pay a reduced tuition rate (Kyrgyzstan). Although the tuition fees helped to remedy, in the short-run, the scarcity of financial resources in higher education, it produced a two-tier system that decreased the quality of higher education, and in particular of pre-service teacher education. In pre-service teacher education, the consequences of this ill-conceived reform have been disastrous. For contract students, enrolment in pre-service teacher education was not their first choice. Many of them are academically weak, that is, they didn’t obtain the necessary test results to enter more prestigious degree programs. In other words, they enrolled in teacher education because they lacked other options. The proportion of contract students in the seven pre-service teacher education programs that we visited in Tajikistan and Kyrgyzstan ranged from 30 to 70 percent, depending on the location and the reputation of diploma program. The wastage in pre-service teacher education, that is, the large proportion of teacher education never enter the teaching profession is to some extent related to the fact that a sizeable number of the pre-service teacher education students is entirely unmotivated, i.e., never meant to enter the teaching profession in the first place. They mostly benefit from the subject matter that is taught and do not relate to pedagogical subjects or methods taught during their studies. While the existence of this two-tier system is an insurmountable structural problem that needs to be resolved at the governmental level, it is a curricular problem that these students do not change their negative view on the teaching profession over the course of their studies. They lack a teacher identity. Those who actually enter the teaching profession—the budget students—do so because of the service requirement that is attached a government scholarship. In Tajikistan, the recipients of

government scholarships (budget students) need to serve in schools for 3 years and in Kyrgyzstan for 2 years, before they are handed the teaching diploma. One could regard this period of immersion into the teaching profession as a teacher “pre-certification period” in which a program of on-the-job mentorship could support and motivate these new, pre-certified teachers to remain in the profession. Currently, this opportunity to remedy the shortcoming of pre-service teacher education during the pre-certification period is missed.

Ineffective reforms: the revision of curriculum frameworks and curriculum standards

As will be explained in greater detail in this report, there was ample donor support to revise the curriculum. However, the revisions have been mostly confined to policy reforms with little impact on school practice. In contrast to the examples of reforms mentioned above, which either emphasized structural changes (e.g., finance of higher education) or revisions of policy documents, the strength of the PEAKS program was its emphasis on reforming the practice of education. PEAKS applied a bottom-up approach to school reform—similar to the one pursued in the OSI network programs since the mid-1990s—in that it empowered practitioners at school-level. This approach was quite the inverse of strategies propelled by the two large donors the Asian Development Bank (ADB) and the World Bank. There are advantages and disadvantages for each of the donor strategies. The development banks have been bound to working with and through government channels and therefore pursued a top-down approach with a great emphasis on policy reform rather than practice reform. As a result, many policy reforms funded by large donors have occurred to date on paper only, and did not (yet) make it to the classroom. Vice versa, many classroom and school level reforms propelled by NGOs or bilateral donors, including PEAKS, have not (yet) had an impact at a systemic level. A greater emphasis on systemic and sustainable reform is desirable in the follow-up program funded by USAID. A logical step forward for institutionalizing student-centered teaching, which was rigorously pursued under PEAKS, is a reform of teacher training or pre-service teacher education. One of the prime targets of the reform should be this severely underserved area of reform: pre-service teacher education. With attention given to the reform of pre-service teacher education, the follow-up USAID project will help implement at policy level what PEAKS so successfully implemented at the practice level.

2. PEER-TRAINING AND PEER-MENTORING

Along with a less hierarchical approach and an emphasis on practice rather than policy reform, PEAKS strengthened horizontal support in the form of peer-training and –mentoring. The concept of the

Professional Development School (PDS), acting as resource and training centers for surrounding schools, and cluster schools reflects the strong belief that individuals with practical pedagogical experience (teachers) are best suited as trainers and mentors for student-centered teaching methods. The success of the cascade model used in PEAKS relies on two project features: (1) extensive exposure of peer-mentors and trainers (“PEAKS trainers”) to interactive student-methods, and (2) systematic training and mentoring of regular teachers by the PEAKS trainers. While the first condition is clearly fulfilled, it is questionable whether a critical mass of regular teachers have been trained at PDS and cluster schools to make an impact on their pedagogical work and to sustain the reforms propelled by PEAKS at school level. The dependency on PDS trainers, or, the capacity gap between PEAKS trainers (a small group of teachers) and the masses of regular teachers at PDS schools is a serious concern that needs to be thoroughly analyzed. What is a great success for a project, such as PEAKS, might result in a great loss for a school: with government institutions of in-service teacher education recognizing the capacity of certified trainers at PEAKS schools, these teachers become, over a short period of time, overburdened with training and mentoring responsibilities outside of their own school, especially if they are located in a central location. They need to either reduce their teaching load (e.g., to one shift only) to act as trainers and/or textbook developers, or completely change their profession to devote their entire time to pedagogical activities outside the classroom.

Worse case scenarios come to mind. The scenarios in the two countries vary, however, because PDS schools in Kyrgyzstan received official status as training and resource sites. This means that the Kyrgyz PDS schools could transform their training and mentoring activities into a commercial enterprise, charge fees for services and thereby sustain their activities. On the positive side, PDS schools in Kyrgyzstan are attractive sites for entrepreneurial teachers and the likelihood that they stay involved as teachers at their school is great. Even though it has become common practice for governmental and non-governmental organizations in Kyrgyzstan to charge fees for teacher training, we see problems arising in a context where the teacher salaries are extremely low and the promotion criteria or salary increases are not clearly linked, let alone guaranteed, to professional development. The situation in Tajikistan is different. The chances of rural-urban migration (“brain-drain” or more accurately “brain circulation”) are real given that only 1 of the 5 PDS schools is located in Dushanbe [Sina is this correct, would you mind checking???]. The PEAKS training of trainers makes teachers more marketable and contributes to their social and geographical mobility. The qualifications acquired over the course of an international project such as PEAKS enables them to find a different job in a more central location with a greater salary, more influence, and better living standards.

The loss of trainers built over the course of a project can only be offset with a critical mass of teachers trained and “left behind” in the PDS and cluster schools. However, we recommend that careful consideration is given to what kind of training should be offered at school-level. Rather than doing more of the same with a greater number of teachers and schools, we propose that the focus on teaching methodology is expanded in two distinct ways. First, student-centered teaching methods should become more closely linked to subjects (e.g., geography, biology, etc.) or disciplines (e.g., natural sciences) taught at lower and upper secondary school levels. Second, student assessment methods both in the classroom and, once a year, at school level, should be revised in ways that reflect student-centered teaching methods. Thus, the follow-up training and mentoring components of the USAID-funded educational program should help teachers at PDS and cluster schools to apply more systematically student-centered teaching methods to their particular subject and develop formative student assessment methods at classroom and school levels that are in line with interactive teaching.

3. QUALITY PRODUCTS

There is a scarcity of student-centered teaching and training material at school level outside of the materials and trainings conducted under PEAKS. There are three issues with regard to product development: (1) One group of products is completed and of outstanding quality but not sufficiently distributed at school level. For example, the ITML (interactive teaching and learning methods) module and CD, developed by PEAKS staff and trainers of Uzbekistan, stands out as a comprehensive training and self-study package of outstanding quality. (2) Another group of products is relevant but still under construction. It appears that the PEAKS program encountered challenges with developing own products and publications that could be distributed to schools beyond the scope of PDS and cluster schools. For example, the handbook of model lessons or the manual for developing a school-based curriculum for the voluntary hours (“local hours”) are extremely useful but are still under development. These products need to be completed and widely distributed, preferably accompanied by training. (3) There is a third group of products that need to be first developed. For example, there is a lack of pedagogical material for inclusive education or training on how to cater to educating students with special needs. While this was one component of PEAKS in Kyrgyzstan it was limited in influence and in Tajikistan it was not included at all. Similarly if the focus on pre-service teacher education and student assessment reform is pursued, there is a great need of materials that specifically deal with that sub-sector (e.g., teaching practicum, multi-subject teaching, teaching an integrated curriculum, student-centered assessment methods, etc.). Overall, the development of products was one of the key features of the PEAKS program. This particular feature

could be implemented more rigorously, enhanced, and embedded in an effective dissemination and training strategy. It is recommended that the pedagogical material is published as a series (with the same logo, format, etc.) to allow program visibility at school level. NGO-administered programs are typically limited in their dissemination of interactive teaching and training material for reasons related to institutional sustainability. This applies, especially for the OSI network programs (Step by Step (SbS) and Reading and Writing for Critical Thinking (RWCT)) that face dwindling financial support from OSI. Often presented in terms of quality insurance, they need to retain a brand name that becomes marketable for “clients” (parents, teachers) or other international donors. Such a marketing strategy prevents going to scale and institutionalize student-centered methods in government structures more systematically. A USAID-funded and developed program is in a position to pursue a different strategy. Student-centered teaching and assessment methods should become mainstreamed in in-service and pre-service teacher education, and in the long run constitute the norm, and not the exception, in Kyrgyz and Tajik classrooms.

Definitions of “basic education” – the focus of our mission—vary in the region. Surprisingly, the Fast-Track Initiatives in Kyrgyzstan and Tajikistan restrict basic education to pre-school and primary school (grades 1-4). In general, however, the multilaterals (development banks and U.N. organizations) tend to view “incomplete secondary education” (preschool and grades 1-9) as basic education. The most inclusive definition is the one applied by USAID: basic education spans from preschool to “complete secondary education” (grades 1-11). We recommend that the focus is placed on lower and upper secondary school (grades 5-11) as well as on the various tracks of pre-service teacher education (9+3, 9+3+2, or 11+5) given the strong emphasis of other large donors on preschool and grades 1-4.

4. NETWORKING OF INNOVATIVE SCHOOLS

When PEAKS was initiated, there was already a strong network of SbS (Step by Step) and RWCT (Reading and Writing for Critical Thinking) in place, both in Kyrgyzstan and in Tajikistan. PEAKS only selected a few of the existing OSI partner schools as PDS schools. The activities of the OSI partner schools continued, and included both PEAKS and non-PEAKS schools. As a result, the selected PEAKS schools viewed themselves as belonging simultaneously to two networks, the network of SbS or RWCT partner schools and the PEAKS PDS schools. More often than not, they identify with the Soros programs and merely view USAID, including PEAKS, as a funder. In effect, USAID disbursed grants to existing networks of innovative schools, all funded by different sources with a strong professional identity as “Soros schools.” SbS and RWCT have their own sustainability and survival strategies in place, some of

which are adverse to an active dissemination of their resources and material (for copyright and commercialization issues). The question therefore becomes: how can USAID support the active dissemination of student-centered teaching, learning *and* assessment methods in in-service *and* pre-service teacher education without compromising too much the institutional cooperation with its current program partners. The recommendations, presented in this report, are based on a needs assessment, that is, we have identified areas of reform that are currently underserved by other donors, and yet correspond to what the existing capacity built within USAID-funded education programs has to offer. The combination of needs assessment and feasibility considerations has informed our assignment, and has ensured that a replication of existing efforts as well as an over-funding of specific institutions and areas of reform is avoided.

Besides the need to reconsider the mode of cooperation with the existing institutional partners, the network among schools (rather than among the various projects within PEAKS) should be strengthened and sustained. Officially, PEAKS implemented only two cascades: (1) the training of trainers, and (2) the training of regular teachers at PDS and cluster schools. However, over the course of the PEAKS program, a third cascade emerged: (3) teachers/trainers at cluster schools training and mentoring regular teachers at their surrounding schools. This third cascade could become systematically targeted in that suitable teachers from cluster schools could be selected as potential peer-trainers and mentors. The quality of training and mentoring decreases with each cascade and it is therefore important to provide sufficient exposure and support for these newly emerging (unofficial/uncertified) trainers and mentors in the third cascade.

Most PEAKS PDS and cluster schools in Kyrgyzstan submitted a School Improvement Plan in which the school outline their visions and plans for the future. Many of these plans include information on the school's professional development plan, both for teachers at their own school as well as for teachers in surrounding schools. We recommend that these School Development Plans to be carefully reviewed. Possibly, these plans can be regarded as road maps for school-based reform, and supported by USAID.

Furthermore, the satellite model of PEAKS (assigning several cluster schools to one PDS school) relied on and, in effect, reinforced a huge capacity gap between the PDS school and the cluster school. We recommend that the satellite model is replaced by a "school adoption model" in which 1 school adopts, depending on its capacity, only 1 or 2 other schools. This will enable stronger horizontal support (teacher to teacher support), a flatter hierarchical structure, a dissemination of scale, and ultimately a mainstreaming of student-centered methods in all schools. A distinction between different types of

“certified trainers” might be necessary to introduce. Rather than enhancing the supply of nationally certified trainers which, for reasons of their own survival as professional peer-trainers, will *generate* an excessive demand for in-service teacher training (that will inevitably lead to a problematic commercialization of in-service teacher training) we recommend to create the status of peer-mentors and peer-trainers that do not undergo any governmental certification procedure. There is a window of opportunity at this particular moment and time to widely disseminate student-centered teaching and assessment methods by means of a school adoption model or peer-mentoring/teaching model given that all schools have heard of or were exposed, in one way or the other, to student-centered teaching methods. The difference between the satellite model, pursued in PEAKS, and the school adoption model proposed in this study will be explained in greater details in the recommendations section.

Figure 1: PEAKS Cluster Model

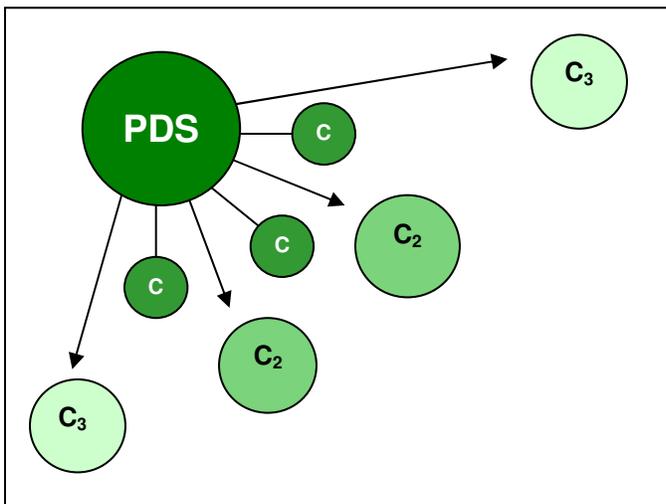
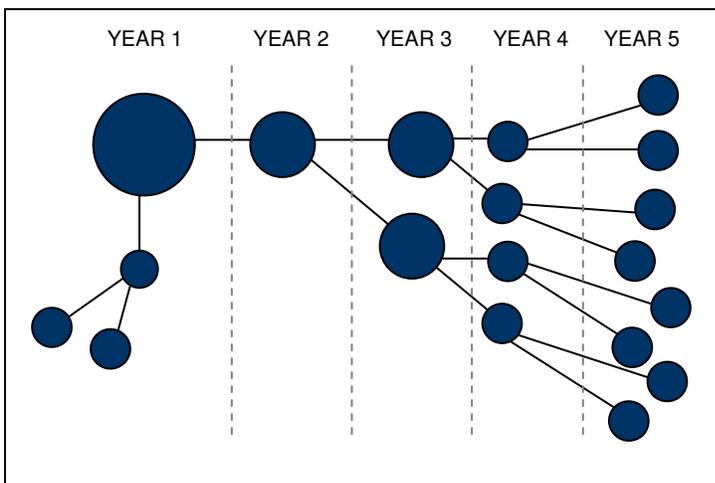


Figure 2: New “Adoption” Model



The proposed network of Schools of Innovation includes PEAKS Professional Development Schools, PEAKS cluster schools, and newly “adopted” partner schools. It will be important to acknowledge existing cooperation agreements between schools and international organizations, and specifically target new schools that have been left out from internationally funded initiatives.

5. COUNTRY-SPECIFIC ADAPTATION

There exist sufficient similarities with regard to educational development between the two countries to suggest the design and implementation of a joint transnational educational program. The similarities may be summarized as follows:

- *Curriculum:* The educational systems in both Kyrgyzstan and Tajikistan experienced a structural reform pressure on curriculum reform that has triggered generous donor support: Both countries extended schooling from 10 to 11 years, and intend to eventually extend the years of schooling to 12 years. In the early years of the transition, there was also a great pressure to revise the curriculum in ways that reflected the breakup of the Soviet Union and the reconstitution of the new socio-demographic make-up of the countries in Central Asia. These curricular changes affected mostly language and history teaching. Donors supported curricular reform in the areas of social studies, in particular, economics, civic education, and legal education in secondary schools. The structural reform pressure has motivated the development banks to allocate sizeable budgets for supporting the revision of the curriculum. ADB, World Bank and FTI all earmarked sizeable portions of their grants or loans for curriculum reform. It is an area of ongoing reform with ample external assistance. Even though most of the funds have been used to revise policy documents rather than pedagogical practice, we do not recommend major involvement in this area that already is saturated with donor support. USAID should focus on providing practitioner-induced curriculum and assessment reform at classroom and school-level. Furthermore, it should facilitate a dialogue between practitioners and policy makers on matters related to curriculum and assessment reform.
- *Assessment:* There is a great demand in the general public for standardized exams, especially for university entrance exams. Presented as a means to combat corruption in education, the unitary standardized entrance exam has been successfully implemented in Kyrgyzstan. Tajikistan is at a preparatory stage, and the Ministry of Education was convinced by the World Bank and its international consultants to curb its enthusiasm for standardized exams. It

is at the stage of developing a general concept paper on the introduction of a standardized university entrance exam. While there is ample public recognition and donor support for the introduction of standardized exams at critical stages of the educational system: after primary school, after incomplete secondary school (9th grade), after complete secondary school (11th grade) and before university entrance, there is to date little donor support to train teachers in using student-centered, formative student assessment methods in their classrooms. Step by Step has sensitized preschool and primary school teachers in the portfolio method, observation methods and learning contracts, but other interactive teaching methods fall short of systematically integration student assessment methods as part of their training. For teachers trained in student-centered teaching, the linkage with student assessment is the next logical step enabling them to systematically use interactive methods. A side-comment, which will be elaborated in greater detail later in this report, might be useful here: An new emphasis on student-centered assessment is not only a logical step forward after stressing student-centered teaching, but it is also a means to more systematically integrate student-centered teaching throughout the school year. In more regards than one, the introduction of student-centered teaching methods fell prey to a supplementary approach to reform rather than a substitutive approach precisely because of the lack of a more comprehensive approach that included curriculum reform, textbook revision, and student assessment reform. This supplementary approach has been widely criticized in the area of curriculum reform: new subjects (e.g., civic education, ICT, etc.) were added with donor support, contributing to the already existing, much-criticized overloading of the curriculum, without replacing or revising existing subjects. To some extent, the same applies to teaching methods in the classroom. At certain periods, in particular towards the end of the school quarter and the school year when students are prepared for passing the (unrevised) exams, teachers resort to teacher-centered teaching methods. Even though the method of student-centered teaching is self-perpetual and sustainable, because teachers continuously receive ample positive reinforcement by motivated and grateful parents, the method encounters challenges when it comes to grading students for their performance.

- *Pre-Service Teacher Training:* In both countries there is virtually no or very limited support for pre-service teacher education reform. Higher education reform was one of the first areas of reform in the 1990s. It has, however, affected more the structure of higher education than methods and content taught in higher education. From all higher education institutions, the pedagogical colleges and universities are the ones least affected by the reform of the 1990s. Donors also directed their efforts towards in-service training rather than pre-service teacher

education. As a result, there is a huge innovation gap between school teachers and teacher educators. School teachers had been exposed to a much greater extent to student-centered teaching and learning than teacher education working in pre-service teacher education. This gap has caused an internal reform pressure with schools demanding from pre-service teacher education (pedagogical departments at universities, pedagogical colleges, pedagogical universities) to become more proactively involved in training their lecturers in student-centered teaching methods. There is a great potential to link PEAKS schools (both PDS schools and cluster schools) to pre-service teacher education institutions, and use the innovation potential of PEAKS schools to upgrade pre-service teacher education both during the period of the course-work, the practicum, as well as the pre-certification process at school level.

1. INTRODUCTION

Curriculum reform in both the Kyrgyz Republic and Tajikistan since the mid-1990s has been characterized by two key trends (1) Over-funding and (2) Lack of coordination of reforms between donors and different government organizations. The combined result has been many reforms produced on paper but little real reform at the classroom level.

1.1. Over-funding

Curriculum development has received extensive attention from both the donor community and the Ministry of Education in the past 15 years. This has been evidenced by the continuous revision or adding of policy documents at the same time not allowing any time for implementation or consolidation. For example in Tajikistan in 2003 standards for education were produced and these were revised again in 2007 despite the fact that they had not been introduced to most schools during this time. School visits conducted for this report showed that these standards were still not in use in schools even after the two revisions. Similarly, in Kyrgyzstan in 1996 standards for education were also produced, these were revised in 2002, in 2004 and again in 2006; however, in 2007 they are still not present in many schools and are certainly not used by teachers.

Funding figures also show a marked preference by donors for curriculum reforms. For example the Fast Track Initiative (FTI) in Kyrgyzstan has dedicated 25% of its \$15 million budget to curriculum development, the Asian Development Bank (ADB) in Kyrgyzstan in its second Education Project has allocated \$1,269,000 solely to the development of curriculum and learning assessment *materials*, and over the last 10 years in Kyrgyzstan out of the \$72 million of external assistance for educational development around 60% has been spent on projects addressing curriculum in some way. Tajikistan also has a critical mass of donors working on curriculum related issues with six major donors focusing on the development of curriculum and/or learning materials, and all six involved in some aspect of textbook production.

The generous funding and generous attention to curriculum however has failed to translate into change at the classroom level. Schools visited for this report were still teaching using programs that have been little changed since the Soviet times and in many cases staff were not aware that any reforms had been made.

1.2. Lack of Co-Ordination of Reforms between Donors and Different Government Organizations

While there has been much donor activity it has also not been coordinated and as a result some areas of curriculum have received extensive investment, such as textbook printing and publishing, while other areas such as reform of the program content have received very little attention. Donors have tended to favor funding areas where results are visible and can be realized quickly rather than more complex policy areas such as curriculum content reform (content reform involves actual changing of what is taught in the classroom and to date reforms have not impacted the classroom). Thus they have gravitated too many of the same areas. The lack of dialogue between donors has therefore resulted in subjects being added to an already crowded curriculum, such as in the case of civics education in both Tajikistan and Kyrgyzstan, or to replication and overlap as in the case of the World Bank and the ADB both of which have very similar curriculum components in their projects. While there is hope that improved donor coordination will take place under the FTI in both countries this remains to be seen.

2. CURRENT SITUATION

2.1. Curriculum Development

The term *curriculum* is a Western term that has no direct equivalent in either Kyrgyzstan or Tajikistan. It is used to refer to different education documents inconsistently and thus there is much confusion surrounding what curriculum is and therefore what curriculum reform is referring to. When officials from the Ministries of Education or donors speak of changes to the curriculum they are often speaking at cross-purposes with one group referring to changes in content elements and the other to changes in structural elements. The term curriculum therefore refers to both structural and content elements as defined in Table 1.

Table 1: Curriculum Components and Examples

Structural Elements (Education Plan, Standards, National Curriculum Framework (TJ))	Number and type of subjects to be taught at each level, number of hours to be spent on each subject, grade level at which particular subjects should be taught
Content Elements (Program, Standards, National Curriculum Framework(TJ))	What topics and themes should be covered and when they should be covered, which textbooks should be used

2.2. Curriculum Documents in Tajikistan and Kyrgyzstan

The key curriculum documents in both countries are listed in Table 2 below; they both have virtually the same documents except at the highest level the overarching document in Tajikistan is titled the *National*

Curriculum Framework (NCF) while in Kyrgyzstan the overarching document is *A Concept of Education in Kyrgyzstan*.

Table 2: Curriculum Documents in Kyrgyzstan and Tajikistan

Document	Description	Kyrgyzstan	Tajikistan
National Curriculum Framework/ A Concept of Education in Kyrgyzstan	Broadly outlines the goals of education for subjects and assessment	yes	yes
Education Plan	Outlines the broad requirements of all subjects, by topic but not by grade for example in Math it groups grades 1-4 together for all topics	yes	yes
Standards	Provides a list of the required subjects for each level of schooling and the number of hours that should be spent on each one	yes	yes
Program	A detailed guide that gives topics and themes for each subject and grade, as well as the number of hours to be spent on each theme, an aggregated lesson plan	yes	yes

2.3. Curriculum Development and Change in Tajikistan

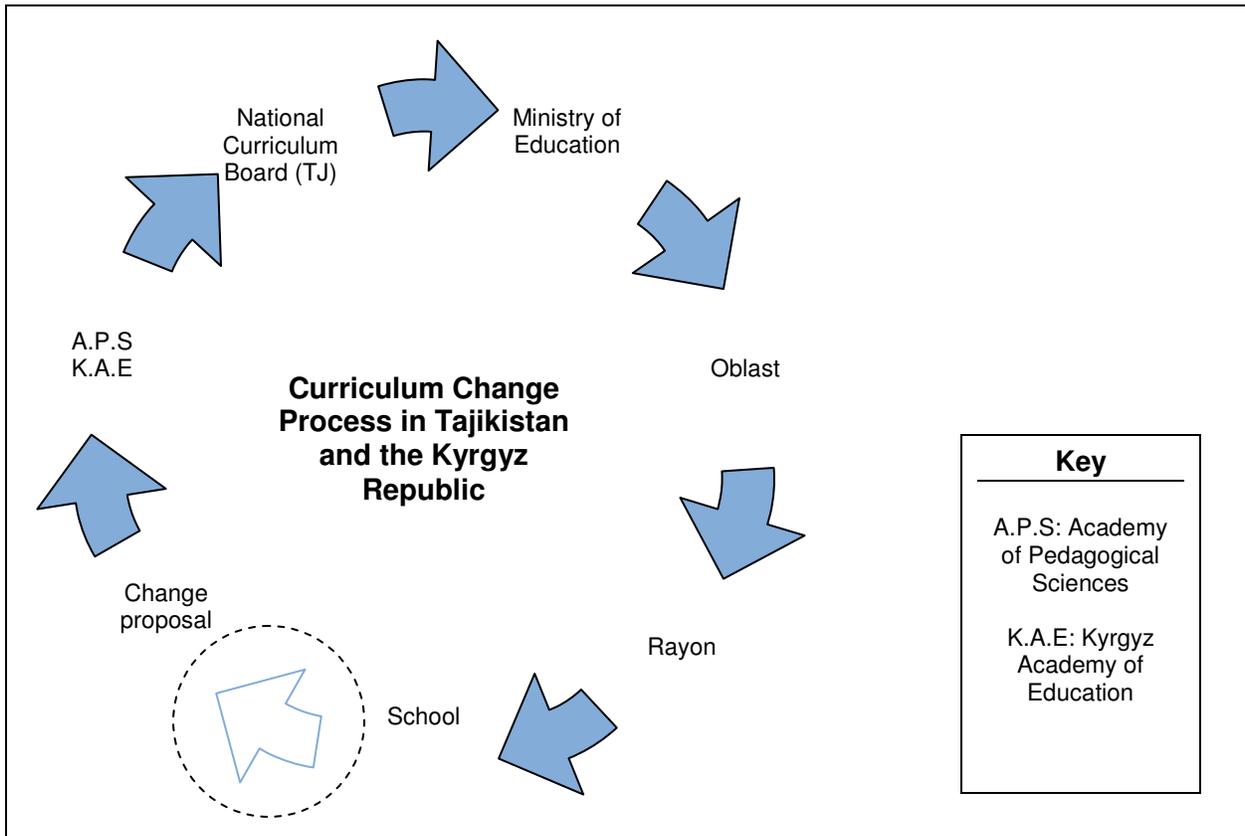
Curriculum development in Tajikistan, both content and structural, is conducted under the auspices of the Ministry of Education but carried out by the Academy of Pedagogical Sciences (APS) and the Scientific Methodological Centre with a final review by the National Curriculum Board (NCB). Multilateral donors, bilateral donors and Non-government Organizations (NGOs) are also involved in elements of curriculum reform and they too are required to pass any suggestions that will affect the national system through the NCB (for a full description of the official organizations involved in curriculum development see Part 5 on donor involvement). Recent curriculum changes include the development of the National Curriculum Framework and development of educational standards both of which have been carried out through the APS. Curriculum changes in Tajikistan tend to occur through a very top-down process that excludes practitioners and are often motivated by donor recommendations and/or international collaborations (as in the case of the National Curriculum Framework which has been modeled on US and Australian frameworks).

2.4. Curriculum Development and Change in Kyrgyzstan

Curriculum development and key documents in Kyrgyzstan are very similar to Tajikistan but there is no National Curriculum Board, rather changes to the curriculum are proposed, then passed through the Kyrgyz Academy of Education and then to the Ministry of Education. Practitioners are not involved in the

process and the developers of any curriculum documents are usually donors or academics. Curriculum changes therefore have also remained superficial in Kyrgyzstan as in Tajikistan. Recent changes to curriculum in Kyrgyzstan include the development of education standards which were first developed in 1996, then revised in 2002 and 2004; and the writing of A Concept of Education in Kyrgyzstan paper in 1996 which was also revised in 2002 to become ‘Concept of Development of the Educational System in the Kyrgyz Republic 2002-2010’.

Figure 3: Curriculum Change Process in Tajikistan and Kyrgyzstan



The curriculum change process in both countries can be seen in the above figure, it begins with a proposal for change which can come internally through the Ministry of Education or externally from a donor agency such as the World Bank. Then it proceeds upwards till approval is granted by the Ministry and the change is legislated and passed down through Oblast and Rayon levels of education administration until it, in theory, reaches schools. The red arrow shows where the system breaks down does not allow for input or feedback from schools, ideally schools and practitioners would feed back into the system however this currently does not happen on a regular basis. Occasionally if time and funding allow some

curriculum changes are piloted in schools however the impetus for the change does not arise from the schools and is not encouraged to arise from schools. Teachers who were interviewed in PEAKS schools however expressed an interest in being involved in curriculum reform and feel they have much to offer.

2.5. Key Similarities in Curriculum

When examining the curriculum documents from both countries key similarities are that the curriculum is:

- *Overcrowded*: there are too many subjects and too little time to cover them, subjects are added but are not taken away. One example in Tajikistan is the addition of the subjects ‘market economy’ and ‘law and rights’ which have not replaced older subjects but have been added to an already long list of subjects. Table 3 below shows the subjects and number of hours to be spent on each subject for grades 5 to 9 in a Tajik language school in Tajikistan.

As can be seen in Table 3 below in Grade 8 students in Tajikistan will study 18 subjects in the course of the year and will only spend around 30/31 hours on all of these subjects. The breadth of knowledge required is overwhelming as is the limited amount of time in which teachers have to cover it. This also assumes that children attend school every day and that teachers also attend regularly. However as is often the case there are factors which keep students away from school at certain times such as the cotton harvest and often in winter due to a lack of heating in schools there is high, anecdotally reported, absenteeism.

In Kyrgyzstan more progress has been made towards reducing the number of subjects and the Kyrgyz Academy of Education (KAE) has proposed the consolidation of 22 subjects into 14 subjects, however this is yet to be approved by the Ministry.

In international terms while the number of hours per subject is more or less consistent with many countries the number of subjects is much greater. In Australia in the state of New South Wales there are a maximum of 10 subjects in Grade 8, in the United Kingdom Grade 8 there are also on average 10 subjects depending on the school. Students in Tajikistan and Kyrgyzstan are therefore studying around double this in a similar time frame. The pressure on students to perform in all of these subjects is also great and adds to the burden.

Table 3: Subjects and number of hours for grades 5-9 in a Tajik Language School

No	Subject name	Number of hours per year level					Total
		5	6	7	8	9	
1	Native Language	3	3	3	2	2	13
2	Reading	1	1	1	-	-	3
3	Tajik Literature	2	2	2	2	3	11
4	Russian Language	2	2	2	2	2	10
5	Foreign Language	2	2	2	2	2	10
6	General History	1	1	1	1	1	5
	History of Tajikistan	1	2	2	2	1	8
7	Law and rights	-	-	-	1	1	2
8	Mathematics	5	5	-	-	-	10
	Algebra	-	-	3	2	3	8
	Geometry	-	-	2	2	2	6
9	Drawing	-	-	-	1	1	2
10	Physics	-	-	2	2	3	7
11	Chemistry	-	-	-	2	2	4
12	Biology	2	2	2	2	2	10
	Ecology	-	-	-	-	1	1
13	Geography	-	2	2	2	2	8
14	Singing and dancing	1	1	-	-	-	2
15	Art	1	1	1	-	-	3
16	Information technology	-	-	1	1	1	3
17	Labor	2	2	2	2	2	10
18	Sport and gym	2	2	2	2	2	10
Total number		25	28	30	30	32	145

- *Abstract and irrelevant:* Curriculum documents especially those framing the curriculum at the national level such as the standards and the National Curriculum Framework remain very abstract, difficult to understand and of little relevance to the daily reality of education. As they have been developed without practitioner input they remain of little use to practitioners and are rarely seen in schools and even more rarely in a classroom. The primary document upon which practitioners rely on in both countries is the Program and this document remains the least altered of all curriculum documents at the same it is the most influential in terms of practice.
- *An absence of horizontal coordination between subjects:* The ‘Programs’ which are used in schools are discrete, subject-based programs. They do not form a coherent system and do not integrate across subject areas. There is no overall system or framework that could be called a ‘National Curriculum’ which is line with international standards. While Tajikistan has a document that is entitled National Curriculum Framework it only makes mention of horizontal

integration of subjects without fully explaining or exploring what this means. In Kyrgyzstan there is currently no document like this, but the ADB is working towards achieving this in its second education project.

3. BARRIERS TO CHANGE

There are three main barriers to changing curriculum in Tajikistan and Kyrgyzstan; 1) Ambivalence to reform, 2) Lack of practitioner involvement and 3) Scarcity of local expertise. Unless these barriers are overcome it will be difficult to sustain any curriculum reform.

3.1. Ambivalence to Reform

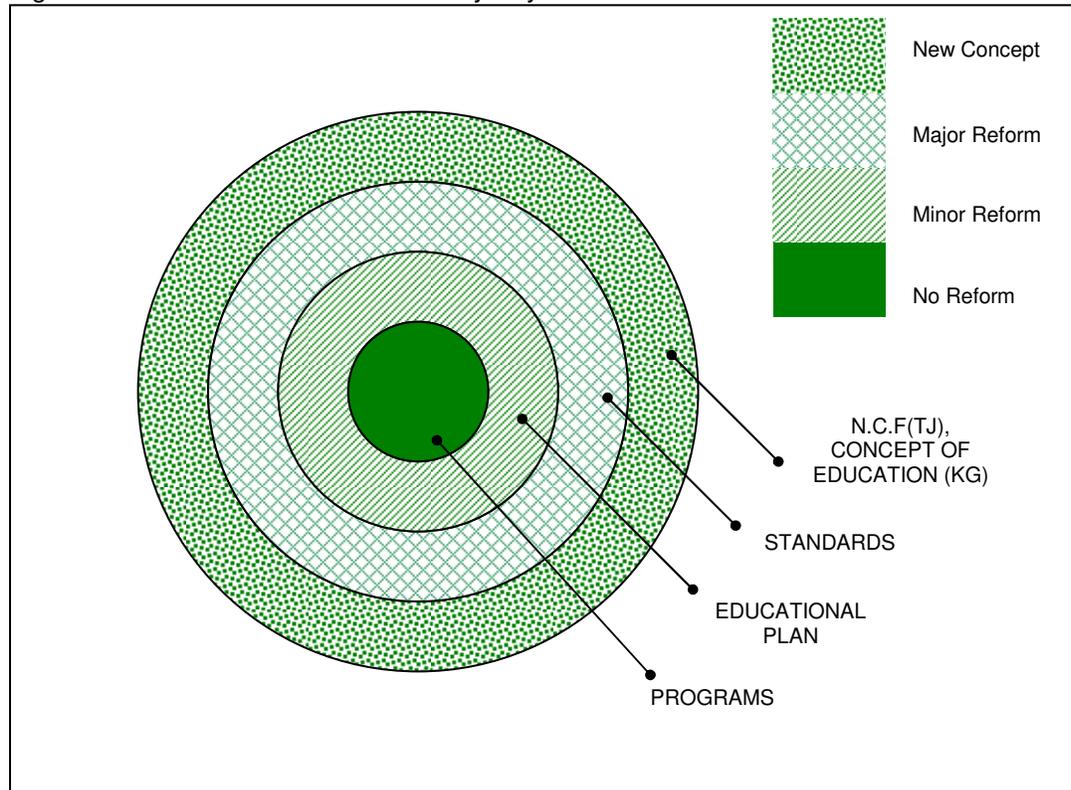
Curriculum reform pressures in both countries appear to be the result more of external forces than internal demand. The extension of schooling from 10 to 11 years is one example of this, as is the further pressure to extend the system to 12 years of education in order to conform to international standards. In the same way international best practice has been used as the impetus for the creation of state standards in both countries, the development of the National Curriculum Framework in Tajikistan and the National Scholarship Examinations in Kyrgyzstan.

So although new curriculum policy documents have been created, new textbooks produced and new methods of teaching introduced, there remains a large area of the curriculum that has been untouched by all the reform efforts. This seems to be due to a core of internal resistance and/or ambivalence to fundamental curriculum change. Cosmetic changes to the curriculum are allowed but reforms that would affect the number of hours, the subjects taught or contents of what is being taught are not solicited or encouraged. There is still a strong belief in the existing education system so while there is much talk of international reforms little is done to ensure that these reforms make meaningful change at the classroom level.

Figure 4 below shows the core of the curriculum at the classroom level, that is the program and to a slightly lesser extent the education plan and it can be seen that these are the areas most untouched by reform. This is the case for both Tajikistan and for Kyrgyzstan, where policy documents such as the standards have added another layer to curriculum but have not altered the content of the program which, as stated before, is the daily guide for teachers and the heart of the curriculum in both countries. While

projects such as the ADB’s second education project in Kyrgyzstan have plans to re-write the programs (over a three year process) these have yet to be realized and as yet the tender has still not been awarded.

Figure 4: Areas of Curriculum Reform by Key Documents



3.2. Lack of Practitioner Involvement in the Curriculum Reform Process

The other major barrier to curriculum reform is the lack of practitioner input. In Tajikistan and Kyrgyzstan state standards were developed in 2003 and 2006 but most teachers still have not seen them or fully understand how they relate to their daily practice. Without practitioner involvement in the reform process any reforms are unlikely to address the needs of practitioners and are therefore unlikely to be implemented at the classroom level. Curriculum is ultimately what happens at the classroom level and thus teachers, while powerless to influence policy, are very able to influence practice. Reforms that fail to consider this and exclude them will not be sustainable.

3.3 Scarcity of Local Expertise

In both countries there is a shortage of local experts for donors and Ministry officials to work with if they wish to implement new reforms and/or changes to the curriculum. It appears that there is a situation where a few people and agencies have positioned themselves very strongly, to the extent of not allowing

others access. For example in Kyrgyzstan, former PEAKS trainers can be found working on similar projects for a number of donors simultaneously. However, rather than bringing new ideas to each organization they often replicate the work that they did with the first organization in the subsequent projects. This means that rather than new knowledge circulating, old knowledge is being relabeled and re-used time and time again so that the number of truly new reforms is very small. While donors do bring in international consultants, these individuals are only present for a short time and often rely heavily on their local counterparts, who will in all likelihood be the ones who see the project to fruition. There is a great need to build more local capacity and expertise in order to ensure that there is a choice of local consultants available with a range of expertise and experience.

4. UNDERSERVED AREAS

There are three areas of curriculum in both countries that despite heavy donor attention have been overlooked or opted against. They are; 1) The development of subject teacher associations, 2) children with special needs (although this is a much greater problem in Tajikistan) and 3) Revision of the program to reflect more up to date approaches in both content and methodology.

4.1. Subject Teacher Associations

Currently subject teachers in both countries at the secondary level lack opportunities to mix together, exchange ideas or be introduced to new innovations in their content areas. While they have often been exposed to new student-centered methodologies there are also regular changes that are more subject or discipline specific that would be useful in order to keep updating their knowledge. There are official gatherings at the Rayon level in both countries of subject teachers but these are not independent forums through which teachers can discuss issues with the program or the standards or gain new knowledge. In Kyrgyzstan the only independent subject association is for English language teachers and it has helped to support English teachers, but is not yet wide-spread. There are also informal associations in both countries but they do not meet regularly.

4.2. Insufficient attention to students with special needs

In both countries the issue of children with special needs or disabilities has not been focused on by either the government or donor community. In Soviet times and still today the university department which taught on this subject was called the Department of Defectology, as such it can be seen that there was not a hopeful attitude towards students with any form of disability. In both Tajikistan and Kyrgyzstan

children with special needs were educated in separate schools however as funding for education decreased many of these schools closed and students were forced to return home or in some cases were abandoned altogether. There is a need for a change in attitude towards these students and for them to have proper access to education.

In Tajikistan there has been little to no donor involvement in the area of children with special needs. While there are no official figures on how many children are categorized as having special needs it was estimated by UNICEF that there are around 20,000 the Ministry of Labor however states that it is more likely around 11,000 children with special needs. Currently these children simply stay at home and there has been very little effort to integrate them into the existing system or to offer them any alternative, specialized education. They may receive private tuition at home if their parents can afford it but for most parents this would not be a priority.

In Kyrgyzstan statistics on the number of children with special needs or disabilities are even more difficult to find. In the Soviet period these children were educated separately in specialized schools and those schools which still remain have around 6,347 students enrolled according to UNICEF. In terms of donor involvement in this area PEAKS offered one component, conducted by SAVE UK, on inclusive education which has been taken up widely by the PDS and cluster schools, with at least two teachers in each of the four schools we visited having received the training. The directors of these schools also reported that these teachers had given training to the other teachers in the school to ensure dissemination of inclusive education practices. The Fast Track Initiative in Kyrgyzstan is also considering including Inclusive Education training in the technical proposal, but this will be largely focused on grades one to four.

There is also a need in both countries for teachers of older students to understand how to cope with and how to encourage children with special needs. While extra attention and improved teaching and assessment methods (such as individual learning plans) help, the more common categories of special needs should be understood as there are specific strategies to be used when dealing with blind or deaf students for example, in the classroom.

4.3 Lack of Reform of the 'Program'

While much reform has focused on policy reform in terms of textbook revisions and the development of broad subject standards the key document which all teachers use in the classroom is the Program however this document has not been the subject of any reform efforts. As a result it remains crowded with content,

in some cases the content needs revision to reflect recent developments in media, science and technology, and the methods recommended and assessment methods recommended also need to be revised to reflect student centered pedagogy. In Tajikistan there have been preliminary efforts to reform some of these documents by the Academy of Pedagogical Sciences but more technical assistance is needed and more funding to pilot and develop revised editions for all subjects. In Kyrgyzstan the ADB Second Education Project has one component under which the Program should be revised but it does not specify what these revisions will be or when this will take place.

1. INTRODUCTION

In both countries student assessment has not received the same amount of attention or financing, from either the Ministries of Education or donors, as has curriculum. While curriculum received extensive donor attention, student assessment has largely been only a smaller component of projects by the World Bank and the Asian Development Bank and as a result reforms have mainly focused on:

- *The Development of a Common, National University Exam:* Although Tajikistan currently does not have a single university entrance exam, through the World Bank and the Ministry of Education a National Testing Center is in the process of being created which will be responsible for the development of this exam. In Kyrgyzstan a common university exam (The National Scholarship Test) was created by the American Councils for International Education (ACCELS), with the support of USAID, and is now in use. The development of these exams was seen as essential to combat corruption and to provide universities with an objective, transparent view of student achievement.
- *The Introduction of Standardized Tests:* Standardized testing is the preferred form of assessment among Ministry officials and donors. In Kyrgyzstan the World Bank Rural Schools Project has one component dedicated to the development of standardized testing. In Tajikistan the World Bank through the FTI is also focusing on the development of standardized testing at Grade Four. UNICEF/UNESCO also employ standardized testing instruments to conduct the Monitoring of Learning Achievement studies.

2. ASSESSMENT REFORM CHARACTERISTICS

Assessment reform in general will be focused on either formative or summative assessment. *Formative assessment* occurs during the learning process and provides information that can be used to inform and/or improve learning. Assessments become formative when the results are used to adapt teaching methods to meet individual student needs. Formative assessments, therefore, should provide feedback to be used by both teachers and students to adjust teaching and learning strategies. Formative assessments are

frequently referred to as “*assessments for learning*” because they aim to lead to greater success at later stages of learning.

Summative assessments are designed to authenticate or provide evidence of student learning. These assessments occur within classrooms and/or are imposed from outside classrooms. In the classroom, summative assessments occur at the end of instruction (at the end of a topic or at the end of a term or year) and document what students have learned. It is common for these tests and exams to be used to determine student report card grades. From outside the classroom, large-scale summative assessments should also be considered. High-stakes tests such as national literacy or numeracy tests, SATs, PISA or TIMMS are often referred to as “*assessments of learning*” or evaluative assessments as many outside stakeholders look to this type of evidence for accountability purposes to decide if public education efforts are effective. Table 4 below illustrates the relationship between formative and summative assessments in the classroom and how there is a need for both forms.

Table 4: Relationship between formative and summative assessments in the classroom

	Formative	Summative
Purpose	To monitor and guide an on-going process/product while it is still in progress	To judge the success of a completed process/product at the end
Time of Assessment	During the process or development of the product	At the end of the process or when the product is complete
Types of Assessment Techniques	Informal observation, quizzes, homework, teacher questions, worksheets	Formal observation, tests, projects, term papers, exhibitions
Use of Assessment Information	To improve and change a process/product while it is still going on/being developed	Judge the quality of a process or product then grade, rank, promote

Source: O'Connor, 1998

While assessment reform has occurred largely at the national level rather than the classroom level and have been summative in style there have been some projects which have been concerned, at least in part, with formative assessment. These include Step by Step in both countries, but this has been limited to Years 1-4. The Interactive Teaching and Learning Methods (ITLM) course in Tajikistan also discusses formative assessment but is not subject specific. In Kyrgyzstan the World Bank Rural Schools Project contains a formative assessment component but so far this has only been for five subjects in Grade 7. A handbook for teachers has been produced as part of this component and it details different types of formative assessment and different ways to assess different learner styles. However the dissemination and training involved with this handbook is currently restricted to two pilot oblasts Issy Kul and Talas. As a

result of the lack of attention to formative assessment, in both countries it is characterized as being teacher centered and weak in student involvement.

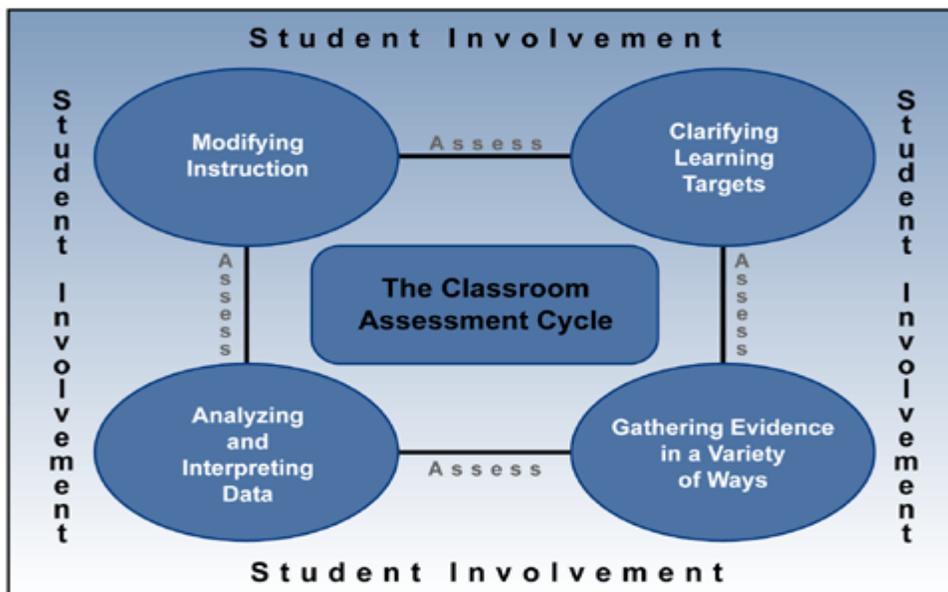
2.1. Teacher Centered

Teachers assess students in very limited and usually summative ways, through written tests or dictations. These assessments are designed to demonstrate the amount of knowledge rather than skills acquired and privilege those students whose learning styles match the assessment style. Part of the reason for this is that state exams and Olympiads (student competitions) are also based more on memorization than application. Teachers whose students perform well in either of these are praised and rewarded and so there is greater incentive to use more traditional methods and greater incentive for teachers to inflate grades in order to appear successful. In Kyrgyzstan some schools currently use control exams in order to hold teachers to accountable however these are designed in the school and are not a completely reliable measure.

2.2. Weak in Student Involvement/ Ownership

Students have little or no input into their own assessment and thus they have little ownership of their own learning or achievements. Their results on assessment tasks are often viewed as a reflection of the teacher’s ability rather than a combination of student and teacher input. By being excluded from the assessment process students fail to get any real benefits from assessment tasks and if doing poorly still can see no way to rectify this. Figure 5 below gives one example of how students could be involved in the assessment process, “The Classroom Assessment Cycle” which provides an example of a formative assessment process with student involvement.

Figure 5: Student Involvement in the Formative Assessment Process



2.3. A Potential Site of Corruption

The low wages and high demands placed on teachers mean that private tutoring is extremely common for students in both countries. Recently in Tajikistan a law was passed making it legal for teachers to give private tutoring, a way therefore for teachers to supplement their salaries. While private tutoring is not corrupt in itself it can lead to teachers not supplying students with all the information they need in class time in order to do well in exams. Students who wish to do well on exams will have to get extra tuition. This therefore privileges wealthy children who are able to afford to get the extra tuition and thus the higher grades.

3. CURRENT SITUATION

3.1. Assessment types

In Tajikistan donor and government emphasis has been on summative assessment and has promoted the use of standardized tests and common university entrance exams. However these have still not yet been realized and to date there is no common university exam or the use of any standardized testing. Internal assessment, which takes place in schools, has also been neglected and practitioners who may have received student-centered training under PEAKS or other donors have been unable to transform these interactive teaching methods into student-centered assessment.

In Kyrgyzstan more work has been done on assessment, with the support of USAID, through American Councils for International Education (ACCELS) and more recently the Center for Educational Assessment and Teaching Methods (CEATM)¹ which developed the National Scholarship Test (a common university entrance exam) and are now implementing standardized testing for grades four and eight. The World Bank Rural Schools Projects also contains a component which deals with student assessment. This component covers the development of standardized testing and helping schools improve formative assessment through the introduction of outcomes based assessment. So far however the formative assessment plans are only developed for five subjects in grade seven and are being piloted in two oblasts. Although there are plans to take this nationwide it is still in the development phase. Similarly the ADB is currently in the initial phases of a second education project and one of the subcomponents is 'Modernizing Learning Assessment'. According to project documentation the ADB plans to develop and implement, for each grade, a clear policy, assessment standards and regulations on formative and

¹ The National Testing Initiative project financed by USAID and implemented by ACCELS was started in 2002 to assist the Kyrgyz government with the development of the National Scholarship Test, however the final goal of the project was to create a Kyrgyz independent testing organization capable of conducting objective testing in the future. This organization is CEATM which is now fully in operation.

summative assessment systems. This project however is still in very initial phases and is still in the tender process. Assessment in Kyrgyzstan therefore at the classroom level still remains teacher centered and the purposes of assessment remain for evaluative reasons rather than to improve learning outcomes. A summary of assessment methods in use in each country can be found in Table 5 below where it can be seen that; a) there is a much greater need for assessment reform assistance in Tajikistan especially and b) that there is a great need for more formative assessment to be used in schools.

Table 5: Assessment tools used in Tajikistan and Kyrgyzstan

Assessment	Type	Tajikistan	Kyrgyzstan
State exams for grades 9 and 11	Summative	Yes	Yes
State promotion exams for grades 5-10	Summative	No	Yes
PISA ²	Summative	No	Yes
National system of standardized tests	Summative	No	Yes
Common university entrance exam	Summative	No	Yes
School based end of year exams	Summative	Yes	Yes
Classroom based tests	Summative	Yes	Yes

4. CHALLENGES OF STUDENT ASSESSMENT

4.1. Lack of Capacity at the Country Level

Tajikistan is weaker in the area of national assessment than Kyrgyzstan. Despite having national exams in years 9 and 11 these are poorly coordinated and there are doubts about the integrity of the exams as they are sometimes distributed to schools a week early. The strategic goals of the Ministry of Education in Tajikistan include: improving monitoring and evaluation of educational quality through identifying learning outcomes at all levels for all courses, monitoring educational quality centrally and locally and to establish an independent national centre for the evaluation of the quality of education (in short a testing centre). However the national centre currently exists in paper form only and according to Ministry officials hampered by a lack of psychometricians and others skilled in testing procedures.

In Kyrgyzstan while there are also national examinations at the end of years 9 and 11 the questions that will be asked on these exams are available for sale in the marketplace, thus the reliability of these exams is also called into question. The National Scholarship Test for university entry was developed to provide a more objective view of student achievement, separate and more reliable than school assessment. A new

² PISA is the OECD Program for International Student Assessment which began in 2000 and tests the scholastic performance of 15 year old students in reading literacy, mathematics literacy and most recently (2006) in scientific literacy. PISA occurs every three years and is designed to test and compare schoolchildren's performance across the world, with a view to improving and standardizing educational methods. In 2006 56 countries took part in PISA.

department has recently been set up in the Ministry of Education that is dedicated to assessment and testing but it too lacks experienced personnel and is not able at this stage to develop its own testing instruments. CEATM however provides Kyrgyzstan with at least some capacity for developing national exams and standardized testing as it has a core of well-trained and experienced test developers. However it is not unreasonable that the government would like to develop its own capacity to develop and use standardized tests and is not reliant on an outside agency.

4.2. Lack of Systematic Internal Examination and Assessment Procedures

Internal assessment mechanisms in schools in both countries are very unsystematic and repetitious. Teachers re-use old forms of assessment year after year to assess student's learning and there is not equality of task difficulty on end of term or year assessments even within the one assessment task. The methodological council in schools is responsible for overseeing the development of examination and assessment procedures, but usually the members of these councils are teachers who have the usual teaching time commitments and who do not have necessarily more knowledge or expertise about the area of assessment.

4.3. Lack of Practitioner Capacity

Practitioners in both countries at the school and district level have received little or no training on how to develop student centered assessment tasks and how to assess students in different styles, or to involve students in the assessment and learning process. This lack of knowledge has hampered the transfer of student centered teaching methods to student centered assessment methods. While the PEAKS project has helped to improve student-centered teaching methods in its PDS and cluster schools it still has yet to develop training and information on applying the same methods to assessment.

4.3. Lack of Objective Baseline Data on Student Achievement

The ADB first education project identified learning assessment systems in Tajikistan as lacking modern approaches for improving the quality of education of school children transiting from primary to secondary. However as there is no common standardized assessment instruments in use it is difficult to know with what skills or knowledge students are entering secondary education and what they still need to know. Without accurate information it is difficult to know where to target any additional support to students. There is also no accurate information about in which areas of students are performing well and in which they are performing poorly in order to be able to target assistance more effectively.

Kyrgyzstan is slightly further progressed in this area as it has just completed PISA 2003 and is also launching standardized testing for grades 4 and 8 in mathematics, reading comprehension and science. These two projects will hopefully provide some good information on the current situation of student achievement, both domestically and internationally, and give a clearer picture of which areas could be targeted for improvement in the future.

4.4 Limited and Subjective Grading System

In schools in both countries teachers assess students learning based on the subject program and what it states that children should know. Students are graded on a scale from 1-5 which many believe is too narrow and lacks the scope to reflect varying student ability. Also as there is great pressure on teachers to pass students most students receive a grade from 3 to 5 further narrowing the range of scores available. In addition content knowledge is largely all that is assessed by teachers and there is a need to assess other aspects of students' abilities and to assess in a variety of ways in order that all students can demonstrate their knowledge not just those of a particular learning style.

5. UNDERSERVED TOPICS

5.1. Few Links between Student Centered Teaching Methods and Student Centered Assessment Methods

In Tajikistan and Kyrgyzstan the heavy focus of donors on interactive teaching methods such as Reading and Writing for Critical Thinking (RWCT), Active learning methods (ALM) and Interactive Teaching and Learning Methods (ITLM) has led to the development of good student-centered methods. What is missing from these programs is a bridge from interactive teaching to interactive assessment. The freedom that schools have to develop their own assessment methods for the end of each year means that schools have a great potential to be able to develop and use student centered assessment for most of their major exams.

5.2. Lack of Knowledge about *Assessment of Learning* (evaluative assessment) versus *Assessment for Learning* at All Levels

The use of assessment as a tool to improve learning and to help learners to take part of the responsibility for their own learning is not well understood. Currently assessment is viewed as a tool merely for evaluation and even in this instance it is not utilized to its full capacity. Not only do practitioners need to understand this but those at the Ministry and Academic institutions also need to understand the different uses of assessment. Assessment is used currently to make evaluations of teacher quality or student

knowledge rather than as part of the learning process and as a tool that can be used to improve student learning and involve students in their own education. This focus on evaluative assessment (assessment of learning) can lead to a stifling of innovation and narrow, shallow learning³. It is therefore important that all those involved in education understand assessment more fully and the range of uses that it has.

³ For more information on this topic see Brooks and Tough, 2006, *Assessment and Testing: Making space for teaching and learning*, Institute for Public Policy Research, www.ippr.org

1. INTRODUCTION

Since the 1990s, pre-service teacher education in Tajikistan and Kyrgyzstan has been a sector characterized by a lack of substantial curriculum reform, little to no professional development of university instructors, an absence of significant donor involvement, wastage of graduates, dated pedagogical methods and practicum components, and relatively loose certification processes.

In this part of the report we provide an overview of pre-service teacher education and the consequences of the present situation on teacher quality and shortages. Based on the identified underserved areas, we further explore the issues relevant to areas of need, donor involvement, and subsequently the impact that current configurations of the system have bore and will bear on the existing system of pre-service teacher education.

2. CURRENT SITUATION

2.1. Attrition and Wastage

For a number of endogenous and exogenous reasons, teacher training insufficiently and inadequately produces students that commit to teaching upon graduation; some salient reasons contributing to this include:

- *Endogenous Factors:* Many of those who apply to pedagogical colleges and universities (including departments of education) do not plan on becoming teachers; for example in Tajikistan while enrollment rates in higher education pre-service education have increased from 6,771 in 1999/2000 to 8,771 in 2004/2005, teacher shortages have not significantly changed⁴. Rather, applicants apply for ulterior reasons:
 - Students who receive low marks on the university entrance exam and were not qualified to enter another department (subject specific) are nonetheless admitted into pedagogical institutions/departments because of the high demand for teachers.

⁴ PULSE (2006). *Baseline Study of Higher Education in the Republic of Tajikistan*. Dushanbe: Ministry of Education, Tajik Branch of the Open Society Institute - Assistance Foundation, Education Reform Support Unit "Pulse."

- There is no cultivation of professional identity on the part of the instructors; therefore, no internal sense of teacher identity is developed within students by the time they graduate, having received out-dated and inadequate training in methodology and lack of practicum in the curriculum.
- *Exogenous Factors:* Other exogenous factors also play a significant role in the high attrition rates of graduates who do not become teachers.
 - An extremely low salary is a significant barrier in attracting would-be teachers in both Tajikistan and Kyrgyzstan.
 - Graduates seek out other occupation opportunities, which utilize their knowledge or semi-skill acquired from subject specific training in pedagogical institutions. Some popular alternative fields include business, administration, and translation.
 - Poor working conditions contribute to the attrition of new teachers, who turn to high paying and less demanding jobs. Some unfavorable conditions include:
 - Exhaustive work load (often having to take two shifts to compensate for low salary)
 - Lack of teaching materials and aides
 - Poor infrastructure (lack of electricity and heating, and in some cases water)
 - Inadequate in-service training and supervision
 - Low status associated with teaching
 - Poor school leadership

2.2. Subject and Teacher Shortages

There is a shortage of subject-specific teachers in both Tajikistan and Kyrgyzstan. Table 6 shows the shortage rate of subject-specific teachers in Tajikistan; figure 6 shows this shortage by region. It should be noted that there is definitely a rural / urban divide. As witnessed by the chart, there is hardly any shortage in Dushanbe. Similarly, Kulyab experiences little shortage of teachers according to the director of the pedagogical college, despite being in the oblast with the greatest deficit of teachers. According to the MoE of Tajikistan, in 2005, 3,906 pedagogical graduates received diploma out of which 1,948 graduates (49.9%) were registered by educational institutions based on “arrival rootlet”. While the shortage of subject course numbers at 6,323, the Ministry of Education (MoE) has counted a shortage of 8,795 teachers in Tajikistan; this indicates that teachers are covering more than one shift.

Table 6: Subject Teacher Shortage

LANGUAGE & LIT.		OTHERS	
Tajik Lang. & Lit. (Tajik Schools)	472	ABCs (Alphabet) - Beginners' Reading	30
Tajik Lang. & Lit. (non-Tajik Schools)	141	Geography	313
Russian Lang. & Lit (Tajik Schools)	640	History & State Law	414

Russian Lang. & Lit (non-Tajik Schools)	45
English	938
German	7
French	2
Arabic	2
Uzbek	73
Kyrgyz	14
LANG. & LIT. Shortage Sub-Total	2334

Primary Military Training	264
Music and Singing	142
ATK	335
Pucobann & Zeprenne (?)	89
Physical Education	212
Home Economics	289
Primary Classes	216
Market & Trade	3
OTHERS sub-total	2307

SCIENCES & MATH	
Physics & Astronomy	425
Chemistry	441
Biology	251
Ecology	12
Math Geometry	553
SCI. & MATH Shortage Sub-Total	1682

TOTAL SHORTAGE 6323

Figure 6: Teacher Shortage in Tajikistan by Region

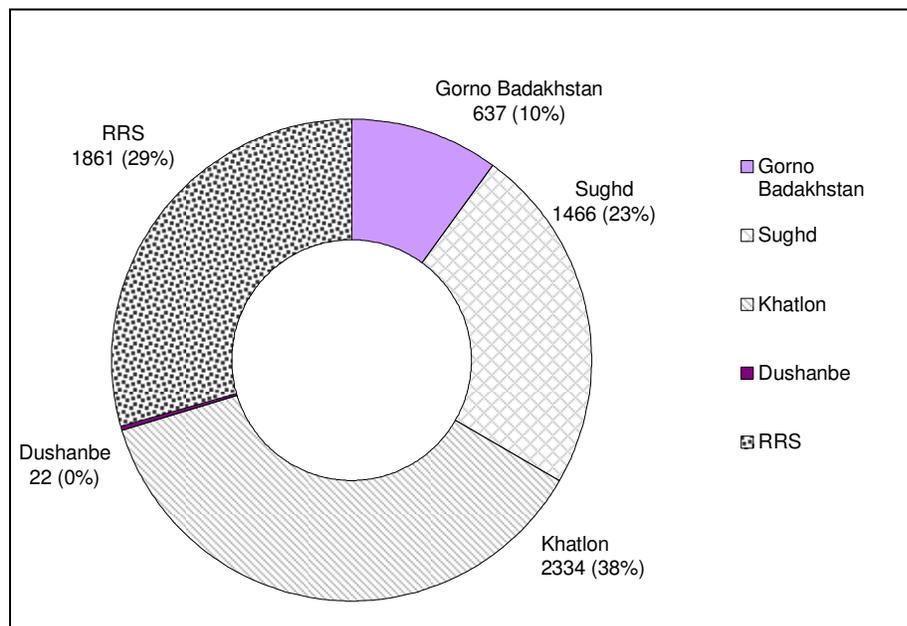


Figure 7: Admission, Enrollment, and Graduate Rates in Secondary Vocational Education (College Level) and Higher Education (University Level) Specializing in Education (teacher training) in Kyrgyzstan

Figure 7a: Higher Ed. (University)

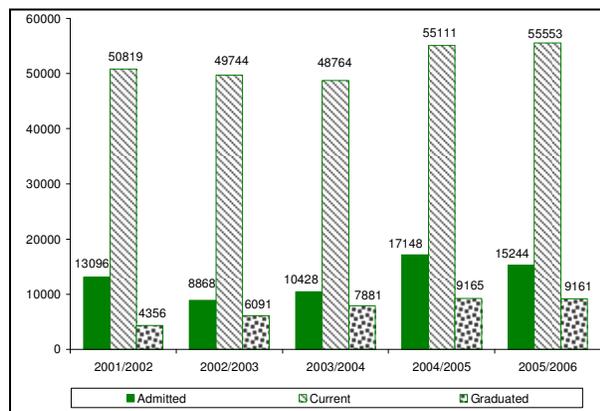
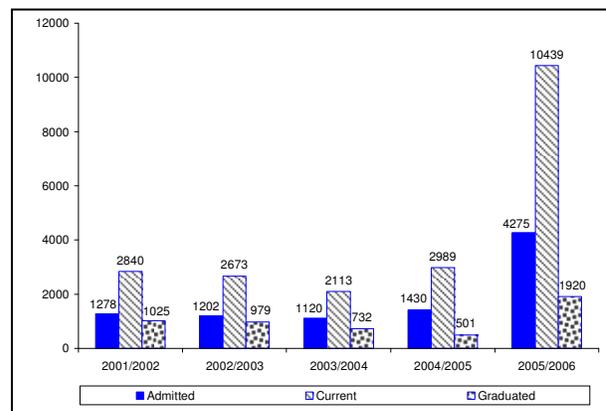


Figure 7b: Secondary Vocational Ed. (College)



The shortage of teachers in Kyrgyzstan is primarily due to low salaries, no enforcement of term-of-service requirements for budget students, and high attrition rates after graduation. In 2002 the official number of teacher shortages for Kyrgyzstan was 2,580.⁵ However, despite the increasing rate of secondary vocational institution (college) and higher education graduates who specialize in education (NSCKR 2006; see Figure 7), another estimate indicates that teacher shortage in Kyrgyzstan has reached 4,000 vacancies.⁶

2.3. Types of Teacher Education and Training

There are primarily three stages at which teacher training occurs:

- *Pre-Service*: At the pre-service level, pedagogical vocational institutes, colleges and universities (or pedagogical departments) facilitate training of students with certification as the end point. Pre-service teacher education will be discussed in more detail below.
- *“Concurrent-Service”*: The MoE, and subsequently schools, officially requires non-certified teachers to obtain accreditation. As a result, some uncertified teachers enroll in pedagogical vocational institutes or colleges to receive specialized training while continuing their teaching (these uncertified teachers are referred to as para-teachers). Furthermore, concurrent-service teacher training is also a route of training for diploma holders who want to change subject specialization.
- *In-Service*: In-service trainings are traditionally facilitated at teacher training institutes (TTI). They provide an opportunity for accredited teachers to receive professional development (i.e. additional training in teaching methodology). In-service training has been and continues to be a state requirement in both Tajikistan (once every 3-5 years) and Kyrgyzstan (once every five years). In both countries, it is also a sector with significant donor and NGO involvement, including organizations like Open Society Institute (OSI), Aqa Khan Foundation (AKF), the Academy for Education Development (AED), Save the Children UK (SAVEUK), the World Bank (WB), the Asian Development Bank (ADB), and USAID, among others.

⁵ Open Society Institute – Education Support Program (2002). *Education Development in Kyrgyzstan, Tajikistan and Uzbekistan: Challenges and Ways Forward*. Available at: http://www.soros.org/initiatives/esp/articles_publications/publications/development_20020401.

⁶ Toursunof, H (2006). Kyrgyzstan: the future short-changed. *EurasiaNet Civil Society*. Available at: <http://www.eurasianet.org/departments/civilsociety/articles/pp022606.shtml>.

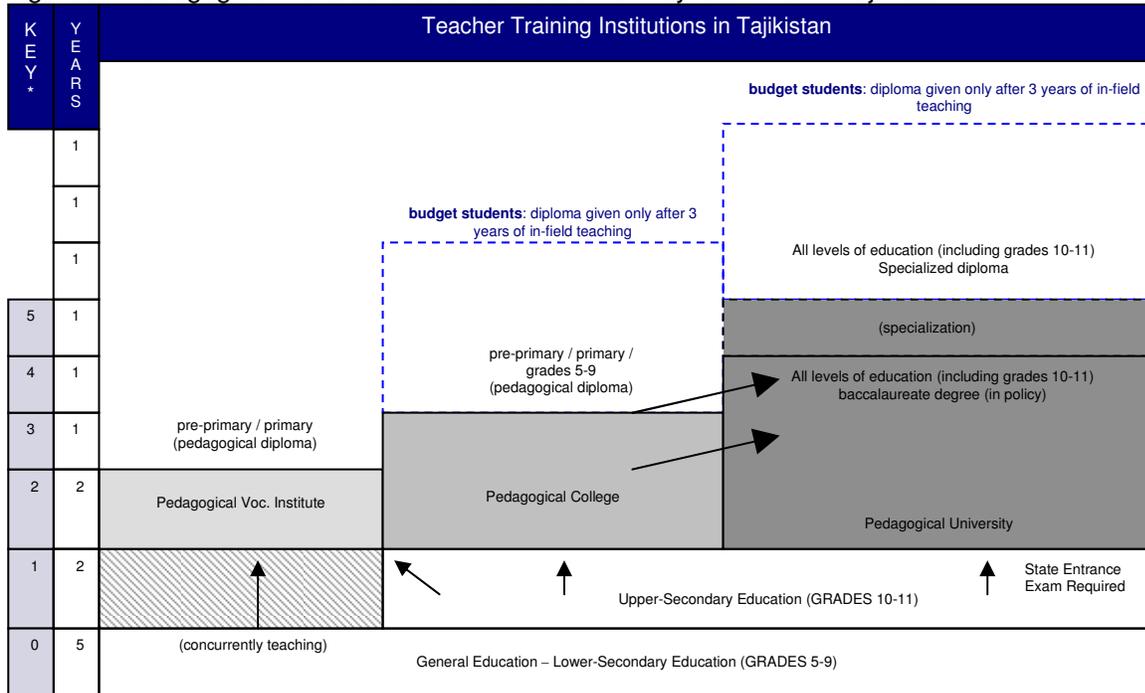
3. TEACHER EDUCATION

To assess underserved areas in pre-service teacher education, an overview of teacher education in both countries is in order. To date, there is no systematic study available on pre-service education; therefore, the following information is based on official government documents, reports by various organizations, and interviews conducted with key institutions and actors involved in pre-service teacher education.

3.1 Routes to Teacher Education Certification

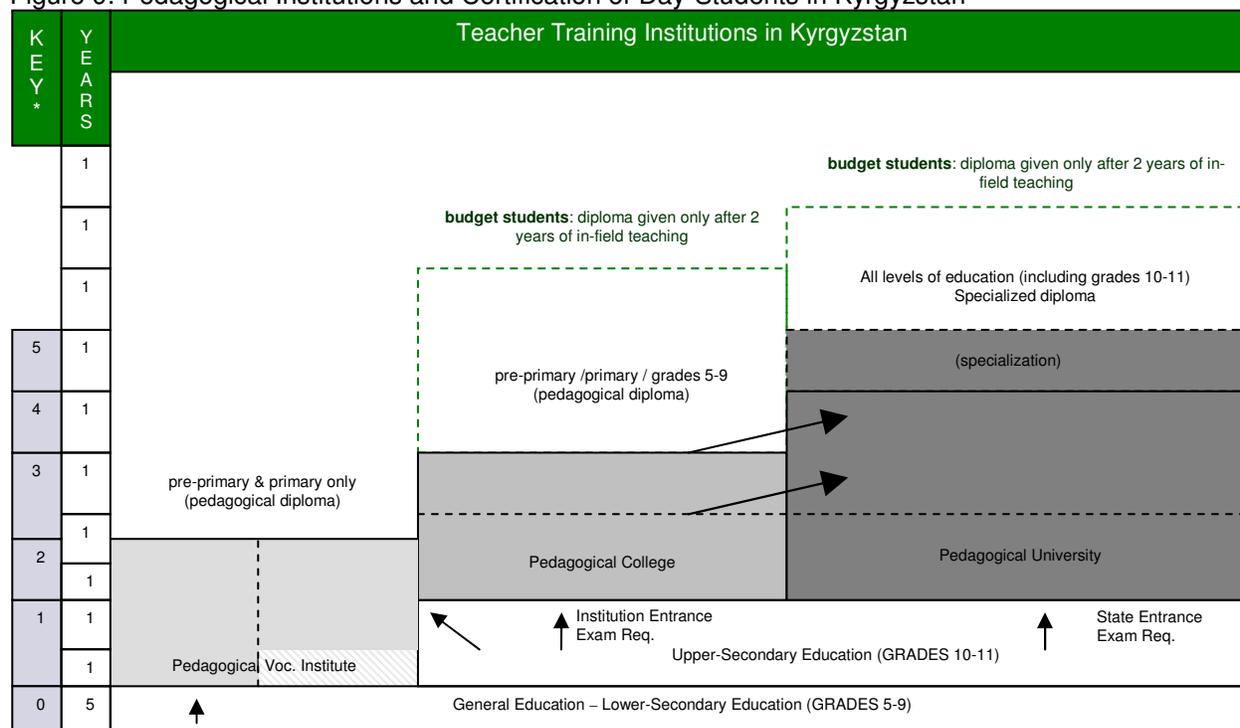
There are several ways of receiving teacher education in Tajikistan and Kyrgyzstan. To be certified as a teacher by the Ministry of Education in Tajikistan and Kyrgyzstan, would-be teachers officially need to complete specific years of pre-service teacher education at a pedagogical vocational institute, pedagogical college, or pedagogical university (or a university education department). Figure 8 (Tajikistan) and 8 (Kyrgyzstan) illustrate a breakdown of various pre-service pedagogical institutions, associated requirements, subsequent qualifications and certification outcome in Tajikistan and Kyrgyzstan.

Figure 8: Pedagogical Institutions and Certification of Day-Students in Tajikistan



Certification Key: (1) secondary education diploma; (2) pre-primary/primary pedagogical diploma; (3) pre-primary/primary/grade 5-9 pedagogical diploma; (4) baccalaureate degree (“incomplete higher education” in Tajikistan); (5) diploma of specialization
 —> requirement for and direction of admission (upgrade of education certification)

Figure 9: Pedagogical Institutions and Certification of Day-Students in Kyrgyzstan



3.2. Geographical Coverage of Pre-Service Teacher Education

Three types of pedagogical institutions exist in the Tajikistan and Kyrgyzstan: (1) pedagogical vocational institutes, (2) pedagogical colleges, and (3) pedagogical universities (or departments within multi-discipline universities). The pedagogical institutions and departments are geographical distributed with heavy concentration in urban areas, but also some coverage in rural areas.

4. PRE-SERVICE CURRICULUM

NOTE: At the pre-service level (vocational institutes, colleges, and universities) different ranks and titles are used to distinguish faculty members (e.g. lecturer, professor, etc.). To avoid confusion, the term *instructor* will be used to refer to all levels of instructing staff at pedagogical vocational institutes, colleges, and universities; subsequently, the term *teacher* refers only to school teachers K-11.

4.1. Pre-Service Teacher Education Instructors: Qualifications and Practices

A noticeable vacuum exists in terms of consensus around the key qualifications of a pedagogical institution instructor, and much less agreement or discussion about the ideal key qualifications of a teacher. Currently:

- *There are Irrelevant Requisites for Hiring:* Instructors in Tajikistan and Kyrgyzstan require only a higher education decree (5 years) in order to teach as an instructor in pre-service institutions;

although, higher levels of education (graduate and post-graduate degrees) raise the rank and pay scale of the instructor. It is not uncommon for graduates with high academic marks (i.e. receive a “red diploma”) to be hired as faculty instructors. Emphasis on actual pedagogical experience and pedagogical learning is not necessarily considered as a requisite.

- *There is No In-Service Professional Development Training for Instructors:* Although the governments of both Tajikistan and Kyrgyzstan require recurring in-service training of school teachers (every 3-5 years), there is no in-service training required for instructors. Furthermore, there is no systematic financial support for those instructors who seek other forms of professional development. According to a study conducted in 2005, 72% of all university instructors in Tajikistan had not engaged in any form of professional development between 1995 and 2005, and only 18.5% have received some form of professional development (“retraining”) between 2000 and 2005 (PULSE, 2006).
- *There are Limited Avenues to Improve Pedagogical Knowledge and Skills:* In addition to graduate and post-graduate study, there are three predominant opportunities available to instructors for improving pedagogical knowledge and skills:
 - Voluntary Participation (non-work paid) in in-service trainings facilitated by innovative training centers (e.g. PEAKS Professional Development Schools; or Central Teacher Training Institute (CTTI) in Tajikistan and KOE partners in Kyrgyzstan)
 - Observing/Collaborating (i.e. co-teaching) with innovative schools that use interactive and child-centered methodologies
 - Private research of innovative methods

4.2. Modes of Instruction

In both Tajikistan and Kyrgyzstan the pre-service teacher education curriculum has several components of instruction, including:

- *Lectures:* Instructor gives lecture-style lessons on a particular topic (usually theory and text based).
- *Laboratory:* This mode of instruction is used notably for science courses, in which experiments and hands-on learning take place; for languages it is employed as independent study.
- *Practicum:* Depending on the subject, students engage in practicing the lesson learned, or listen to instructions from the instructor; for example in a pedagogical methods course a student would be required to prepare a lesson and possibly asked to present in front of class or at an actual school; the term *practicum* is used and included in curriculum schedules, but it often regresses to lectures or seminar style learning.

- *Seminars*: This forum-based mode of instruction provides an opportunity for instructors to engage in dialogue with students; students can ask question or engage in discussion with peers and their instructor about specific subject matters.

4.3. Allocation of Time: Modes of Instruction and Subjects

The proportion of time spent in each mode of instruction varies depending on class subject and year level. Table 7 provides an overview of current curriculum mandated for pre-service education at a pedagogical college in Tajikistan, illustrated by the example of the Russian Language Department requirements. As it is, most teacher specialization tracks are inundated with general education and subject-specific courses—such as History of Religion, Culture, Logic, and Ecology among others—even if these subjects are unrelated to the students’ future teaching-subject. Similarly, secondary education (grades 9-11) and subject-specific education tracks have an over-abundance of subject topics, which act like a quasi subject studies specialization. In turn, many of these subject-specific graduates do not go into teaching, but apply their learning to other related fields such as translation and business.

Table 7: Pedagogical College Curriculum of Subjects, Modes of Instruction, and Hour

PEDAGOGICAL COLLEGE – CURRICULUM (RUSSIAN LANGUAGE FACULTY)								
SUBJECTS	TEST	EXAM	TERM PAPER	HOURS				
				TOTAL	LECTURE	LABRATORY	PRACTICUM	SEMINARS
PROGRAM FOR HUMANITY, SOCIAL AND ECONOMIC SUBJECTS				754	196 (26.0%)	-	450 (59.7%)	108 (14.3%)
HISTORY OF TAJIKISTAN	1	2		90	60	-	-	30
PHILOSOPHY	3	4		72	46	-	-	26
CULTURE	6			40	24	-	-	16
LOGIC	4			36	20	-	-	16
BASIC RIGHTS		1		36	26	-	-	10
HISTORY OF RELIGION		3		30	20	-	-	10
FDREIGN LANGUAGE	1	2		104	-	-	104	-
TAJK LANGUAGE	1,3	2,4		210	-	-	210	-
	1,2			136	-	-	136	-
PROGRAM FOR NATURAL SCIENCE				254	134 (52.7%)	-	108 (42.5%)	12 (4.7%)
ECOLOGY	2			30	24	-	6	-
INFORMATION	1,2			72	24	-	48	-
BASIC DEMOGRAPHICS & ECON. GEOGRAPHY	6			32	20	-	-	12
PHYCIOLOGY, ANATOMY, HYGIENE	1			30	20	-	10	-
HEALTHY LIFESTYLE EDUCATION	2			30	20	-	10	-
SECURITY & PROTECTION IN EMERGENCY	3			20	10	-	10	-
MEDICAL FIRST AID	4			40	16	-	24	-
GENERAL SECTION ON SPECIALITY				528	310 (58.7%)	40 (7.6%)	90 (17.0%)	88 (16.7%)
PRACTICUM READING AND WRITING	1			20	20	-	-	-
PEDAGOGY THEORY & SYSTEM TECHNOLOGY	2	3	4	80	48	-	-	32
BASIC PSYCHOLOGY		3		50	34	-	-	16
PHYSCHOLOGY BY AGE	4			36	24	-	-	12
PEDAGOGICAL PHYCHOLOGY		5	5	40	24	-	-	16
METHODOLOGY OF TEACHING	3,4	5	5	140	70	20	50	-
RUSSIAN LANG. METHODOLOGY ON TEACHING RUSSIAN	3,4	5	5	120	60	20	40	-
GENERAL LINGUISTICS		1		42	30	-	-	12
SECTION ON SPECIALITY				1874	566 (30.2%)	142 (7.6%)	1086 (57.9%)	80 (4.3%)
TOTAL HOURS				3410	566 (16.6%)	182 (5.3%)	1734 (50.8%)	288 (8.4%)

4.4. Course Requirements

The MoE in both Tajikistan and Kyrgyzstan determine 70-80% of the curriculum. Each institution is given freedom to include 20-30% into the required curriculum. Furthermore, 20-30% of the hours spent on receiving teacher education is technically supposed to consist of elective courses, whereby students may choose different classes that suit them. However, in both Tajikistan and Kyrgyzstan, elective courses are defaulted to mandatory supplementary classes, because they have failed to implement the actual concept of an elective course. While some higher education institutions in Kyrgyzstan have technically adopted a credit system, none have truly implemented it; rather, the pre-existing practice of required set courses for each semester prevails.

4.5. Process of Including New Courses & Making Significant Changes to Core Courses

At all levels of administration, from the MoE, to rectors, to university instructors, to the students, in both Tajikistan and Kyrgyzstan, there is an implicit call for curriculum reform. However, for a new course to be included into the core curriculum, or for significant change to be made to an existing course, a series of steps need to be taken. Some university and college administrators that we interviewed remarked that this process is (1) extremely bureaucratic, (2) a long process, (3) generally difficult to undertake. Figure 10 shows the general process by which core courses are added or changed in both countries. Table 8 lists key actors involved in the process of including or changing courses. It is important to note that modifications to existing courses and utilization of elective courses do not follow this process; rather, change may be implemented by the instructor or by the rector with relative ease.

Figure 10: Process of Including and Approving New Core Courses (or making significant modifications)

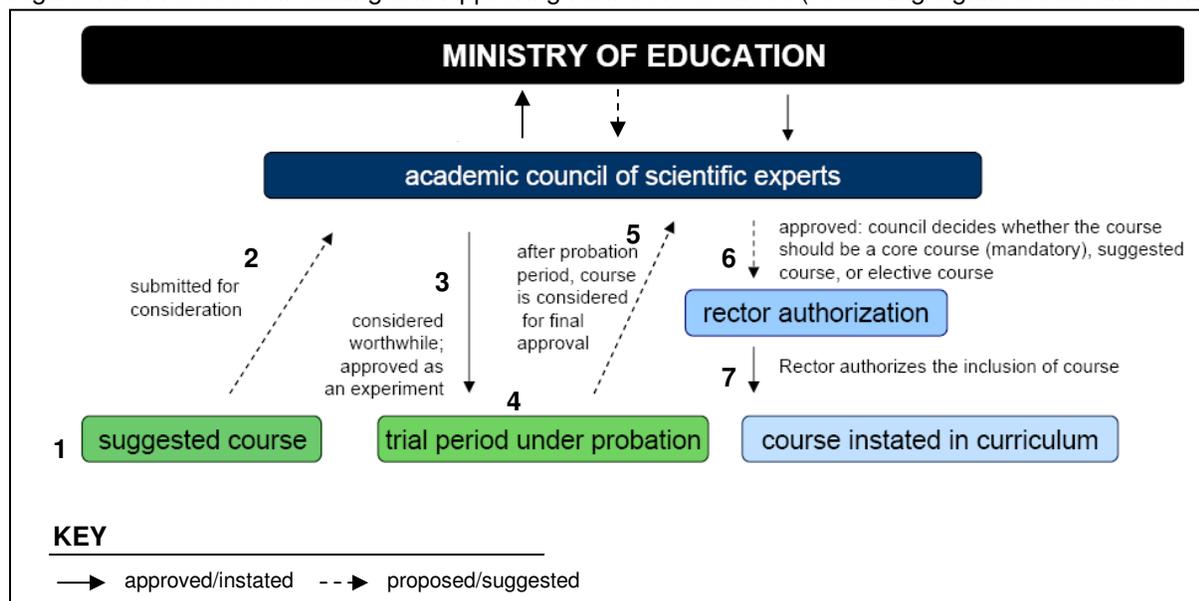


Table 8: Key Actors in Formulating Pre-Service Teacher Education Curriculum in Tajikistan

KEY ACTORS	ROLES & RESPONSIBILITIES
Ministry of Education	Set guidelines & standards
Academic Council of Scientific Experts	Authority over course content and requirements
Rector	Authorization of new courses
Professors & Instructors	Propose new courses, make independent modifications to existing courses (not curriculum changes)
External Agencies (i.e. USAID, AKF, OSI, WB, GTZ)	Offer supplementary support & suggestions for inclusion and adjustments

5. PRE-SERVICE TEACHER EDUCATION STUDENTS

5.1. Admission of Students

In 2005, the MoE in Tajikistan decided to address the shortage of teachers by broadening its admission base at pedagogical colleges and universities. Aware of the high attrition rates upon graduation, this policy overlooked the qualifications of applicants in exchange for increasing the number of graduates who theoretically will go on to teach (in 2005/2006 49.9% of graduates went on to teach). While no policy has been passed to increase admission rates in Kyrgyzstan, clearly the number admitted into pedagogical institutions and departments is significantly high with an accompanying high attrition rate upon graduation; for example, in 2003 and 2004 only 524 out of 1798 graduates (29.1%) from secondary professional educational institutions (college) went on to teach.⁷

According to interviews with executive administrators working in educational institutions (particularly pedagogical colleges and universities), many students apply and are admitted with the foreknowledge that there is no “real” interest in teaching. From our observations, students are also open about their alternative plans after graduation, usually citing low salaries, low prestige, and poor working conditions as reasons for not going into teaching. Many students who apply to pedagogical institutions and departments also resort to doing so because they performed poorly on the state university entrance exam, and thus were not admitted into other discipline departments. It is not uncommon to hear students say that they enter pedagogical institutions and departments because they (1) simply want a diploma (family expectations), (2) do not want to perform compulsory military service, (3) believe that it is an alternative route to getting enough “certification” to work in a higher paying job. None of which bodes well for the teaching profession.

⁷ Ministry of Education and World Bank [ME & Bank] (2007). *National Educational Statistics*. Bishkek: Rural Schools Project.

5.2. Category of Students

There are three general categories of post-secondary education students in Tajikistan and Kyrgyzstan, as listed below:

- *Day Students*: These students attend school fulltime with in-class sessions. Some day-students stay at dormitories, while others live at home and attend classes daily.
- *Correspondence Students*: Students attend the university twice per year (once during the winter break and another during summer), for intervals of usually 20 days; during this time students receive intensive lecture sessions, exams, and assignments to complete at home. This group will be discussed in more detail below.
- *Distance-Learning Students* (Tajikistan only): This includes receiving course work by mail, and sending in completed work in return. Attending the campus only occurs for taking exams. In Tajikistan this exists on a nominal level, and is totally absent in Kyrgyzstan (although there is talk of re-instituting it at the university level). The quality of these students and their learning is suspect, and little information about it is available.

The ratio of day students to correspondence students is fairly equal in both Tajikistan and Kyrgyzstan depending on the region (ME & Bank, 2006; PULSE, 2006). Eligibility for correspondence student includes either concurrently being employed by a school as a teacher, or having acquired a subordinate teaching degree. For example, to be a correspondence student at the university level, one must be currently teaching or have a diploma from a pedagogical college or pedagogical vocational institute. It has also been reported by government officials and pedagogical institution management in both Tajikistan and Kyrgyzstan that correspondence students make up the vast majority of the total who graduate and who actually teach. One explanation for this is that correspondence students who receive a diploma and continue to teach come from rural areas where teaching is the only regular paying job. However, it is equally important to note that there is no hard and fast monitoring system for correspondence students and their quality of learning, or assessment of their ability; we have heard from several instructors and in-service agencies that some (if not many) correspondence students pay to simply receive the diploma without any substantive training.

5.3. Funding of Students

There are two predominant types of tuition funding options available to students in Tajikistan and Kyrgyzstan, (1) budget funding and (2) contract funding (see Figure 11 contract / budget student ratio). While there is a universal curriculum requirement for both sets of students, contract students are able to

access classes that budget students can not. This mostly has to do with the quality and size of the class, including the resources used in those classes staffed by more qualified or higher ranking instructors.

- *Budget Students:* In Tajikistan, the tuition of budget students is almost entirely covered by the state; whereas in Kyrgyzstan budget students are given a 50% discount on tuition (government grants are also provided to students who perform exceptionally well on entrance exams, and are fully funded). At the university level in Kyrgyzstan, only 12% of current students are budget students. At the university level in Tajikistan, government spending on budget students is successively increasing in amount, but covering fewer students, decreasing from 56.3% of total students in 2002/2003 down to 45.1% of total students in 2004/2005. In both cases, after graduation, a subsequent term-of-service in the teaching field is required. Graduates have to teach, for which they are paid, in either a school requesting support (they must present proof from school director), in schools from which they graduated, or at a school decided by the pedagogical institution (usually in rural areas). The term-of-service is for three years in Tajikistan, and two years in Kyrgyzstan. Not until they complete the term of service do the students physically receive the diploma—they are therefore considered “pre-certified teachers” until they complete their term-of-service. This is an incentive for students to fulfill their service agreement. Despite the term-of-service policy with its intent to address the need for teachers, neither country systematically monitors budget student graduates. At most, pedagogical institutions follow up by requiring written proof from the school director, and often only at the term-completion year. It should be noted that “budget students” can enroll at the beginning of any subsequent academic year as “contact students,” which frees them of the obligation to perform their term of service.
- *Contract Students:* In Tajikistan and Kyrgyzstan, contract students are not obliged to perform a term of service; rather, they instantly receive their diploma after successful completion of college or university. Paying tuition is not uncommon in Kyrgyzstan and is the leading revenue source for universities; for example, only 7% of the university budget is paid by the government, the rest is drawn from tuition. At the university level, 88% of students in Kyrgyzstan (during 2005/2006) and 54.9% of students in Tajikistan (during 2004/2005) paid tuition. However, as reported by the MoE in Tajikistan, contract students in Tajikistan pedagogical colleges and universities are attributed with:
 - coming from affluent families
 - having had low higher education entrance exam scores (no competition for admission when paying fees)
 - having little or no intention to enter the teaching field upon graduation

Figure 11: Contract / Budget Student Ratio in Tajikistan and Kyrgyzstan at University Level

Figure 11a: Tajikistan 2004/2005

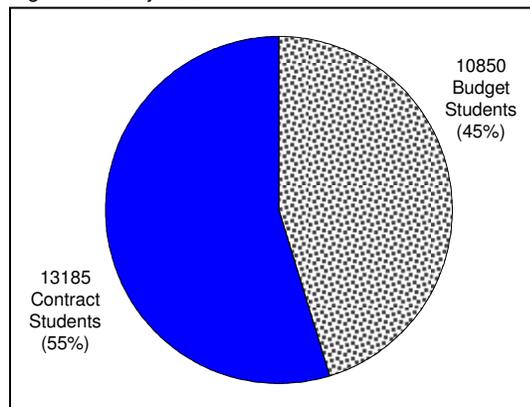
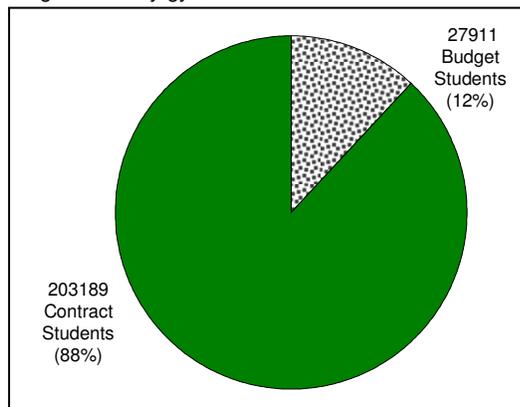


Figure 11b: Kyrgyzstan 2005/2006



6. UNDERSERVED TOPICS

6.1. Practicum Component of Pedagogical Methods

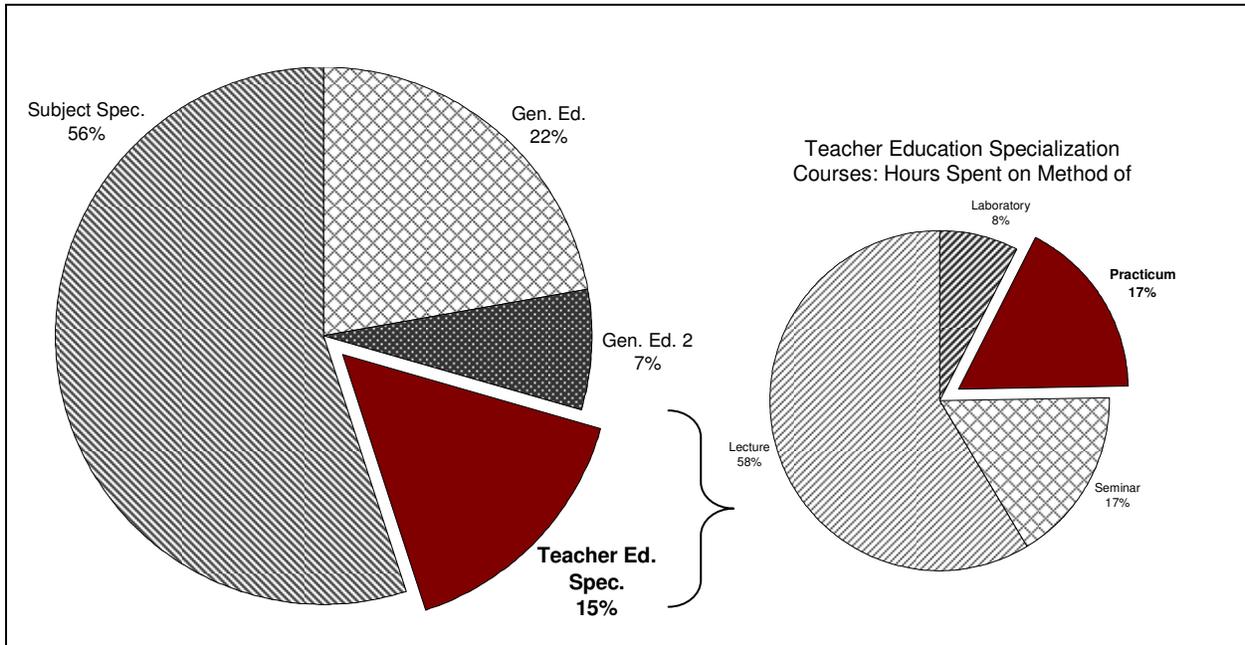
As mentioned in Section 4, the total amount of time students spend learning “teaching methods,” and the amount of practicum hours employed for teaching methods subjects is marginal compared to the abundance of general education and subject specific courses. Figure 12 illustrates this point by drawing on the curriculum found in Section 4.3 for specialization of teaching the Russian language at a pedagogical college in Tajikistan. While subject knowledge is important, there is a paucity of focus on specialization and professional development of teaching methods. Although practicum hours are extensive in subject specific areas—such as strengthening a particular set of skills (e.g. language)—attention needs to be drawn to the practicum for courses related to the specialization of teaching. In both Tajikistan and Kyrgyzstan, practicum hours set for the pedagogical methods courses are nominal compared to other modes of instruction, such as lecture and seminars.

In Kyrgyzstan, there seems to be a sufficient distribution of courses on pedagogical-related subjects on paper (i.e. the curriculum outline), but upon review two initial observations may be made:

1. Many of the courses seem redundant. For example, some classes of the primary education specialization excessively overlap, such as: General Psychology, Developmental Psychology, Psychology and Pedagogical Practice, and Ethno-Psychology, History of Pedagogical Ideas, Social Pedagogy, Ethno-Pedagogy, Comparative Pedagogy, Psychological and Pedagogical Theory, Foundations of Social Pedagogy and Psychology, etc.

- The practicum components seems to be implemented poorly, reduced to in-class exercises, continued lecture-style instruction, and field-teaching without mentorship.

Figure 12: Pedagogical Subjects and Mode of Instruction in Tajikistan (e.g. Russian language specialization)



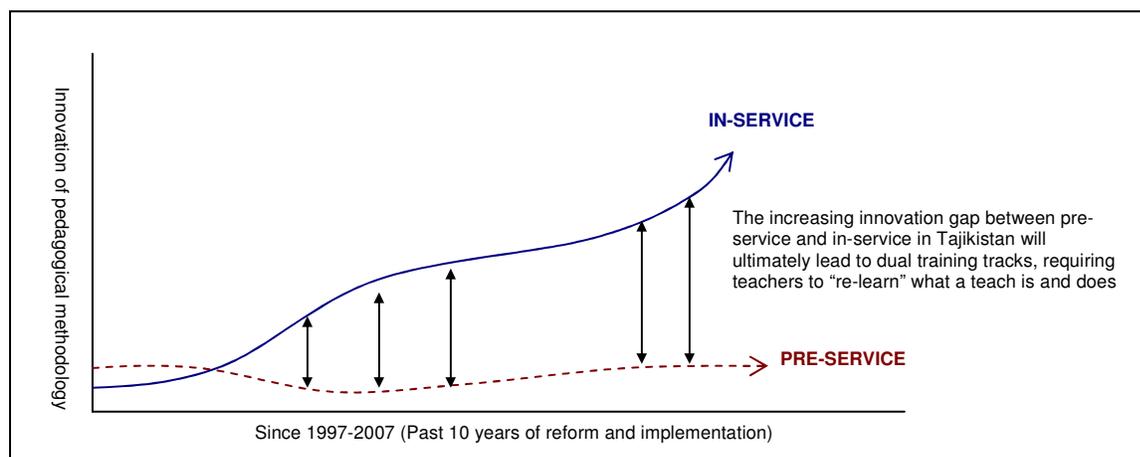
6.2. Innovation Disparity between Pre-Service Education and In-Service Teacher Training

Over the last several years there has been relative neglect of and inadequate attention given to shortcomings in pre-service education. Simultaneously and concurrently, in-service training programs (primarily funded and implemented by international donors and NGOs) have significantly developed a culture of innovative didactic methodologies, child centered learning practices, and other improvements in in-service trainings. However, this disparity between the stagnant and the progressive has led to an innovation gap between pre-service education and in-service training over the last several years.

In-service programs under the PEAKS Project, such as Step-by-Step (SbS), Reading and Writing for Critical Thinking (RWCT), and Interactive Teaching and Learning Methodology (ITLM), have gained momentum and popular acceptance by the MoE and other government education agencies in both Tajikistan and Kyrgyzstan. Similarly, some government facilitated professional development institutes, like the CTTI in Tajikistan and the KOE in Kyrgyzstan, have built partnerships with international organizations in developing teaching methodology in in-service teacher training. However, little to no work has been carried out in the pre-service education sector. Other than some scattered event trainings,

where pedagogical institution instructors attended in-service training programs facilitated by international organizations (e.g. OSI, AKF, SAVEUK, AED), no systematic process for pre-service education upgrading exists in either Kyrgyzstan or Tajikistan (with the exception of the WB and GTZ initiatives in Tajikistan with uncertified teachers).

Figure 13: Innovation Gap between Pre-service Education and In-service Teacher Training



As the innovation disparity widens, as illustrated in Figure 13, the situation will escalate to a “dual-training” systems in both countries, where pre-service education will be virtually out-dated; thus in-service training would fundamentally be considered a “re-training” of teachers. A precursor of this imminent problem is seen in Osh, where the in-service training institute has crafted a special one month (156 hour) preparatory training program for new teachers who are inadequately trained at the pre-service level and require basic training on how to “really” teach a class.

6.3. Multi-Subject Teaching

Multi-subject teaching is beneficial primary for two reasons: (1) it addresses shortages of subject specific teachers; (2) provides opportunities for teachers to receive a higher salary. In both countries multi-subject teaching is a *de facto* result of teacher shortages. However, in both Tajikistan and Kyrgyzstan the consideration of multi-subject specialization is dealt with ambivalence and sometimes distain. In Tajikistan, the MoE allowed multi-subject teaching (2003/2004 academic year), but in 2005 the MoE abruptly rescinded the decision through a decree suggesting that multi-subject specialization was inadequate and ineffective. In Kyrgyzstan, multi-subject specialization was allowed with dual subject specialization (such as chemistry and biology, physics and math, native language and Russian, etc.). Similar to the case in Tajikistan, the MoE of Kyrgyzstan issued a mandate in 2006 rejecting multi-subject specialization on the grounds that it was inadequate. From our observation and discussion with

pedagogical institutions instructors and administrators, the failure of multi-subject specialization was not in its conceptualization, but in its implementation at the curriculum level. In both cases, when multi-subject specialization was approved and tried, there was no reform or innovation to the curriculum; moreover, there was no donor involvement in multi-subject teaching which resulted in an absence of technical assistance in effectively implementing the policy. In effect, multi-subject specialization curricula took two forms: (1) a split curriculum where time was divided between two subjects, resulting in inadequate learning in both; (2) students were required to take on the course work of two subjects in the time span of one specialization, demanding a stressful schedule which left the student with little time to learn both subjects adequately.

6.4. Correspondence Students

The neglect of curriculum for correspondence students has led to poor development of a promising area of pre-service education. As noted, correspondence students are predominately comprised of those teaching without certification. Instead of drawing on the uniqueness of the situation associated with correspondence students—most being and continuing to be teachers—and optimizing the curriculum to enhance learning, the official course work remains the same as day students with the exception of little to no practicum component. For example, we encountered a veteran teacher who had been teaching for twenty years and yet seeking certification from a pedagogical college; she had to take the same path as a student straight out of upper secondary school who had no experience or point of reference. The lack of a monitoring system also leaves room for cheating and opportunities to simply “buy” the diploma. These students are not considered a target group, but rather treated like second class students (when compared to day-students).

6.5. Pre-Certified Teachers

In 2005/2006 half of higher education students in Tajikistan and 12% of students in Kyrgyzstan were budget students who were required to perform a term-of-service; therefore during this period they are technically pre-certified teachers. However, their period of service goes unmonitored and unsupported. The term of service of these new teachers is a critical juncture in consecrating them with mentorship, resources, and encouragement to form teacher identification, capacity, and confidence, with retention as the ultimate goal. Nonetheless, as a result of the poor monitoring and support system, many pre-certified teachers do not complete their term of service, and thus they either default on their agreement or arrange school administrators to sign documents testifying to their work at the school while doing something else.

6.6. Flexibility in Curriculum

According to those we interviewed (rectors, deputy rectors, directors, and deputy directors of pedagogical universities and colleges in Dushanbe and Kulyab, as well as in Bishkek and Osh) there is much receptivity to the idea of including innovative methods into the current curriculum. In general, there seems to be awareness among pedagogical institution leadership and methods instructors that a general “upgrade” of methods focusing on learning and teaching is needed. Partnerships between university faculty members and innovative teachers and schools has developed informally but irregularly over the last several years, and could use more systematic fostering.

PART FOUR: DONOR INVOLVEMENT

1. DONOR INVOLVEMENT

1.1. In Curriculum and Assessment

Donor involvement in curriculum and assessment can be broken down into six main categories; textbook development (which includes the training of textbook authors, writing of textbooks and publication), student-centered or interactive teaching methods, curriculum support resources (which includes development of dictionaries, curriculum enrichment frameworks), new curriculum documents (such as new programs, development of standards), inclusive education (targeting children with special needs), internal assessment tools and external assessment systems (which refers to standardized tests, national exams etc). As can be seen in Table 8 and 9 below nearly all organizations involved in curriculum or assessment have some element of textbook development, while only one program (PEAKS) has focused on internal (that is school based) assessment.

Donor involvement in Tajikistan has had little impact at the national level as can be in column four of Table 9. Of the reforms so far only some textbooks and the Curriculum Enrichment Frameworks (CEF) developed by AKF will have the potential to impact the country as a whole. The rest of the reforms are limited to pilot regions and/or clusters of schools. There needs to be better identification of the areas of need and more sustainable and wider reaching reforms.

In Kyrgyzstan in terms of curriculum and assessment it is also clear that there has been more donor support in term of number of donors for textbook development and for reforms focused at the primary level (see Table 10). While more has been done in Kyrgyzstan in terms of assessment by the donor community, most of this has been focused on summative assessment in the form of standardized tests. There has also been more donor support for inclusive education in Kyrgyzstan with PEAKS, through its partner SAVEUK which has disseminated training throughout the PDS and cluster schools. The Fast Track Initiative in Kyrgyzstan is also planning to include inclusive education in its program, although this is still at the planning stage.

Table 9: Donor Involvement in Tajikistan

Curriculum and Assessment			
Area Targeted	Organizations involved	Institutionalized	
Textbook development	ADB, WB, USAID (PEAKS), OSI, AKF, IDB	Y (some)	
Student-centered/ Interactive teaching methods	USAID (PEAKS), OSI, AKF	N	
Curriculum support resources	AKF	Y (under FTI)	
New curriculum documents	ADB, WB	N	
Inclusive Education	none	N/A	
Internal assessment	USAID (PEAKS: ITLM- secondary) (Step by Step-primary)	N	
External assessment	WB	N	
Primary level focus (Grades 1-6)	WB, OSI (Step by Step), AKF, PEAKS	N/A	
Secondary level focus	ADB, IDB, PEAKS, OSI (RWCT)	N/A	
Pre-Service Teacher Education			
Area Targeted	Organizations involved	Level of Involvement (extremely low, very low, low, medium, high, very high)	Institutionalized
In-Service of Instructors	NONE	-	-
Core Curriculum Reform	NONE	-	-
Curriculum Support Resources	AKF	Low (humanities project)	N
Methodology Upgrade	AKF, OSI,	Extremely Low	N
Practicum Upgrade	NONE	-	-
Mutli-Subject Training – Technical Assistance	NONE	-	-
Partnering with Innovative Schools	AKF, OSI,	Very Low	-
Uncertified Teacher Training (certification process)	WB, GTZ	Low (express track) / Medium	Y/N

Table 10: Donor Involvement in Kyrgyzstan

Curriculum & Assessment			
Area Targeted	Organizations involved	Institutionalized	
Textbook development	ADB, WB, USAID (PEAKS), OSI, IFES	Y (some)	
Student-centered/ Interactive teaching methods	USAID (PEAKS), OSI, WB	N	
Curriculum support resources	none	N/A	
New curriculum documents	ADB, WB	N	
Inclusive education	PEAKS (Save, UK)	? (possibly under FTI)	
Internal assessment	USAID (Step by Step -primary), WB, ADB	N	
External assessment	WB, CEATM	Y	
Primary level focus (Grades 1-6)	WB, OSI (Step by Step), PEAKS, UNICEF	N/A	
Secondary level focus	ADB, PEAKS, OSI (RWCT)	N/A	
Pre-Service Teacher Education			
Area Targeted	Organizations involved	Level of Involvement (extremely low, very low, low, medium, high, very high)	Institutionalized
In-Service of Instructors	NONE	-	-
Core Curriculum Reform	NONE	-	-
Curriculum Support Resources	NONE	-	-
Methodology Upgrade	NONE	-	-
Practicum Upgrade	NONE	-	-
Mutli-Subject Training – Technical Assistance	NONE	-	-
Partnering with Innovative Schools	NONE	-	-
Uncertified Teacher Training (certification process)	NONE	-	-

1.2. Pre-Service Teacher Education

Generally, donor involvement in higher education is scarce to non-existent. It should be noted that there has been no systematic long-term involvement by any donor. There are several reasons for this. As noted by some donor and NGOs, namely the WB and AKF, because attrition rates were exceedingly high, and because most of the best graduates from pre-service education do not go into teaching, involvement was considered (1) high risk; (2) costly; (3) ineffective in addressing the needs of the educational system at the school level. In the past, effort was placed on building school-level capacity with teachers (in-service programs), curriculum, school materials (books and teaching aides), and infrastructure. Table 9 and 10 shows the limited participation of donors in pre-service teacher education. However, all donors interviewed mentioned that because of extensive work with in-service institutes for over a decade, now would be an ideal time to get involved in pre-service teacher education.

In Kyrgyzstan, as illustrated in Table 10, there has been absolutely no donor involvement in pre-service teacher education, except through informal invitations to participate in in-service training targeting school-level teachers. Therefore, the pre-service sector in Kyrgyzstan presents a variety of opportunities for donor involvement (which will be discussed in the recommendations section).

In Tajikistan, donor involvement in pre-service teacher education has been nominal in the form of:

- *Training Uncertified Teachers*: While several organizations have engaged in sporadic work with pre-service training, such as AKF and OSI, only two international organizations have noticeable and regular presence in pre-service / con-current service training in Tajikistan: (1) GTZ and (2) the World Bank.

GTZ and Uncertified Teacher Trainings: GTZ has a significant presence working with uncertified teachers through a concurrent-service training program (emphasis is placed on primary education). To qualify for GTZ training, teachers must have at least two years of experience, and have graduated from 11th grade. The program includes onsite training and some correspondence work for primary education level teachers; and because participants in the program are concurrently working, the training takes place during holidays and sometimes on Saturdays. There are reportedly 40 school clusters (mostly secondary schools) and affiliated schools where the GTZ training takes place. The make-up of trainees is 90% experience uncertified teachers and 10% pedagogical instructors. GTZ has facilitated training through pilot programs that reached 1000 participants in 2005 and 1700 participants in 2006. The program fills an essential niche in teacher training, because uncertified teachers technically cannot receive in-service training. It is important to note that while the Ministry of Education approves of the GTZ program certificate, suggesting that the teacher is fit for teaching, the MoE has not made the training certificate

equivalent to a pedagogical diploma. At the end of the training an exam equivalent to the state exam for pedagogical institutions is taken, and for this reason the MoE approves of GTZ's work. It is worth mentioning that in April/May GTZ is hosting a conference on bridging in-service training and pre-service education, with invited representatives including pedagogical university academicians, the CTTI, and members of the MoE.

The World Bank Uncertified Teacher Training Pilot Program: Recognizing that there is a high number of uncertified teachers in Tajikistan, the World Bank has developed an "express training" program for uncertified teachers since 2003. The program design has been carried out in collaboration with pedagogical institution instructors and RTTIs, and includes some innovative learning and teaching methodologies. In consultation with the MoE, the goal was to provide concurrent-training to experienced uncertified teachers, ultimately conferring a pedagogical diploma (focus on primary level teachers). The express training was made up of an abridged version of the approved standard curriculum, designed by selected pedagogical instructors, and now is recognized and approved by the MoE for the first time (in June 2006) as a diploma granting program. The first cohort of uncertified teachers (with at least 3 years of experience), who will end up with a pedagogical diploma, were chosen from a pool of 638 untrained teachers; 219 of them passed a required exam (similar to a university entrance exam); and finally 200 went into the express training program for primary grades specialization. The two year program is divided into four interval trainings: (1) 1.5 months; (2) 10 days; (3) 10 days; (4) 10 days. The program is facilitated in four training centers (Kulyob, Ragon, Nurabod, and Vahdad). The practicum requirements are substituted with actual teaching hours in the field. Upon graduation, the uncertified teachers will receive a diploma, equivalent to a pedagogical college.

- *Second-Hand Professional Development*: Organizations like AKF, SbS, and PEAKS, in addition to government in-service training centers (i.e. CTTI) have welcomed college and university instructors who want to participate in in-service training on interactive teacher and learning methods (particularly because there is no such professional development outlet available to post-secondary education level instructors).

In the final analysis, there is much room for collaboration between USAID and other organizations, particularly in the role of coordinator of efforts in both curriculum and assessment, as well as in pre-service teacher education. USAID is uniquely placed in that it has developed strong partnerships with NGOs on the one hand, and steadfast relationships with multilateral organizations, such as the World Bank. Subsequently, USAID could play a significant role as a broker of innovations and learned

experiences, helping organizations to move away from donor saturated sectors (e.g. textbook development) towards covering a range of needs in the education sector.



The following recommendations are meant to be considered for a multi-year project, characterized by a shared regional initiative with country specific adaptations. While the recommendations generally apply to both countries, each country has specific assistance requirements. For example, the issue of students with special needs is more critical in Tajikistan than in Kyrgyzstan. Likewise, in the sector of pre-service teacher education, Kyrgyzstan has laboratory schools attached to some pedagogical whereas Tajikistan does not; this bears upon the implementation strategy associated with school-university partnerships. The proposed program aims to bridge:

- Schools of innovation & pre-service teacher education institutions
- Existing schools of innovation (PEAKS schools) & newly adopted partner schools
- Student-centered teaching methods & student-centered assessment methods
- Student-centered teaching methods & subject-specific knowledge
- Curriculum reform on paper & curriculum reform in pedagogical practice
- Bridge countries with similar experiences such as Kyrgyzstan & Tajikistan

The adoption model, applied to network schools and pre-service teacher education institutions, is likely to trigger an avalanche of school- or institution-based curriculum reform. The regional feature of the program, tentatively titled *Bridges*, is an additional momentum that will generate enthusiasm, support and visibility.

In designing the new program, coherence in objectives and strategies is key. Rather than overloading the program with too many components, we propose that Bridges reflects the following eight

recommendations. Given the strong attention given to preschool and primary school education in Education for All and the Millennium Development Goals, and pursued by development banks (ADB, World Bank), U.N. organizations (UNICEF, UNDP), and the Fast-Track Initiatives, we recommend that the focus should be placed on the following underserved areas:

- Lower secondary school (grades 5-9)
- Upper secondary school (grades 10-11)
- Pre-Service teacher education for lower and upper secondary school education (pedagogical universities or pedagogical faculties of universities)

This implies that pedagogical colleges (11+3 or 9+2+3), preparing preschool and primary school teachers, should be excluded as target institutions.

There are three sets of recommendations, which appear in order of priority, the first section consists of a combination of recommendations from pre-service teacher education and curriculum and student assessment while the following two sections are focused on the sectors separately. The contents of each section are as follows:

1. Sustaining the Network of Innovative Schools

- 1.1. Produce and Disseminate Student-Centered Training and Teaching Material Through School Adoption Model
- 1.2. Development and/or Sponsoring of Core Subject-Specific Teacher Associations
- 1.3. Developing More Pedagogical Materials for Teaching Children with Special Needs

2. Pre-Service Teacher Education

- 2.1. Professional Development of University Lecturers in Languages, Math/Physics, Pedagogy
- 2.2. School University Partnership
- 2.3 Pilot of Multi-Subject Teaching (Languages & Math/Physics)

3. Curriculum and Assessment

- 3.1. Moving from Interactive Teaching to Student-Centered Teaching and Assessment
- 3.2. Hosting Regional Roundtables on Assessment
- 3.3. Provision of Technical Assistance on Standardized Test Development to the Ministry of Education

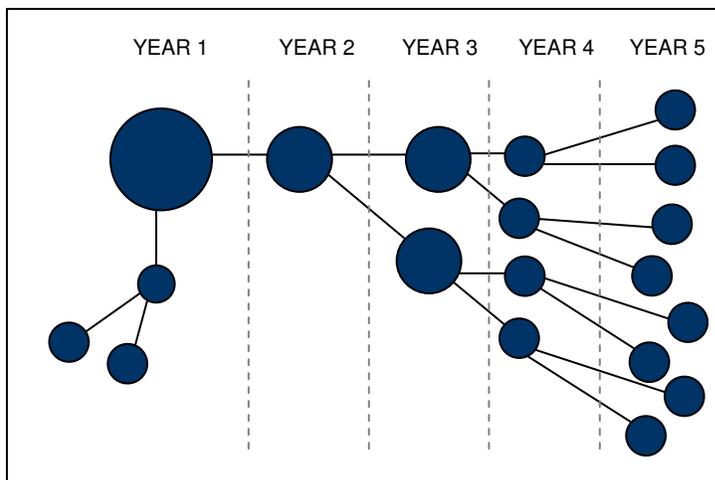
1. SUSTAINING THE NETWORK OF INNOVATIVE SCHOOLS

This first section of recommendations contains those with the highest priority and is focused on sustaining and expanding on the capacity that has already been built through the PEAKS schools. In this section there are recommendations both for the pre-service teacher education sector and curriculum and student assessment.

1.1. Produce and Disseminate Student-Centered Training and Teaching Material through a School Adoption Model

There is a need to develop and disseminate more material in schools, including model lessons, examples of locally developed curriculum, etc. An emphasis of the follow-up program should be the training of teachers in the usage of the material. The current dissemination strategy presupposes a great capacity of professional development schools to train three to five other schools. In effect, it generates a capacity gap that triggers all kinds of other problems, including the brain drain/circulation of PEAKS trainers that are short in supply and high in demand. We recommend that an adoption model is utilized, in which one partner school adopts two schools per year. By year 4, every school in Kyrgyzstan (total of 2,170 schools) would have been “adopted”, and trained in the usage of student-centered material. In Tajikistan, the saturation could be reached at an earlier stage. We recommend that the schools are selected based on a “School Cooperation Agreement” that the three schools (one school with existing capacity and the two adopted schools) collaboratively submit.

Figure 14: Adoption Model



Naturally, the quality of the 3rd and 4th year cascade training is much lower than in the current PEAKS program. It is important to bear in mind, however, that the objective of the training is not so much training of trainers but rather training of teachers in the usage of student-centered teaching and assessment material. By the end of the new USAID-funded educational program, each school will have been “adopted,” and each and every teacher in Kyrgyzstan and Tajikistan will have heard of and been exposed to interactive teaching methods.

It is then a matter of training teachers in applying these methods with the support of adequate teaching material. Thus, the receptiveness, knowledge, and exposure to interactive methods has—thanks to the valuable work of NGOs—changed over the course of the last few years. It is important that the follow-up program, funded by USAID, does not replicate what already exists nor start from scratch, but rather acknowledges the great receptiveness in schools towards using student-centered teaching methods, assessment methods, and material. It is also important that the follow-up program does not do more of the same (i.e., more PDS and cluster schools), but rather elevates the practitioner to a higher level of student-centered teaching and empowers the practitioner to become a peer-mentor and advisor. Having two to three neighboring schools work together makes the efforts sustainable, and ensures an avalanche or a school-based reform movement devoted to student-centered teaching.

1.2. Development and/or Sponsoring of Core Subject-Specific Teacher Associations

Currently subject teachers, especially those in rural areas, lack any systematic way of sharing knowledge and methods with other teachers of the same subject. Subject-based teacher associations could help to provide teachers with: a) way to share information, b) a means of supporting each other and c) a forum in which to look more critically at the current curriculum. USAID could support the initial start-up of such associations and an annual or bi-annual conference that could bring experts from around the world to share about new developments in the field. Under the auspices of these associations working groups could be formed to examine the curriculum and with assistance from USAID advocate for changes they felt necessary. These associations would help to build the capacity of practitioners to transform the curriculum from the bottom up and at the same time giving a voice to teachers in a more organized and professional way. These associations should be built with an element of cost-sharing to encourage sustainability and in order that they ultimately become self-funded.

1.3. Training and resources for Teaching Children with Special Needs

While Kyrgyzstan has had more involvement with inclusive education programs, there was little work done in Tajikistan. Although these children make up only a small percentage of the population it is nonetheless an area that remains underserved and where teachers remain untrained. By exposing teachers to even a basic understanding of children with special needs, USAID helps children with even mild disabilities, such as slow learners, to be better catered to by the system. Therefore there is an opportunity for USAID to help further create more materials and to offer training regarding inclusive education and how to best cater to children with special needs in Tajikistan at all year levels and in Kyrgyzstan at the secondary schooling level. As there is no compulsory special needs component in pre-service teacher training, it could also be included as part of the in-service education requirement that teachers have from the government. There could therefore be an investment in training the trainers at these in-service institutes in the principles of inclusive education. Rather than making inclusive education a separate training program it could also be incorporated into the existing ITLM courses as another module, using the existing inclusive education units devised by SAVE UK, under PEAKS, as the basis. It would therefore require minimum expenditure but would have far reaching effects.

2. PRE-SERVICE TEACHER EDUCATION

Rather than identify potential pilot sites we have identified potential target groups for pre-service teacher education. Based on our assessment of pre-service teacher education opportunities, we recommend that an emphasis is placed on the following three groups of students, as these are the ones who are most motivated, most likely to become teachers, and most likely to stay in the teaching profession:

- Budget students who study with the (partial) support of a government scholarship
- Correspondence students who work as non-certified teachers in schools
- Pre-Certified teachers that received a government scholarship and completed their course work but need to accomplish their term of service requirements before receiving the diploma (2 years in Kyrgyzstan and 3 years in Tajikistan).

The recommendations for this sector center around improving the quality of instruction for teachers in the universities and on improving school-university partnerships. These are both highly neglected areas and ones in which there is the potential for USAID to make a lasting impact upon generations of teachers.

2.1. Professional Development of University Lecturers in English, Math/Physics, Pedagogy

Several pedagogical colleges and universities and pedagogical faculties of universities participated in PEAKS. The follow-up educational program of USAID is able to build on these partners and includes university lecturers that have been trained in PEAKS. What is lacking, however, is a systematic in-service training of higher education instructors. None of the donors to date have been involved in the professional development of pre-service teacher educators. We recommend that each of the participating pre-service teacher education institutions select a “core team” of university instructors (two to five per selected subject area, depending on the size of the institution) that are prepared as trainers (three to four workshops per year). These core team members/trainers, in turn, provide institution-based training for their peer-instructors at their institution. We recommend an incremental and subject-specific approach to reform. Rather than having core teams in each of the subject area, we recommend to concentrate the efforts on philological departments (languages) and mathematics departments. The shortage of teachers in these two areas (math and languages) is extreme. In the professional development of language instructors an emphasis should be placed on communicative language skills.

There is also a need and opportunity to introduce a modified PEAKS approach of (a) institution-based training, (b) peer mentoring and training, and (c) practical orientation. Three foundational steps need to be taken toward the introduction of a systemic in-service training program for higher education pedagogical institution instructors (of all levels):

1. Materials from other innovative training, such as Interactive Teaching and Learning Methods (ITLM), need to be adapted for training higher education instructors; to pilot this task a base of trained instructors need to be created. While there have been some initiatives by other organizations to train instructors, such as those by Step-by-Step (Tajikistan) and AKF (Tajikistan), and by WB for express trainings of untrained teachers, we recommend building a separate identity for this initiative, e.g. use PEAKS/ITLM trainers.
2. With the long-term and sustainability kept in mind, a cadre of university professors needs to be trained as trainers (preferably in philology and math departments and in the departments titled “pedagogical methodology”); this group of trained instructors would make up the first cascade of

ITLM professors. These will in turn follow a similar cluster system as used in PEAKS schools, but instead of the first cascade becoming trainers of other universities' professors, they will be trainers of other professors within their own institution, i.e. the second cascade

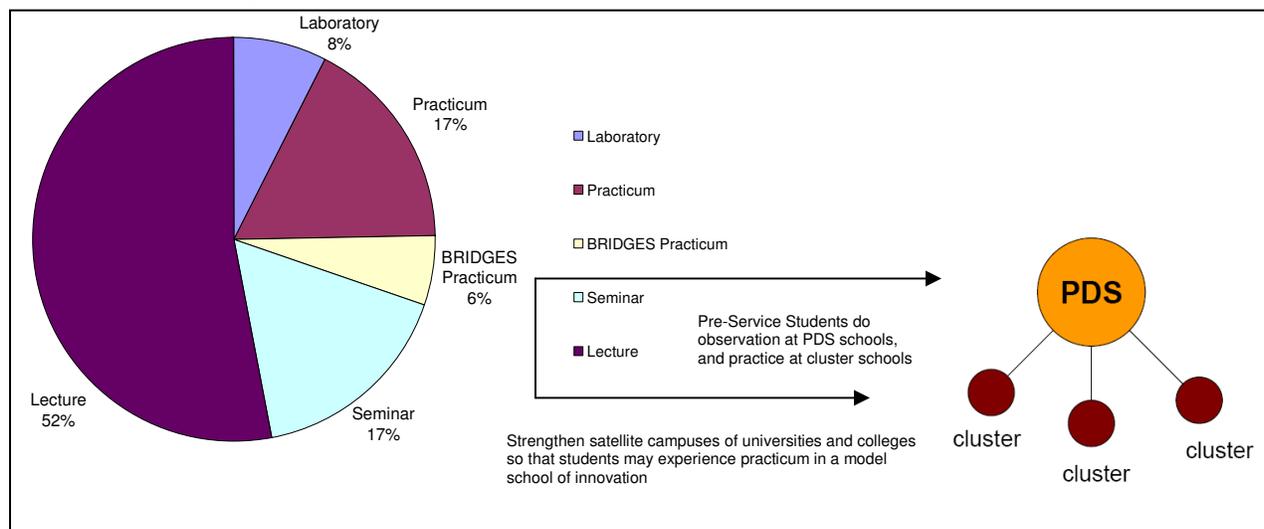
3. Time needs to be afforded for higher education in-service so as to enable professors and instructors to participate in such trainings as core team members (preferably three to four times a year, for about a week)

2.2. School University Partnerships

School-university partnerships could enable PEAKS trained schools and a number of carefully selected new schools of innovation (located in strategically important locations, including in the “laboratory schools” of pre-service teacher education institutions) to use their full potential as Professional Development Schools (PDS). Additionally the benefits of such a partnership are many for pre-service teacher education institutions in that the instructors and students are able to bridge theory and practice of education. The concept of professional development schools and, by implication, the concept of a symmetrical partnership between schools and pre-service teacher education institution should be fully implemented in the proposed USAID-funded follow-up program and include the following components:

- *Practicum Reform:* The practicum reform includes a revision of guidelines and handbooks on the various practicum components (objectives, tasks, mentoring during the practicum) as well as the organization of student placement. We use the term “satellite campus” for those Professional Development Schools that will be selected to partner up with select pre-service teacher education institutions. There exists a demand, as voiced by higher education institution senior administrators interviewed, for inclusion of more practice at the pre-service teacher training level, including use of a modernized approach to practicum. Therefore in cooperation with universities, hours allocated for elective courses could be utilized to include more practicum opportunities, such as student-teacher onsite visits and collaboration with schools of innovation—this collaborative relationship would be tightened by associating particular universities and colleges with PEAKS schools which could be considered “satellite campuses” for pre-service teacher training. A benefit of focusing on increasing practicum hours through elective courses is that such an initiative can avoid the time-consuming and inefficient process of course approval from the Academic Council of Scientific Experts or the MoE. An increase of hours would be ideal, giving an opportunity for students to work with innovative teachers, and to even participate in innovative trainings at PEAKS cluster schools (see Figure 15).

Figure 15: Upgrading Practicum by bridging students in pre-service teacher training and existing PEAKS schools by increasing hours of practicum courses



In Kyrgyzstan there are pedagogical institutions and departments that are attached to kindergartens and primary schools. In Osh, for example, the Pedagogical Institute intern their students at their satellite schools for practicum training. To optimize this practicum experience, training fulltime teachers at these schools with innovative methods would provide interns a model of interactive learning and teaching methods.

- *Increase the number of practitioners teaching in pre-service teacher education: the Clinic Professor*

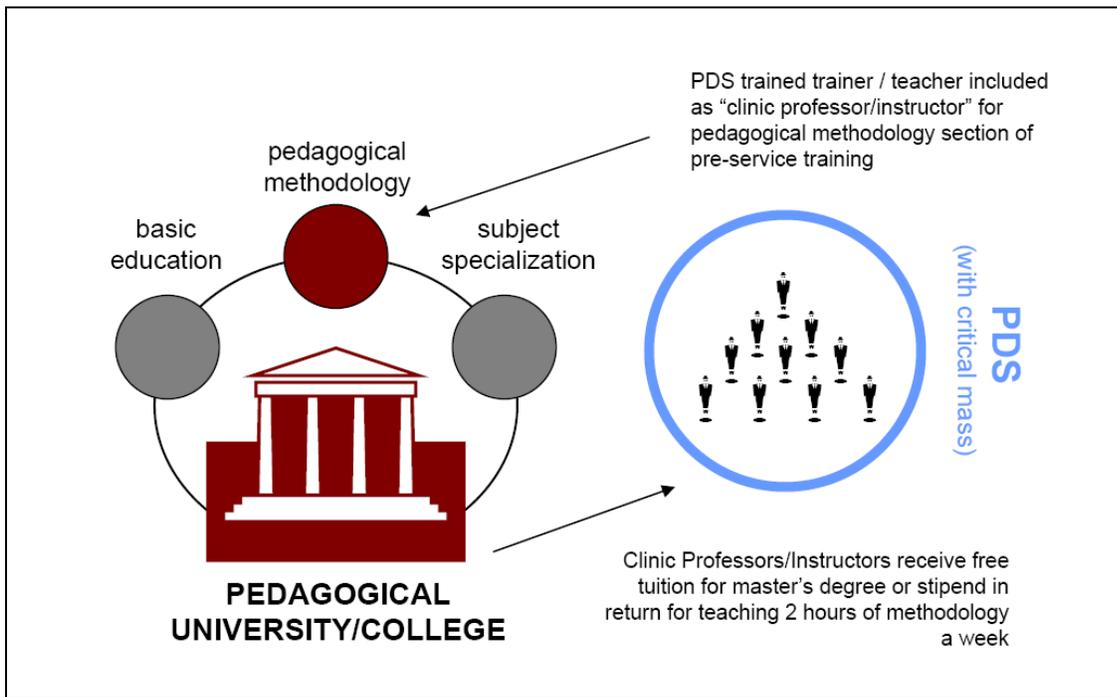
There is a need to upgrade pedagogy methodology taught at higher education with modern international standards. By including experienced and innovative teachers (i.e. clinic professors/lecturers) as instructors for the methodological section of teacher training at the pre-service level, students could receive more relevant and modern methods of teaching; students could also be provided with a successful role model of a teacher who is motivated, which contributes to cultivating a new teacher identity. The added training courses would be counted as electives, and perhaps consist of two hour per week blocks of training. PEAKS trained trainers in PDS schools that have reached a certain critical mass (e.g. 10 trained trainers), and who are concurrently teaching in schools would be selected as clinic professors for three reasons:

1. They have extensive experience in innovative teaching methods and have skills and knowledge of how to share such methods to others

2. Drawing from PDS schools that have a critical mass of 10-15 other in-service trainers ensures that the school is not being deprived of its own human resources (and thus avoids a potential brain drain)
3. By requiring clinic professors to be concurrently teaching in schools, the program maintains:
 - a. Teachers who are in practice and are kept active in the field as methods teachers
 - b. Teachers do not leave teaching posts to be full time “clinic professors”

In return, clinic professors could receive free tuition in acquiring a master’s degree equivalent education (This however would need to be negotiated with the university as there would need to be some incentive for them to offer this, perhaps a donation of textbooks or some form of technical assistance). The incentive to be a clinic professor would then not only include the intrinsic reward of being a higher education instructor, and added status among teacher colleagues, but also monetary compensation in the form of subsidized graduate training (which raises the salary scale for teaching in school). This is an optimal way to bridge the innovation gap between in-service and pre-service. A support structure should be provided to trainers from PEAKS PDS and cluster schools so that they feel confident with teaching teacher education students at colleges and universities. See Figure 16 for an illustration.

Figure 16: Including “clinic professors” as Instructors of Methodology



It should be noted that while innovative experience teacher trainers have experience teaching veteran teachers, they would require some preliminary training in order to adequately fulfill the key qualifications of a Clinic Professor (i.e. equipped to deal with inexperienced university students).

- *Conduct Collaborative Educational Research:* Even though research—often reduced to publishing—is considered part of the key qualifications of university lecturers, it is not systematically pursued. In the long run, the quality of pre-service teacher education and the quality of teaching in schools depend on the ability of university lecturers, teacher education students, and school teachers to conduct applied educational research or action research, and apply an investigative approach to their daily work. This approach is essential to continuously improve pedagogical practice and better understand student needs. Ideally, the three groups (university lecturer, teacher education student, school teacher) design, conduct, analyze and write-up small research projects that relate to topical issues in education. The current situation is far removed from reflection-oriented pedagogical practice or practice-oriented educational research, respectively. It is therefore necessary to build small building blocks towards such an end goal. GTZ Tajikistan plans to build the research capacity among university lecturers in pre-service teacher education. One might consider establishing collaboration with GTZ in specific area (e.g., professional development on research methods courses) or conduct a pilot project in three to five pre-service teacher education institutions, each pursuing collaborative research projects with a partner secondary school.

2.3. Pilot of Multi-Subject Teaching (Languages & Math/Physics)

There is tremendous pressure by international donors in the ministries of education in Tajikistan and Kyrgyzstan to introduce, and train for, multi-subject teaching. The ability of a teacher to teach two subjects has a positive impact on a teacher's salary, and on attraction to and retention of teachers in rural areas. It would resolve the burning issue of teacher shortage in the long run. Under pressure, the ministries went back and forth on this issue. What is lacking is a carefully designed curriculum for multi-subject teaching in pre-service teacher education. We recommend that a five-year pilot is carefully designed, implemented and continuously monitored in which one cohort of pre-service teacher education students are trained in multi-subject teaching (both in multi-subject language teaching and in math/physics) at select pre-service teacher education institutions.

There has been extensive study and work done on multi-subject teaching, however a state decree (2005) instating multi-subject teaching was inadequately implemented and subsequently closed in Tajikistan; facilitating a means to promote multi-subject training requires consideration, as it may address current

challenges such as subject-specific shortage in schools and teachers' salaries. In Kyrgyzstan, the MoE also changed the policy of allowing multi-subject training because it was assessed as ineffective, and thus it was removed as a potential route of training. Moreover, it is time consuming and inefficient for teachers in one subject to qualify to teach for another subject; currently, to acquire another specialization a teacher trained in one subject has to return to pedagogical university/college at the third-year level to gain specialization in another subject—streamlining the current process would remedy this shortcoming. In practice multi-subject teaching exists in rural areas contributing to inequality between urban and rural schools. Rural schools depend on teachers teaching (poorly) multiple subjects. In fact, multi-subject teaching in rural areas is common, but not officially approved. However, because this is a policy level reform, it is necessary to secure permission to conduct a pilot at select pre-service teacher education institutions. We recommend that four pilot sites and eight classes per country are selected: two colleges or universities in urban areas and two in rural areas. In each of the colleges and universities two (cohort-) classes are selected. The pilot needs to be carefully designed, monitored and evaluated, and the lecturers participating in the pilot need to be adequately prepared and included in all curricular changes. Approval and support from the Ministries of Education as well as from the Academic Council of the colleges and universities for implementing such a pilot for multi-subject teaching need to be secured.

3. CURRICULUM & ASSESSMENT

In general, the curriculum and assessment area should be given little priority. As repeatedly mentioned throughout this report, other large donors are already heavily involved in this area, in particular with curriculum reform. However USAID could provide assistance in terms of complementing the work carried out by other large donors as well as within the Fast Track Initiative. through the introduction of a practitioner-oriented perspective on curriculum and assessment reform. There are three areas in particular that are currently underserved and that correspond to what USAID and its partner organizations have to offer.

3.1. Moving from Interactive Teaching to Student-Centered Teaching and Assessment

The capacity of the existing network of innovative schools supported under PEAKS should be sustained *and* elevated to a higher level of student-centered and subject-specific teaching and assessment in lower and upper secondary schools. Currently, there is a lack of emphasis on specific subject teaching strategies and on student-centered formative assessment. In a follow-up educational program USAID could help innovative teachers to professionally grow in ways that allow them to systematically apply, throughout

the year, student-centered teaching and assessment methodology. This would serve as a complement to the FTI occurring in both countries as it strengthens practitioners input into the reform process at both the school and classroom level.

PEAKS PDS and cluster schools have become centers for interactive teaching and learning methods with teachers using a range of teaching methods and catering to a range of learning styles. However teachers have not been able to transfer these same skills to the area of assessment and are still having to resort to using much more traditional methods of assessment. Under the a new program teachers could be trained on how to develop and use a range of student-centered *assessment* methods, perhaps building on the assessment module that is in the ITLM package. While the ITLM assessment module currently provides teachers with ideas for developing good classroom based student-centered assessment it does not assist with the development of school based exams. As schools only have end of year state exams in grades 5 and 9 they need to develop end of year exams in the other grades internally. This has been a problem for teachers and schools, as there is much uncertainty about what types of exams to prepare and how exactly to prepare them. In Tajikistan where the state exams are a single question drawn by the student or allocated by the teacher at random teachers have mimicked this style for their own end of year exams. In Kyrgyzstan where the state exams are now multiple-choice teachers used a slightly wider range of exams but they are still limited and are based heavily on memorization. By introducing a module into ITLM or by creating a stand alone assessment package that helps teachers and methodologists to prepare high quality end of year examinations USAID could make a real contribution to not just the reform of formative assessment but also of summative school based student-centered assessment.

Part of the introduction of student-centered assessment should be the introduction of learning contracts (target setting) which are used to involve students more in their own learning and to help them to set targets for themselves so that student achievement is viewed not only as the teacher's responsibility but also as that of the student. Introducing the use of a "learning contract" can help teachers to observe and provide feedback to each and every student individually. This is an important part of student-centered (rather than only interactive) teaching. In a learning contract, the lower or upper secondary school student analyzes his/her strengths and weaknesses, learns to formulate learning objectives for the upcoming semester, and learns to monitor and evaluate his/her actual learning outcome. The learning contracts help to make the student feel responsible for his/her learning outcome. This shift of responsibility from teacher to student is essential in Central Asia where the burden of a student's grades has traditionally fallen solely on the teacher. The learning contract is also very useful for catering to students with special needs as it helps teachers to take these students and their abilities into account. Rather than holding them to the same

standards as other students through the use of the learning contract these students can work to a level appropriate to them and can be graded accordingly.

Making generic interactive teaching methods more subject specific is also a natural progression of ITLM and/or RWCT. One of main strengths of PEAKS as stated, was the overall improvement in teaching methods, transforming them from teacher centered to student centered. However both RWCT and ITLM employ generic approaches to this and do not have subject specific approaches. One way to further build the capacity of subject teachers and to strengthen their expertise would be to introduce some core subject specific strategies to the ITLM or RWCT programs so that teachers could have access to specific strategies for their subjects.

3.2. Hosting Regional Roundtables on Assessment

Assessment in general is very narrowly understood in both countries. It is seen more as a means to evaluate than to help students to improve their learning. Performance of students is usually linked to performance of teachers and thus student assessment can often have punitive results. As the use of standardized tests creeps across the region it is important that governments, educators and donors have a common and informed understanding of assessment that is wider than the results of such tests. By hosting a regional roundtable event on assessment USAID has an opportunity to bring expertise from abroad and to contribute to the creation of a culture of *assessment for learning* rather than *assessment of learning*. It will also create an opportunity for a sharing of experiences from around the region and to building partnerships between educators and administrators. It would be important to invite practitioners to such an event in order that they be part of the process and share the reality of assessment at the classroom level with those in government or administrative positions.

3.3. Provision of Technical Assistance to the Ministries of Education on Standardized Test Development

In both countries there were requests to help develop capacity for those at the Ministry level to be able to develop reliable and valid standardized or national tests. There are currently no psychometricians in either Ministry of Education despite both Ministries hoping to have a center for assessment and testing. USAID could provide training for those wishing to develop their skills in this area and help to create capacity at the government level. It could draw on the experience/expertise in Kyrgyzstan of where assistance was given by USAID in establishing CEATM, which is now an independent organization that has designed standardized tests for the government and is helping to conduct the PISA study in the country. USAID could help to establish a similar organization in Tajikistan and through these organizations provide training for those in government.

BIOGRAPHICAL INFORMATION OF AUTHORS

GITA STEINER-KHAMSI

Gita Steiner-Khamsi, Ph.D., Professor, International and Comparative Education, Teachers College, Columbia University, New York. She has conducted analytical work, project evaluation and needs assessment in the post-socialist region funded by the Open Society Institute, the World Bank, DANIDA, or USAID. Her areas of expertise are school reform, teacher education reform (including teacher salary reform) and rural school development. She has worked as a project and policy advisor in the Russian Federation (since 1992), in Mongolia (since 1998) and more recently in Central Asia. Her most recent book is entitled *Educational Import. Local Encounter with Global Forces in Mongolia* (Palgrave Macmillan Publisher, 2006).

gs174@columbia.edu

<http://www.tc.edu/faculty/steiner-khamsi>

SINA McCANTS MOSSAYEB

Sina McCants Mossayeb is a founding consultant for International Development Solutions. Sina has a Masters of Art in Near Eastern Studies, and is currently pursuing his Doctorate of Philosophy at Teachers College, Columbia University, New York. He has worked extensively on non-formal education projects in Bulgaria, South Africa, Mexico, Belize, and the United States over the last 10 years. His region of expertise is the greater Middle East region, and currently he has been working on teacher reform in Central Asia.

smm2155@columbia.edu

<http://idsconsulting.org>

NATASHA RIDGE

Natasha Ridge is a founding consultant of International Development Solutions. Natasha has a Masters of International and Community Development and a post-graduate Diploma in Secondary Education. She is currently pursuing her Doctorate of Education at Teachers College, Columbia University, New York. She has worked as an education professional in the Middle East and Asia since the mid-1990s and more recently she has been working on education reform projects in Central Asia. Natasha's region of expertise is the greater Middle East, and she is also involved in curriculum and student assessment reform in Central Asia.

nyr2101@columbia.edu

<http://idsconsulting.org>

Scope of Work
Assessment of Issues and Opportunities: Pre-service Teacher Training
in Tajikistan and the Kyrgyz Republic

I. Background

USAID/PEAKS: in-service teacher training

USAID/CAR began investments in the basic education sector of the region in 2003 with a quality improvement program focusing on three main areas: teacher training in child-centered critical thinking methodologies; community involvement in education; and strengthening the sector's financing structure and management. This program is implemented in four countries of Central Asia and is scheduled to end in June 2007.

To address the most immediate need of the sector, USAID made a deliberate decision to focus on in-service training during the initial program period. In both of the countries, teachers have to go through mandatory professional development training once every five years. Such training has traditionally been the responsibility of the state teacher in-service training institutions; however, in the aftermath of independence, drastic reductions of funds allocated to support the education sector has caused a dramatic decline in the availability of training and has intensified the decay of its quality. While a number of urban schools were able to obtain access to methodology training offered by educational NGOs at their own initiative, schools located in rural areas were virtually deprived of any opportunities for professional growth.

The cornerstone of the USAID basic education program in both Kyrgyz Republic and Tajikistan has been the Professional Development School (PDS), a school-based teacher training and resource center which provides teacher and administrator training and acts as a laboratory school for up to ten surrounding schools. During the life of the project, 11 PDS were established in Kyrgyz Republic and 23 in Tajikistan. Through intensive training and mentoring, the USAID program sought to build the capacity in the PDS to provide in-service teacher training in modern interactive teaching methodologies and best management practices. Because the countries initially had differing levels of capacity and understanding of innovative teaching, the PDS model became considerably more advanced in Kyrgyz Republic than in Tajikistan. To certify their recognition of the PDS role in in-service teacher training in the country, the Kyrgyz Republic's Ministry of Education granted them the official status of in-service teacher training provider. This legal status allows the PDS to offer paid services while providing quality training in partnership with state institutions, thereby strengthening their own sustainability.

Despite the focus on school-based training and the preference for the involvement of classroom practitioners in the teacher training process, USAID has worked to strengthen the capacity of active state in-service teacher training institutions. The central teacher training bodies in both countries are close partners of USAID and have demonstrated support and commitment to adopting interactive, child-focused methodologies at all levels of basic education.

Pre-service teacher training in Kyrgyz Republic and Tajikistan

In 2005, USAID conducted an assessment of the existing basic education program, which also sought to identify areas needing intervention to achieve the overall goal of improved quality of education. The assessment recommended assistance in pre-service teacher training, namely pedagogical colleges and departments of universities, as one of the priorities for any follow-on program. Assistance in this area is critical to ensure that innovation introduced at the in-service level is reflected in the pre-service training that new teachers receive.

Pre-service teacher education in Central Asia has suffered the same problems as in-service training, with a rapidly declining quality of instruction, a continuing overemphasis on pedagogical theory rather than practical methodologies, and a lack of incentives for talented professionals to join the teaching corps or remain in the profession. Curriculum in pre-service teacher education is overloaded and based on outdated teacher-centered approaches rather than modern interactive or critical thinking methods. While some professors of pre-service teacher education have attended trainings offered by USAID/PEAKS implementing partners, for the large part this sub-sector remains devoid of modernization.

Pre-service teacher training in Central Asia, as in most of the Post-Soviet states, is two-tier. The lower is the 2-year pedagogical college, which may replace the final two years of secondary school and is sufficient for teaching at kindergartens and in some cases, primary grades. The higher level involves 5 years of university study, with degrees in either general teaching for primary grades, or narrow specialization in subject teaching for secondary grades. The teaching credential requires completion of a classroom teaching practicum, usually during the final year of study.

In Kyrgyz Republic, monthly salaries for teachers average \$19, only half of the minimum consumption level for individuals, and are less than 40% of average earnings in public administration (PID World Bank Rural Education Project). Despite limited incentives to enter teaching as a profession, education is the second most popular field of tertiary study: 24.4% of all students are in Education (UNESCO, 2004) in the Kyrgyz Republic. However, only about 13.7% of Kyrgyzstani graduates continue with jobs in the education sector (same source). Since incentives are lacking, especially in the rural areas, distribution of teachers is a problem with some very small class sizes and some very large. The lack of teachers of some subjects is especially evident in rural areas, but teachers of high demand subjects, such as foreign languages, are difficult to find even in the better-off urban communities. Recent studies suggest that the lack of teachers on the one hand, accompanied by a relatively low overall student-teacher ratio (24 in Kyrgyz Republic, 22 in Tajikistan; UNESCO, 2004) on the other, may in part be the result of the narrow specialization in secondary grades. The types of specialization and the number of state-funded seats in pre-service institutions are formulated based on the Ministry of Education order, and are generally not responsive to the demands of the labor market.

In general, governments throughout the region have been extremely cautious about any curriculum changes, especially if it involves pedagogy. However, certain steps have already been made. In Tajikistan, for example, the Ministry of Education intends to introduce dual-degree teacher certification, which will enable teachers to teach two subjects at the same time and should result in more efficient use of staff.

USAID goal in pre-service teacher training

During the follow-on basic education program, USAID will seek to improve the quality of pre-service teacher training, through the integration of modern methodologies, introducing greater flexibility to the training curriculum, and strengthening the practical aspect of teacher education by building close linkages between the institutions and the USAID/PEAKS Professional Development Schools. USAID will also seek to improve the efficiency of pre-service instruction by examining the financing mechanism for pre-service teacher training and connecting workforce needs with pre-service programs to improve availability and distribution of teachers.

II. Objective

The objective of this assessment is to provide a detailed analysis of the needs and opportunities in pre-service teacher training and provide recommendations to USAID/CAR regarding specific program interventions necessary to achieve the goal outlined above. This involves both academic and management aspects of teacher education, as well as overall policy on pre-service training. The consultant will also examine the level of commitment among host country government bodies, including Ministries of Education and the key state pre-service teacher education institutions to undertake reform in the nearest future. The consultant will also review other donor past, present and planned activity in pre-service teacher training (table attached) to determine the impact of earlier assistance and how USAID could build on and/or complement those efforts.

Specifically, the consultant will address the following issues:

1. Curriculum

- 1.1 The consultant will look at how the pre-service training curriculum is formulated and the state requirements for teacher certification, as well as the main commonalities and differences among the curricula of key pre-service institutions.
- 1.2 The consultant will take note of the Ministry of Education's mandatory guidelines on specific courses of the teacher training curriculum and the process of approval and inclusion of new courses, or adjustment to the content of existing ones.
- 1.3 The review will involve analysis of roles and responsibilities of various players in formulating curriculum and identify weaknesses that could be addressed through a development assistance effort.
- 1.4 The consultant will identify key needs in curriculum modernization, prioritize them in rank order, and examine opportunities for addressing these needs during the next three to five-year period of USAID follow-on activity.
- 1.5 The consultant should note the capacity available in PDS and the potential for expanding the teacher training courses developed by USAID/PEAKS, and adapting them for use in pre-service training institutions.
- 1.6 As part of the general analysis, the consultant will explore the feasibility of introducing greater flexibility in pre-service teacher education curriculum that would result in better availability and distribution of teachers, and recommend steps necessary for USAID to advance in that regard.

2. Instruction

- 2.1 The consultant will examine the existing capacity in the instruction of modern methodologies, average workload and state requirements for instructor credentials at state and private institutions.
- 2.2 The consultant will also look at pre-service institution instructor retention, connections with primary and secondary schools, and provide an analysis of needs and opportunities for improving the quality of instruction.
- 2.3 The consultant will take into account the results achieved by the USAID/PEAKS program and recommend ways to use existing capacity in teacher training, including the Professional Development Schools, in improving the quality of instruction at pre-service institutions.

3. Management

- 3.1 The assessment will involve a review of existing management practices, including academic and operational decision-making, professional development policies, and the organization of academic process.
- 3.2 The consultant will look at how management in pre-service teacher training institutions contributes to quality of instruction.
- 3.3 The consultant will recommend specific assistance activities to help improve effectiveness of management decision making at pre-service training institutions, increase the use of participatory management practices, as well as strengthen organizational development and strategic planning.

4. Policy

- 4.1 The consultant will examine laws and normative acts on pre-service teacher training, namely, teacher certification, requirements placed on public and private institutions, and how national policy in this area plays out in practice at the pre-service institutions.
- 4.2 The consultant will also explore the initiatives supported by other donors, such as the World Bank, in the development of teacher performance-based incentives and support mechanisms for young teachers to work at rural schools.
- 4.3 The consultant will seek to identify potential linkages between quality improvement activities in pre-service teacher training, and performance-based teacher assessment system introduced by the incentive program.
- 4.4 The review of the policy aspect of pre-service teacher training will result in recommendations for USAID on specific course of action for engaging key policy makers in constant dialogue and strategic support of reform in pre-service teacher training.

- 4.5 The consultant will also recommend interventions in formulating an effective policy and sustainable mechanism on the assessment of demand for teachers in public schools and using the most up-to-date information to form the “state order” to public pre-service institutions. The “state order” includes the types of teacher specialization and number of state-funded student places in each specialization.
- 4.6 The consultant will examine how pre-service education is currently financed and recommend interventions that would result in improved quality of instruction in schools and better availability and distribution of teachers, with a focus on more efficient use of available funds rather than increased funding.
- 4.7 The consultant will review any existing institutional accreditation mechanisms and make recommendations on how new approaches would result in graduates with skills better suited to the demands of the country.

III. Logistical considerations

It is expected that the consultant will meet with key stakeholders in pre-service teacher training (such as Ministry of Education, Academy of Education, applicable basic education project implementers, university instructors, teachers, directors, students, education NGOs) in Kyrgyz Republic and Tajikistan, and therefore, will need to spend an adequate amount of time in the two countries. Most meetings will occur in the capital cities of Bishkek and Dushanbe, but travel to important regional centers, such as Osh and Kulyab (TJ) will also be necessary. USAID/CAR estimates that approximately three weeks will be necessary for data gathering and initial analysis, before the consultant can present a draft report to USAID/CAR.

In addition, the consultant will spend 5-6 days at the USAID/CAR Regional Mission in Almaty for a brief orientation prior to fieldwork and after the fieldwork for debriefing and consultations.

USAID/CAR Support:

USAID/CAR will provide translation, arrange and fund all travel by car, and arrange meetings and site visits, as required.

IV. Deliverables

The anticipated schedule of deliveries and payment for accepted deliveries for the consultancy is as follows:

1. Submission of draft outline for final report and assessment schedule- one month before arrival in region.
2. Submission of draft report before departing CAR
3. Final report- 2 weeks after departing CAR.

Reporting content and format

The consultant will present a report with detailed findings and conclusions for each of the outlined focus areas, and recommendations on specific program activities that address the needs of pre-service teacher training. The recommendations will be disaggregated by country. If appropriate, the report may have a regional section to describe potential for regional

collaboration and/or sharing the technical assistance and expertise that is to be offered by USAID/CAR.

In total the report should not exceed 20 pages in length.

V. Qualifications of consultant

The consultant will have substantial expertise in teacher training, both in-service and pre-service, with significant experience in development programming addressing teacher training reform. Experience with teacher training systems of Eurasia, and particularly, of the Post-Soviet states, is essential.

Scope of Work
Assessment of Issues and Opportunities:
Curriculum and Student Assessment
in Kyrgyz Republic and Tajikistan

I. Background

USAID/CAR began investments in the basic education sector of the region in 2003 with a quality improvement program focusing on three main areas: teacher training in child-centered, critical thinking methodologies; community involvement in education, and strengthening the sector's financing structure and management. The program is implemented in four countries of Central Asia and is scheduled to end in June 2007.

USAID's goal in the basic education sector in Central Asia is to build sustainable capacity in local institutions for continuous improvement of educational quality. This involves introduction of internationally accepted teaching methodologies, best practices in management and financing, and broad participation of stakeholders in educational reform.

The cornerstone of the USAID basic education program in both Kyrgyz Republic and Tajikistan is the school-based teacher training and resource center that cooperates with up to up to ten surrounding schools to provide teacher and administrator training and model best practices. During the life of the project, 11 such schools were established in Kyrgyz Republic and 23 in Tajikistan. The expertise built in these schools to provide teacher and administrator in-service training is recognized by governments, and in many instances, partnership relationships have formed between the schools and state in-service training institutions and local departments of education. In comparison to traditional the classroom instruction provided by in-service training institutions, school-based training centers have a number of advantages, including proximity of training and follow-up mentoring to the regular teacher, greater emphasis on practical methods for use in the classroom, opportunities to observe master teachers in their classrooms, and increased opportunities for mutual learning among teachers in neighboring communities.

The teaching methodologies promoted by USAID offer a significant shift away from the traditional knowledge-based approach to learning. The student is placed in the center of the learning process, with the teacher serving as facilitator in the acquisition of skills and competencies, rather than as a source of factual knowledge. The objective of these methods is to teach the child to learn ("lifelong learning"), and develop a set of critical thinking, analytical skills that are required to succeed in the modern workplace and to play a role in civil society.

Assessment issues in CAR

Despite the initial additional workload placed on the teacher when adopting new methods, hundreds of teachers working at USAID/PEAKS target schools have embraced the change and are practicing child-centered pedagogy. The innovations are welcome among children and their parents, who see the benefit of the changing dynamic in the classroom.

However, the impact of the new methodologies has been difficult to quantify, since the student assessment methods still largely reward rote learning, rather than higher-order cognitive skills. Assessment guidelines are rigid and require the teacher to give several grades at every lesson, while modern best practices show that the learning process must not be rushed, and suggest that grading may discourage students if done early in the process. While anecdotal evidence suggests that the new methodologies have a positive impact even by traditional assessment standards, a reform effort is necessary to bring the measurement system in line with changes in teaching practices and their intended results.

While a number of earlier initiatives in student assessment have been launched in both the Kyrgyz Republic and Tajikistan by other donors, such as World Bank, Asian Development Bank (ADB), and UNICEF, these have been either targeted project impact measurement efforts or adapted international assessments (Monitoring Learning Achievement). The current World Bank and ADB grant programs for Kyrgyz Republic include components related to student assessment policies. The World Bank program has launched Grade 4 and Grade 9 nationwide assessments, and seeks to form “a new culture of assessment” in schools. ADB’s new program will use short-term international consultancies to provide training in continuous classroom-based assessment principles. In Tajikistan, the 2006-2015 National Strategy for Education Development includes plans to develop tests to measure student outcomes.

In Kyrgyz Republic, since 2002, USAID has also supported capacity building of an NGO to develop and implement a university entrance examination that measures students’ problem solving abilities. The NGO, the Center for Educational Assessment and Teaching Methods (CEATM) has developed significant capacity in student assessment development and implementation. Today, in addition to continuing work on the national entrance examination, CEATM assists the Ministry of Education to adapt and implement the PISA exam in 2006 and design and implement the Grade 4 and Grade 9 assessments with funding provided by the World Bank Rural Education Program.

National Curriculum

Many of the assessment problems are rooted in the national school curriculum, which is also in need of systemic reform. Many international experts have pointed out its emphasis on theory and facts, at the expense of building the essential skills of problem solving, application of knowledge, and social skills. The current curriculum places the teacher at the center of the learning process: with the learner playing the role of a passive consumer of information. The volume of information in the school curriculum has also been widely criticized as overly burdensome on the learner, with the level of detail oftentimes unnecessary for the purposes of general compulsory education.

Curriculum development in Kyrgyz Republic and Tajikistan, as in most of the former Soviet Union has been the prerogative of the Ministry of Education, which determines subject matter

content and required volume of class hours for each subject, as well as textbooks for each of the subject courses. In recent years, schools were allowed to introduce “electives” in upper secondary grades, which helped to improve curriculum relevance or expand on topics of particular interest to the learners. USAID has supported training and a manual on school-based curriculum development to encourage schools to take advantage of these opportunities to improve the relevancy of the curriculum. The core curriculum, however, may not be altered by teachers without a prior approval process at various levels of the system.

The governments of the former Soviet republics have long taken pride in the national curriculum, its volume and its orientation on fundamental, theoretical knowledge. The belief that the curriculum is essentially sound has resulted in reform attention focused on more visible problems of the system such as infrastructure and textbooks. The need to reform and realign the curriculum with the needs of the labor market and an open society has not been a focus of reform in either country; however, multiple minor adjustments of the curriculum have taken place previous to printing new textbooks. In many cases, these curriculum revisions have resulted in the addition of new subjects and class hours to the overloaded school schedules.

Donors have initiated discussion on the connection between the number of subjects in the curriculum and the overall cost of providing education. In addition, availability of qualified teachers in such subjects as foreign languages, sciences and math is limited in rural areas resulting in vastly different educational opportunities for poor communities. These factors have led to discussion of a minimum standard curriculum with additional subjects to be provided at additional cost to students and families to improve equity. In Kyrgyz Republic, The World Bank Rural Education Project is addressing the issue of a minimum standard that should be guaranteed to all children. In Tajikistan, the 2006-2015 National Strategy for Education Development includes mention of the development of paid services in primary and secondary education which would require a determination of what schools can charge fees for and what is guaranteed for all free of charge.

With the introduction of new learner-centered methodologies in USAID target schools, the need for curriculum reform became evident. Teachers note that heavy emphasis on subject matter, factual knowledge required by the national standards does not always allow sufficient time for an individualized learning process, and marginalizes the development of the child’s creative potential that is so valuable in the modern society.

In both countries, time constraints and the centralized nature of the Ministries of Education have resulted in curriculum revisions that have been led by the Ministry of Education with few practicing teachers and school directors involved in the development process. Now that there are growing numbers of educators who have experience with modern methodologies and competency-based standards, there are opportunities for broader stakeholder participation in future revisions. As part of its current program, USAID has supported the development of associations of educators that could facilitate teacher and administrator involvement in the process.

In Tajikistan, World Bank is providing capacity building assistance to a curriculum board to revise curriculum for grades 1- 4. According to the grant realization plan for Tajikistan’s Fast

Track Initiative, the Ministry of Education plans to modernize the 5th grade curriculum during the first year of implementation (2006-2007). 6th grade curriculum modernization may be part of the second year implementation plan. In Kyrgyz Republic, the ADB project included transition from the 11 year curriculum to a 12 year curriculum among its plans; however, donors are now encouraging the government to consider cost and quality before making this transition. The Kyrgyz Republic is now beginning the process of development of a new education strategy and Fast Track Initiative proposal which may result in funding for activities that would run from 2007-2009 and may include curriculum reform activities.

USAID goal in student performance assessment and curriculum reform

While much has been achieved in the current project to introduce new methods into schools, the experience of innovative in-service training needs to be reflected in the curriculum and assessment mechanisms to ensure that changes in classroom-level teaching are sustainable. In the follow-on Basic Education program, USAID is considering potential technical assistance and training to improve the quality of national curriculum and its alignment with the needs of a market economy and democratic society. Technical assistance will seek to lessen the academic burden exercised by the national curriculum in its present form and allow schools and teachers greater flexibility to improve relevance to the learner. Efforts will also be made to improve the efficiency of the curriculum by considering the impact of any changes on resource needs such as teaching staff and textbooks. This will entail policy work on curriculum standards, as well as training in curriculum development. Similar assistance will aim to improve student assessment in basic education, including continuous classroom-level assessment and external assessment.

As appropriate, USAID plans to assist host governments by providing technical assistance and training to complement their plans for use of funds provided by the Education for All Fast Track Initiative.

II. Objective:

The objective of this study is to provide a detailed review of needs and opportunities in national curriculum and assessment improvement and recommend appropriate activities to address the identified needs and opportunities in the next USAID program in basic education. The recommended course of action will take into account the openness of host country governments to engage with USAID on curriculum and assessment reform, and the progress of other donor initiatives in these areas.

1. Regulatory process and guidelines

- 1.1 The consultant will map the entire process of national curriculum formulation, including the roles of different parties involved and their decision-making power.
- 1.2 The review will include a thorough description of requirements applied to any curriculum revisions and identify particular barriers to improving the flexibility, relevance, and efficiency of the curriculum.

- 1.3 The consultant will review national assessment guidelines and any existing learning outcome measurement standards and identify weaknesses that could be addressed through USAID technical assistance.
- 1.4 The consultant will draw on experience of other countries in improving state policies affecting quality and relevance of national curriculum and examine the feasibility of using successful models in the context of Kyrgyz Republic and Tajikistan. Kazakhstan has recently completed work on a competency-based revision that might be a useful model.
- 1.5 The consultant will examine progress of other donors in the area of curriculum and performance assessment reform and advise USAID of the best ways to bridge any existing gaps in assistance.
- 1.6 The review will result in recommendations for USAID on a specific course of action for engaging key policy makers and practicing educators in constant dialogue and strategic support of improvement of national curriculum and student performance assessment.

2. Capacity

- 2.1 The consultant will examine the capacities of the Ministries of Education and other national-level institutions with a role in curriculum and student performance assessment and identify gaps that must be addressed through training and technical assistance before substantive reform efforts may begin.
- 2.2 The consultant will examine the experience of USAID pilot schools under the PEAKS program in experimenting with curriculum and performance assessment and explore ways of integrating them into further reform activities. Needs for capacity building of practicing educators should also be considered if there are opportunities for their involvement.

3. Implementation

- 3.1 The consultant will recommend a timeline for introducing reform of curriculum and student performance assessment, taking into account the regulatory changes that need to take place and the level of technical and managerial capacity in key host government institutions.
- 3.2 The review will include an assessment of host government support for implementing changes within the next few years, and their openness in receiving USAID technical assistance.
- 3.3 As appropriate, the consultant will explore ways for USAID to complement host governments' FTI plans in reform of national curriculum and assessment guidelines.
- 3.4 The consultant will consider the feasibility of implementation through pilots which later are scaled up to cover larger areas, and recommend a potential pilot site.

3.5 The consultant will identify and recommend potential leverage points for implementation, including projects of other donors or host government initiatives.

III. Logistical Considerations

It is expected that the consultant will meet with key stakeholders (such as Ministry of Education, Academy of Education, applicable basic education project implementers, teachers, directors, students, parents, education NGOs) in curriculum development and student performance assessment in Kyrgyz Republic and Tajikistan, and therefore, will need to spend an adequate amount of time in the two countries. Most meetings will occur in the capital cities of Bishkek and Dushanbe, but travel to important regional centers, such as Osh and Kulyab, Tajikistan will also be necessary. USAID/CAR estimates that approximately three weeks will be necessary for data gathering and initial analysis, before the consultant can present a draft report to USAID/CAR.

In addition, the consultant will spend 5-6 days at the USAID/CAR Regional Mission in Almaty for a brief orientation prior to fieldwork and after the fieldwork for debriefing and consultations.

USAID/CAR Support:

USAID/CAR will provide translation, arrange and fund all travel by car, and arrange meetings and site visits, as required.

IV. Deliverables

The anticipated schedule of deliveries and payment for accepted deliveries for the consultancy is as follows:

3. Submission of draft outline for final report and assessment schedule- one month before arrival in region.
4. Submission of draft report before departing CAR
3. Final report- 2 weeks after departing CAR.

Reporting content and format

The consultant will present a report with detailed findings and conclusions for each of the outlined focus areas, and recommendations on specific program activities that address the needs in curriculum and student assessment reform. The recommendations will be disaggregated by country. If appropriate, the report may have a regional section to describe potential for regional collaboration and/or sharing the technical assistance and expertise that is to be offered by USAID/CAR.

In total the report should not exceed 20 pages in length.

V. Qualifications of Consultant

The consultant will have substantial expertise in curriculum reform and student performance assessment policy work, with significant experience in development programming addressing these issues. Experience with curriculum and assessment structures of Eurasia, and particularly, of the former Soviet Union, is essential.