UPDATE OF ARMENIA EDUCATION SECTOR ASSESSMENT

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Glossary

ATC	**Assessment and Testing Center**
APL	**Adaptable Program Lending**
ECA	**Education and Cultural Affairs**
EF	**Eurasia Foundation**
EU	European Union
IDA	International Development Association
IMF	International Monetary Fund
ICT	Information Communications Technology
IR	Intermediate Result
MOES	Ministry of Education and Science
MSMEs	Micro, Small, and Medium-Sized Enterprises
NAS	National Academy of Sciences
NCET	National Center for Educational Technologies
NGO	Non-Governmental Organization
PH	Project Harmony
PRSP	Poverty Reduction Strategy Paper
PSO	Program Support Objective
QA	Aguirre March 2003 Quick Assessment
RA	Republic of Armenia
SAC	Strategic Adjustment Credit
SO	Strategic Objective
TACIS	Technical Assistance/Commonwealth of Independent States
UNDP	United Nations Development Program
VET	Vocational and Technical Education
WB	World Bank

EXECUTIVE SUMMARY

This report begins (Section I) with a summary of the March 2004 document, "Quick Assessment of the Education Sector in Armenia", prepared for USAID/Armenia. The critical findings of that report are highlighted, including:

- The Armenian education system is seriously flawed and its weaknesses threaten achievement of the country's goals;
- Promising education reforms are underway;
- USAID is already significantly involved in Armenian education;
- USAID needs to increase its involvement and adopt a more strategic approach to education;
- The case for an increased USAID effort is strong.

To this end, it proposed that the Mission, without seeking to supplant or duplicate the work of others, adopt a pro-active stance towards Armenia's education improvement efforts as a whole, rather than continue its *de facto* policy of undertaking education activities only in response to the direct needs of the various SO programs. It further recommended that:

- Specialized staff be recruited and placed in one of the Mission's line program divisions;
- Relations with the MOES and the donor education community be strengthened and that USAID become a "player" in the sector;
- A number of carefully targeted, reform-related education initiatives be developed, which would be supportive of the reform process, as well as Mission objectives;
- A strategic approach be developed to integrate these initiatives, as well as other education activities developed under the aegis of the various SOs, into the Mission's overall strategic framework.
- A first year budget of $1.5-2.0 million be assigned.

Section II discusses the current situation in education, including the large, new World Bank general education project now getting underway, an important new European Union initiative in vocational and technical education, and the initiation of an interesting higher education reform process. Section II concludes with a brief outline of USAID's 2004-2008 Strategy, as it pertains to education.

The core of the report is Section III, Analysis and Recommendations. It is noted that the proposed 2004-2008 Strategy includes a number of positive elements regarding education, which, taken together, demonstrate the Mission's readiness to give education a more integral place in its work. But, in the report's view, they do not yet add up to a strategic approach to the sector. Without a clear statement of the underlying strategy which will govern future education program

development and activity design, one remains uncertain how responsive the Strategy will be to the full range of education opportunities offered by the current situation.

To illustrate these points, a draft strategic statement for education is offered for consideration. Suggestions are also made for better integrating education into the Results Framework and Mission management are also made.

The report concludes with updated comments on possibilities for education program development.

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I.   Review of March 2003 Report

Following pre-strategy discussions in Washington in December 2002, USAID Armenia developed a scope of work for "A Quick Assessment of the Education Sector in Armenia". The purposes of the assessment were to: provide the Mission with focused, up-to-date information on the current state of Armenian education, at all levels; identify potential areas of need not covered by other donors; and make recommendations to the Mission for a possible strategic approach to the sector.

Aguirre International was contracted by USAID to take responsibility for the assessment and selected Richard Dye, an experienced international education specialist, to conduct it.

The work was carried out in Washington and Armenia between January 30 and February 26, 2003. More than 50 meetings were held with: the Ministry of Education and Science (MOES) and other Armenian education authorities, leaders, and experts; USAID, the World Bank (WB), the European Union (EU), and other key donors; Armenian Diaspora organizations; public diplomacy staff in the U.S. Embassy; representatives of international and local NGOs; a local, private consulting firm developing a higher education reform policy paper; and USAID contractors. After review by the Mission and incorporation of the Mission's suggestions, the report[1], hereafter referred to as the QA, was submitted in March 2003.

Summary of Critical Findings of the QA

That the Armenian education system is seriously flawed and its weaknesses threaten achievement of the country's goals.

The quality, relevance, and efficiency of the Armenian education sector have all deteriorated significantly since independence. All levels have been affected, including: Pre-school; General Education; Vocational and Technical Education; and Higher Education. All of the main components of a quality education system – adequate finance, trained, motivated teaching staff, up-to-date standards and curriculum, adequate attention to preparing students for the world of work, adequate provision for teaching materials and educational technology, and acceptable facilities and equipment - are seriously lacking.

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[1] A Quick Education Sector Assessment, Richard Dye, Aguirre International, March 2003.

Enrollments. At the primary level (grades 1-3), the officially reported enrollment rates remain high (just over 90%), but they are widely disputed. The QA, based on extensive interviews and comparing official and unofficial estimates, some as low as 75%, judged actual, current enrollments to be in the 80-85% range, with a declining trend.[2] The main reasons for the differences between the official numbers and the lower estimates are said to be:

- Failure to make adequate adjustments for dropouts and to indicate the percentage of enrollees who are repeaters;
- Failure to capture and reflect he continuing downward effects of emigration;
- The fact that officially recognizing the reality of reduced enrollments would likely have a negative impact on finances and jobs (in the face of announced plans to reduce the number of schools, teachers, and administrators);
- The desire to put Armenia's best foot forward in the inevitable comparisons with international and regional enrollment rates;
- Finally, the probable negative impact of more accurate reporting of enrollments on opportunities for corruption, in a sector widely judged to be one of the most corrupt in the country.

Dropouts. As a result of the weaknesses in general education, the increase in the costs of education for all students at all levels, and the absence of good educational opportunities in the non-academic track, increasing numbers of Armenian young people are reportedly leaving school early and either working in a variety of low-paid jobs or joining the ranks of the unemployed. Dropouts occur at all levels, but the phenomenon becomes most evident after Grade 5. This cohort of out-of-school and undereducated youth is a cause for concern, both economically and socially.

No one knows the exact number of dropouts. It cannot easily be deduced from enrollment ratios, because, as noted, many youths who are officially enrolled, especially in middle and upper secondary, reportedly are not attending school. But, numerous interviewees indicated that it is significant and growing and is adding to the already considerable national education deficit accumulated over the last 12 years. While the education reform, in time, should reduce the dropout problem, targeted education programs are needed to provide existing dropouts with remedial training and practical, market-ready skills.

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[2] Education, Poverty, and Economic Activity in Armenia: Situation analysis report, Conclusion II, which states that "Enrolment Rates for the age group of 7-13 (which is the age group to receive compulsory public-paid education) have constantly declined over the last ten years of transition". The report, published jointly by UNDP and the RA, estimated that the primary school enrollment rate in 2001 was 91.6%, including an undetermined number of repeaters. As the trend for over a decade has been negative, even the current official number can be presumed to be below 90%.

Repetition. The general decline in the quality of education reportedly has led, as well, to an increase in repetition rates. Again, the exact numbers are hard to come by, but there is wide conviction that they are rising.

Summary.   The QA confirmed that at present, Armenia's education system is failing to provide its children and young people with the knowledge and capabilities, especially life-long learning skills that will enable them to play their anticipated roles in meeting the nation's long-term development goals. The latter fundamentally depend for their achievement in converting Armenia into a highly skilled, knowledge society, which, through the brains, energy, and entrepreneurial skill of its people will be able to overcome its geographical isolation and relative lack of resources. While Armenia has a large pool of educated and "qualified" people, many of the best people have emigrated and the qualifications of many of those that remain are not well-suited to current labor force demands. Retraining is part of the answer, but so, also, is the development of a strong, relevant, and supportive education system.

Although there is a time gap between educational improvements and impact on the labor force, the length of the gap is commonly over-estimated. Improvements in upper secondary education, more equitable access to higher professional and academic education, and improved quality and relevance of the education offered at secondary and higher levels can produce relatively quick results, while longer-term efforts to improve the education system from the ground up are proceeding.

Moreover, given basic inequality of access to the kind of education that offers hope for social mobility and economic opportunity, the high costs of education, and the high level of corruption, the current education system threatens to alienate a generation of young Armenians and undermine social and political cohesion.

That Promising Education Reforms Are Underway

General Education. In response to the crisis in education, the government (RA), with the assistance of a coalition of donors, has embarked on a series of reform efforts. The first major initiative was a World Bank (WB) $19 million Education Financing and Management Reform Project, carried out between 1998 and 2002. This project established the legislative and policy base for General Education reform. It also took initial steps to strengthen the Ministry of Education and Science (MOES), laid plans for critically needed rationalization of school facilities and staff, funded a major textbooks initiative, and experimented with new, decentralized, community-based school management and financing models.

A major follow-on project, also focused on primary, middle secondary, and upper secondary education, is getting underway. Entitled ARMENIA: Educational Quality and Relevance,[3] the project is assisted by a four-year $19 million loan approved in January 2004. (It was initiated *de facto* in 2003, funded by a project preparation facility of $1.2 million.) The loan is the first stage of a three stage IDA Adaptable Program Lending (APL) credit. Triggers are included for a second and third credit for an additional $25 million.

The new project is impressive. It has been carefully planned and developed, is conceptually sound, and enjoys the support of the government, the World Bank, and other donors. The first WB project laid the groundwork for reform of general education. The role of the new project is to implement the reforms and to make them sustainable. Rationalization of staff and facilities, on which much of the reform financial plan depends, is one of the central features, along with major initiatives in curriculum development, assessment, retraining of teachers, the application of information technologies to teaching and learning, and decentralized management.

Implementation will be challenging, as the MOES is not yet equipped with the full range of people, skills, and systems it will need to get the job done. Some features of the reform, notably the rationalization (down-sizing) of teaching and administrative staff and consolidation of schools, are highly sensitive politically. It is also the moment of truth for MOES, as it enters the phase where real, nation-wide decentralization of its powers is supposed to take place.

The RA's commitment to the reforms is strong. Moreover, significant provisions have been made in the project's design to overcome these obstacles, through technical assistance, training, and institutional development, but the project's resources in all these areas are limited and tightly focused on policy, new reform institutions, teacher training, and selected pilot projects. As a result, there is ample opportunity for other donors to participate.

One gap in particular which USAID could help fill and, in the process, bring key US education perspectives and skills to bear, is through supplementing the project's limited provisions for technical assistance[4].

Another is the lack of provision in the project for mobilization of local communities to support the schools and hold them, and the MOES, accountable for effective and corruption-free implementation of decentralized school finance, management, and governance provisions of the reform.

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[3] See Project Appraisal Document (Report No: 26266-AM), December 18, 2003.
[4] Like many developing countries, Armenia is reluctant to borrow for technical assistance, expecting to finance the bulk of technical assistance needs through grants by the WB and other donors.

A third key gap, despite USAID and other donor efforts to develop civil society institutions, there is, for whatever reason, no strong NGO presence in the education sector to advocate for the reforms, hold the reformers accountable for meeting their promises, promote anti-corruption efforts, and help to mobilize local communities in support of school improvement.

Finally, not on anyone's list at present, at least as far as could be determined, is the issue of re-training of youth and other people in the actual or potential labor market who lack the skills needed by the emerging economy.

Vocational and Technical Education. Besides the WB-MOES collaboration in general education, the EU, in a change of policy from its previous orientation, is undertaking a sizable initiative in vocational and technical education (VET).[5] The EU program will focus on three areas: policy and structural reforms; proposing and implementing reform in selected institutions in the VET sector; and ensuring that the VET system is adapted to the local labor market. Again, there should be ample opportunities for collaboration by other donors, particularly working with key institutions in developing specific educational programs responsive to demand in high priority economic sectors.[6]

Higher Education. The process of addressing the also considerable higher education reform needs has lagged behind that in general education. However, a serious effort in that direction now is getting underway. The MOES and the principal state universities are taking the lead, with significant donor involvement to date by the World Bank and the EU. A draft higher education law has been prepared. A reform strategy paper was submitted in April, 2003.[7] The paper focuses on government policy issues in such areas as access, finance, standards, accreditation of institutions and degrees, management, and regulation.

A series of efforts to harmonize Armenian higher education with that of EU countries are integral to the reforms. Qualitative improvements are also planned to enable higher education to make the desired contributions to Armenia's international competitiveness. Critical academic areas are curricula, teaching methods, equipment, facilities, and above all, faculty renewal and development.

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[5] TACIS Action Programme 2002-2003, Republic of Armenia: Terms of Reference: Support to the Development of an Integrated VET System.
[6] The QA, based on the expectation of a much larger EU program that actually has emerged, concluded that the VET sector was unlikely to require USAID assistance; new information on the EU initiative suggests that may not be the case.
[7] RA Ministry of Education and Science, Project 4/21/03, Strategy of RA Higher Education Reforms, Yerevan, 2003.

Equitable Access to Higher Education.   Equitable access to Armenian universities is hindered by two major factors. One is the great difficulty less-advantaged students have in qualifying for university entrance, including the poor quality and high cost of public secondary education, the additional cost of private tutoring for the entrance examination, the low quality and reliability of the exam itself, and, reportedly, pervasive corruption in admissions decisions. The other is the cost of university education, even for those who enter under the State Order system.

The RA is considering two steps to improve the situation. The first is a fundamental re-design of the entrance examination and the admissions process, to make it more reliable, open, and fair. The second is development of student loan and scholarship mechanisms to make higher education more affordable to a much wider range of social and ethnic groups and economic classes. These steps will not remedy the underlying unfairness of the current education system, which fails to provide the kind of education that would enable every worthy and interested child to complete secondary school. But, while waiting for the various educational reform measures now getting underway to have the promised impact, they are important advances.

The task of revising the admissions test has been assigned to the new Assessment and Testing Center (ATC) being developed under the WB project. The student loan and scholarship issues are just now being put on the table.

That USAID is Already Significantly Involved in Armenian Education

The QA included a limited assessment of USAID's considerable list of activities in education during the 1999-2003 strategy period. There was no time or opportunity for proper evaluations of the individual projects, but enough data was collected to make comments about the work as a whole. The principal conclusions were that, by and large, the various activities achieved their immediate goals, namely, to support achievement of the Mission's strategic objectives, but that, as a group, they could have accomplished more, if they had been designed and conducted as part of a broader, more strategic Mission approach to education.

That USAID Should Increase its involvement and Adopt a More Strategic Approach to Education

The QA did not recommend that USAID make education a stand-alone strategic objective. Because of the central importance of successful education reform to the short as well as long-term achievement of Mission objectives, however, it did argue that a strategic approach should be developed and applied to the sector. To this end, it proposed that the Mission, without seeking to supplant or duplicate the work of others, adopt a

pro-active stance towards Armenia's education improvement efforts as a whole, rather than continue its *de facto* policy of undertaking education activities only in response to the direct needs of the various SO programs. It further recommended that:

- Specialized staff be recruited and placed in one of the Mission's line program divisions;
- Relations with the MOES and the donor education community be strengthened and that USAID become a "player" in the sector;
- A number of carefully targeted, reform-related education initiatives be developed, which would be supportive of the reform process, as well as Mission objectives;
- A strategic approach be developed to integrate these initiatives, as well as other education activities developed under the aegis of the various SOs, into the Mission's overall strategic framework.
- A first year budget of $1.5-2.0 million be assigned.

That the Case for an Increased USAID Effort is Strong.

The case for a broader USAID involvement in education rests, first of all on the symbiotic relationship between Armenia's human resource development, including the education of its children, to success of Armenia's development strategy and the fact that, as matters now stand, the trends are negative. The country is facing a growing educational deficit, and it is a matter of the highest priority that steps be taken to turn this around. Without progress in this area, it is difficult to predict the ultimate success of Armenia's social transition or achievement of its economic develop strategy.

A second factor is that the ultimate success and sustainability of USAID's program strategy depends on human and institutional capacity building, in which education, as well as training, must play a significant part. For example, realization of democratic governance objectives, much of the work in the social sectors, and a successful transition to a market economy depend in large measure on changing attitudes and behavior, a process that ideally should begin early and continue throughout life. And the success and sustainability of technical and other investments depends not only on the efforts of the people currently involved or available in the market, but also on ensuring a steady flow of trained people to continue the work in the future. The Mission has shown that it shares this view by virtue of the limited, but significant education activities it has supported or is currently supporting, but in the past, these initiatives have not been part of a broader approach to education .

A third part of the case is that, compared with the situation even a few years ago, the opportunities for doing effective work are greatly improved, as a consequence of the fact that a promising general education reform process

enjoying broad national and international support is underway, and that the prospects that something similar will emerge in higher education are good.

Finally, USAID, given its already strong presence in Armenian development, is in a position to provide leadership, as well as to leverage other donor funds in education, with a relatively modest investment of its own resources. Numerous statements that USAID's presence would be of great help in sustaining the reform process were received in the course of the assessment.

II.   THE CURRENT SITUATION

Education Reform

Since the QA was conducted, the reform process has moved forward on several fronts. As noted, the WB general education quality and relevance project is now officially underway. The first steps towards rationalization of teaching staff and consolidation of schools have been taken. The decentralization of school finance to the community level and on a per pupil basis is moving from the pilot to implementation stage. Considerable preparatory and analytical work has been done in other reform areas, such as curriculum.   Again as noted, the EU is moving forward with a reduced, but still significant initiative in the VET sector. And initial steps have been taken towards launching a parallel and much-needed set of higher education reforms.

The process to date has not been without controversy, notably in reaction to actual and proposed reductions in teaching staff and school closing plans. These problems notwithstanding, the government's support for reform continues to be strong. This is reflected, among other things, in the prominent role assigned to education in the RA's poverty reduction strategy.[8]

In sum, this part of the case for increased USAID involvement in education remains intact and, indeed, may be even greater, given the need for the greatest possible encouragement on the part of the donor community, of which USAID is a prominent and visible member, for staying the course, as the inevitable problems are encountered.

USAID 2004-2008 Strategy

The draft 2004-2008 strategy, as it relates to education, includes a number of positive elements:
- It treats education as one of a number of cross-cutting issues under a new Program Support Objective (PSO), which is a reasonable position, depending on how it is defined and placed with the larger strategic framework.

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[8] Poverty Reduction Strategy Paper, Section 7.2.2, Education, Yerevan, 2003.

- The strategy assigns greater importance to education than its predecessor. Continued education programming in direct support of SO programs is included, and examples are provided. [9]
- The door is opened to closer coordination with the reform processes and the principal actors, with USAID, at least in principle, standing ready to assist, budget permitting, in filling critical programmatic gaps in the formal education sector, where it has a comparative advantage.
- Finally, as recommended by the QA, an Armenian education specialist has been added to the staff to enhance the Mission's expertise in education and provide a central focal point for coordination and information. The person, however, reportedly is located in the Program Office, rather than in one of the line program divisions, as suggested by the QA.

On the other hand, the current results frameworks for the various SOs include only limited references to education.

III.   ANALYSIS AND RECOMMENDATIONS

The core of the report is Section III, Analysis and Recommendations. It is noted that the Strategy includes a number of positive education elements, including an interesting list of illustrative activities, which demonstrate the Mission's openness to giving education a more integral place in it work. The report finds, however, that there is a lack of a clear statement of the strategic approach which will be followed to guide program development and activity design. As a result, one is left uncertain as to how education is expected to fit within the overall framework and how strongly and pro-actively it will be pursued.

Statement of Strategic Approach to Education

Following is a draft of a strategic statement that would clarify the role of education in the 2004-2008 Strategy:

"The reform and strengthening of education at all levels is critical to the achievement of Armenia's development objectives. It is also key to the success and sustainability of USAID programs. USAID, therefore, welcomes and will increase its involvement in the on-going educational reform process.

Specifically, pro-active education program development efforts will be undertaken, under the aegis of SO teams, with the goal of designing and implementing activities that will simultaneously promote SO goals and support the reform process.

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[9] Analysis of the Education Sector in Armenia, USAID/Armenia, November 2003, especially pp. 13-16.

Because education activities, in varying degrees, will be integral parts of the Mission's work towards the majority of its strategic objectives, education is treated as a cross-cutting issue. Cross-cutting issues are those that all SOs are expected to address and incorporate, to the extent possible, into their work and, thus, into the totality of the Strategy."

Current Results Frameworks

In some cases, current SO results frameworks are sufficient to accommodate the proposed education strategy and in other cases would need to be modified. Brief suggestions of education issues that should be of interest to the SOs follow. More extensive program comments are made in Section IV.

SO 1.3: Increased Employment in a Competitive Private Sector

This SO is focused on wealth and job creation. It already has a good track record in identifying and implementing education activities in support of its work and is a strong candidate for development of further, significant educational activity. Areas reportedly scheduled for exploration include vocational and technical education and science and technology (including ICT). Middle and upper secondary curriculum reform, especially in such areas as applied economics and world of work issues, should also be included, for sustainability and other reasons.

The bulk if not all the above activities would fall under IR 2: Growth of Micro, Small, and Medium-Sized Enterprises (MSMEs**).** To accommodate them, consideration should be given to adding a Sub-IR 2.4, "Capacity of Upper secondary and higher education institutions to provide human resources and other supporting services to the private sector is increased".

SO 1.5: Secure and Sustained Access to Energy and Water Resources

This SO, especially the first two IRs, is focused on immediate institutional, governance, management, and operational needs in the energy and water sectors. As in the case of IR 1.3, the long-term success and sustainability of the work, particularly under IR3: Increased Energy Security, will depend on the development of greatly increased national capacities in science, technology, and technical education. School curriculum reform in the areas of energy conservation and related environmental should also be of interest.

SO 2.1: Improved Democratic Development

This SO's current results framework could easily accommodate two high priority education reform initiatives.

The first is the need for new or strengthened NGO capacity to provide leadership in education reform advocacy, collect and disseminate information needed to keep stakeholders informed, monitor the progress of the reforms, promote transparency and accountability in the education sector, and provide technical assistance and training to community-level education advocacy organizations (see below). This would be an easy fit with Sub-IR 1.1.

The second need, related to the first, is for a pilot project focused on local level community mobilization and capacity building designed to provide effective opportunities for a wide range of local stakeholders (parents, community leaders, and the private sector) to advocate for, monitor, and participate in local school improvement activities. This could be done under sub-IR 1.4. The Eurasia Foundation (EF) would be a possible collaborator.

For sustainability and other reasons, SO 2.1, like the other SOs, has a interest in school curriculum reform, especially civic and behavioral education at the middle and upper secondary levels, and already has a good track record in this area.

SO 3.2: Increased Access to Sustainable, High-Quality Primary Healthcare Services

This SO already has a good track record in the development of institutional capacity for the preparation of primary healthcare providers and, under Sub-IR 1.1, will be continuing this work. This logically could lead the SO to become interested in broader higher education reform, along with SO 1.3 and SO 3.4. School curriculum reform in such areas as health education and life skills also should be of interest.

SO 3.4: Improved Social Protection

This SO is focused on social assistance, social insurance, and employment and labor issues. Education is not specifically mentioned, but during the previous strategy period some valuable education activities were supported, notably in accounting and actuarial sciences. A case could be made for further involvement in educational, as a critical factor in assuring that social, as well as economic, development keeps pace with and sustains the social protection measures the SO is helping put in place.

One important education reform measure that might be a good fit with SO 3.4 is improved higher education access by economically and socially disadvantaged secondary school leavers. Key elements in assuring increased access are reform in the university admissions processes and development of a national educational loan and scholarship programs. This could be accommodated by adding a new Sub-IR 1.3, "Higher education access for disadvantaged groups increased", to IR 1: Improved Social Assistance Programs for Target Populations.

Curriculum reform in family life and applied economics would also contribute to the sustainability of the SO's work.

A Mission-Wide Curriculum Project

Given the actual or potential interest of all five SOs in curriculum reform, consideration should be given to a joint effort to gain access to the curriculum reform process now getting underway under the WB project, with a view to ensuring that the new curriculum adequately covers the topics in which the Mission is especially interested. The primary need would be for technical assistance.

Mission-Wide Coordination and Support

Building on the recent recruitment of an education specialist, consideration should be given to the creation of a small education coordination and support unit, to be located in one of the line program divisions. The unit would take the lead in enhancing USAID's information on and presence in the education reform process. It would be a source of advice and assistance to the SOs as they explore and develop new education activities. And it could take primary responsibility for selected activities, such as the proposed, joint curriculum project.

IV.   UPDATED PROGRAM COMMENTS

The QA included a number of suggestions as to possible education program initiatives that the Mission might consider. In the following paragraphs, a second look is taken, to bring them up to date and relate them to the draft 2004-2008 Strategy and the strategic approach proposed in Section III. The comments are complementary to and may overlap with the illustrative activities presented in the Strategy, all of which appear to be worthy of consideration. They are presented under the various categories of the education system and are not in order of priority.

<u>Basic and Secondary Education</u>

Community Mobilization for the Schools

As noted, one of the key elements of the new WB project is progressive implementation of a school-based financing and management model piloted under the previous project. (The basic model, in fact, is one being applied by the Bank in a number of countries around the world.) Part of the management model is a system of community-based school boards and parent-school committees. But, so far as we know, the WB program does not extend to mobilizing the wider urban or rural communities, either through new organizations or building on existing ones, to directly support local school improvement and, more broadly, hold school officials accountable and advocate for education reform. USAID might consider support for a pilot effort along these lines. The EF might be a good partner.

Education NGOs

As noted earlier, the number of NGOs focusing on education is small, and there is basically none that has the capacity and profile to play a key role in bringing civil society perspectives to bear on education issues, including the reforms. At the same time, there is a need for an organization to collect and disseminate current information on the education system, advocate for policy and program changes, help hold the wide variety of education actors accountable, support anti-corruption efforts in the sector, and provide advice and assistance to community organizations and others seeking to influence the quality, efficiency, honesty, and fairness of local education.   USAID, with its history of support for development of civil society, would be a logical source of an effort to fill this gap.

Curriculum

In the education development context, standards and curriculum are cross-cutting components, necessary, if not sufficient for success of any reform effort. The WB project includes a major curriculum component. There does not appear to be any need at this time for USAID to become involved in the general effort.   It is, however, one of the areas that the Mission should watch closely and position itself to be helpful, when and if significant problems arise on which USAID can be helpful.

At the same time, most if not all of USAID's SOs have or should have an interest in helping ensure that the new curriculum, the central purpose of which is to make Armenian education more relevant to the country's economic, social, and political development and provides a framework within which the most critical knowledge and skills are transmitted to the future labor force.

The time when a new curriculum is under development is the ideal time for the SOs to promote the adoption of existing curricular principles or models and/or experiment with new approaches tailored to Armenian development needs. Activities responding to such opportunities should include, in addition to the development of the curricular models themselves, related teacher training curriculum and, if possible, piloting the results in a group of schools.

While there is justification for focusing on the upper secondary grades (9- 10), in order to shorten the time lag between the new capacities created and their impact on the labor force, the importance of inculcating the underlying values and aptitudes in the earlier grades should not be underestimated.

Computers, Connectivity, and Educational Technology

The WB program includes a significant educational technology component, including the provision of computers and other materials to the schools and helping teachers use them effectively in the classroom. The long-range goal is "to ensure that all schools have facilities and capacities to integrate a variety of educational technologies as part of teaching and learning so that students can develop the necessary technological and computer literacy for the modern knowledge society".[10]

In the current phase, project funds will be used to provide interested schools with computers and related equipment to establish School Learning Centers. Schools will repay the cost of this equipment, on interest-free terms, through a revolving credit scheme. Parent fees are expected to be the main source of funds for the repayments. Other components include development of ICT curriculum, training modules for teachers, and educational software. A National Center for Educational Technologies (NCET)is being created to oversee the effort.

As regards connectivity, creation of an initial network of 150 larger schools, defined as an enrollment greater than 300, is contemplated. Reportedly, to date the initiative apparently has been developed independent of the existing (and larger) school network established under Project Harmony (PH), despite the fact that the WB, along with the State Department (ECA), has been one of PH's supporters.

PH is a program to provide connectivity, computers, and technical and training services to the schools, with links, as well, to the communities. The services are provided through a network of resource centers sited in nodal schools. Each center serves 3-5 neighboring schools. Centers generally have two trained staff members, a number of computer stations, Internet

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[10] Project Appraisal Document, ibid.

connection, other teaching equipment, such as projectors, and a website. Teachers and students may use the centers for free during certain hours, and at other times, they are open to the community for a fee. Training is provided in Internet use, computer skills, PowerPoint, web design, and classroom use. Center unit cost is about $17,000, excluding Internet connection fees.

Community outreach is done through a system of regional coordination teams, including community developers. Regional training centers are under development. The focus is on civics, democratic development, parenting, and leadership skills for women and girls.

As noted, ECA and the WB currently support the program. The Bank provides the equipment, while ECA's support covers most of the rest of the cost. To date, starting in 2000, ECA has provided a total of $8 million for the project. This includes a recent $5 million grant for 2003 and 2004. When the QA was conducted, the number of centers stood at 110, plus another 10 awaiting connection. A total of 320 is anticipated by the end of 2004. The project's current growth capacity is about 100 new centers per year.

It seems unduly costly and inefficient for the ICT component of the new WB project not to be related .directly and practically, with PH and vice-versa. At a minimum, the two networks should be linked, if at all possible, and the extra expense required to do so would appear to be well-justified. The two program models are different, so it would be useful to consider how they might be brought closer together, with a view to strengthening both and creating economies of scale in such areas as equipment acquisition, maintenance, training, management, and evaluation. The community dimension of PH is particularly attractive.

Parenthetically, the QA recommended that USAID consider assisting PH to extend computerization to the smaller (less than 300 enrollment) and less accessible schools and communities, which the WB project, by plan, will not reach. The Mission considered this suggestion, but concluded that it was not feasible.

Vocational and Technical Education (VET)

Complementing the EU Initiative

As noted, the EU, in the context of the reform process, is expected to focus on the VET sector. While their support reportedly has been scaled back from initial estimates, it remains significant. There will be three main components: VET sector policy and structure; proposing and implementing reform in a select group of key institutions in the sector; and ensuring that the VET system is adapted to the local labor market, by enhancing the

participation of the business community in the reform and functioning of the system.

USAID clearly has a strong interest in seeing this effort succeed. It is, thus, another area which should be high on the watch list, to be alert to the development of technical or other bottlenecks where USAID assistance might be helpful.

In addition, as the SOs seek to provide for the training or retraining of the range of skilled and technical people needed in their substantive areas, e.g. priority industry clusters, it would make sense, among other things, to coordinate with the EU effort to complement the latter's efforts to the extent possible. One way to do this might be to focus on the same key institutions as the EU project.

The QA recommended consideration of USAID support for a pilot project to provide skills training, perhaps together with limited remedial training in basic literacy and numeracy, for unemployed, out-of-school youth. This could be part of an effort to strengthen the education NGO sector, which is very weak in Armenia. This possibility is not mentioned in the strategy, so there presumably are reasons for not pursuing it, at least under the rubric of education.

The VET area, finally, is another in which SO teams could usefully seek to identify concrete opportunities to influence and strengthen general education curricula designed to prepare children for the world of work.

Higher Education

Access and Equity

There is a great need for the improvement in the admission process and the development of scholarship and loan mechanism to open the doors of Armenian universities to a wider range of qualified secondary school leavers, including graduates of upper secondary vocational and technical schools. The current admissions test is a legacy of earlier times and poorly adapted to current needs. It is also reported to be highly corrupt. The same can be said about the current higher education public finance system (State Order), including the corruption charge.

The proposed loan/scholarship scheme would be supported in part by the national budget, as well as donors and other sources, and would replace the current "State Order" system. It would fund the students, rather than the universities, thus, in principle, allowing student demand to predominate in deciding which disciplines and institutions receive available funds.

A central purpose of the plan would be to subsidize low-income and otherwise disadvantaged groups to provide for a more equitable distribution of higher education resources. The scheme meshes, conceptually, with the general education reform, which has among its goals a significant increase in the number of graduates qualified for higher study.

The plan or anything like it, however, cannot succeed with out reform of university admission criteria and procedures. The current admissions system is outdated, lacks basic relevance to the higher level and knowledge and skills required by today's Armenia, and, is reportedly very corrupt.

As noted, the loan/scholarship scheme would be a national in character, with the potential to benefit both public and private university students. The abolition of the State Order system, which after independence rapidly lost all relevance and reportedly, in itself, has become thoroughly corrupted, would be an important, secondary benefit.

The US, of course, has great experience with loan and scholarship programs and also has broad expertise and experience in higher education admissions.   Provided other donors are not already doing or planning to work on these problems in a significant way, USAID should seriously consider doing so. What is needed at this point is a combined, or possibly two separate feasibility studies, for which USAID could offer technical assistance.

Science and Technology

In addition to the access and student finance issues mentioned above, the USAID should consider a focus on strengthening the capacity of higher education to be the leading edge of the development (or re-development) of Armenian capacity in science and technology. USAID already has significant ICT development activities underway in selected universities, which should provide a good base for a broader effort in the technology area.

As the QA pointed out, there are two strategic entry points that could have a critical, long-range impact on future science and technology development in the country. The first is faculty renewal, which is the *sine qua non* for success is finding ways to phase out excess and under-qualified faculty inherited from Soviet times.   The second is the development and implementation of a process for merging what is left of the old Soviet research institutes structure into the universities.

The upcoming NAS assessment should shed light on these issues. There would appear to be a close connection between reaching Armenia's competitiveness goals and the teaching of science/ICT at the secondary level

and enhancing science and technology capacities at the higher education level.

Other Higher Education Reforms

There are many other higher education reform needs: governance, accreditation, academic programs, standards, faculty development, curriculum, teaching methods and resources, research, and administration. As noted earlier, the EU will be assisting in several areas, but not in any significant way in academic development per se, at least so far as one can tell from the available information.