"Out of the Box": A Formative Evaluation of Active Learning Policy and Practice

Final Report
for
UNICEF Azerbaijan

December 6, 2013

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Acronyms

AL   Active Learning

CFS   Child Friendly Schools

CRC   Convention on the Rights of the Child

IDP   Internally Displaced Populations

LCE   Learner Centered Education

MOE   Ministry of Education

MWAI   Miske Witt & Associates Inc.

PTA   Parent Teacher Association

TOR   Terms of Reference

UNICEF   United Nations Children's Fund

Executive Summary

Introduction

        The United Nations Children's Fund (UNICEF) and Azerbaijan's Ministry of Education (MOE) have partnered since the late 1990s to transition the country's post-Soviet era education system toward a learner-centered system that encourages student participation, independent thinking, and a deeper understanding of concepts through an Active Learning (AL) initiative. The goal of this transition has been to improve educational outcomes and to develop students who are more prepared to enter a global economy. UNICEF has supported MOE in these efforts through the implementation of AL in-service trainings for teachers across the country. The purpose of this formative evaluation conducted by Miske Witt & Associates for UNICEF Azerbaijan was to inform policy decisions on the overall Education System Reform in Azerbaijan; to inform next steps for UNICEF in its support of MOE initiatives; and to document the results achieved and lessons learned through AL.

Methodology

        The AL formative evaluation considered several key questions grouped according to five criteria to guide the evaluation. These criteria included relevance, effectiveness, efficiency, impact, and sustainability. Data was collected from 10 schools in five districts, including schools in Baku, Gabala, Masally, and Guba. These included eight schools from the 2004 AL evaluation, one IDP school, and one school from a remote village. Data from each school was collected during a one-day site visit. This included focus groups with teachers and parents, surveys with teachers and students, and two classroom observations. Additional data was collected during interviews with key informants. These individuals represented the MOE, the Azerbaijan Teacher Training Institute, the Pedagogical University, Parent-Teacher Association, Inkishaf, and the Center for Educational Problems. A utilization-based evaluation framework guided this study, with specific attention given to data that could inform next steps. In addition, a human rights-based approach was considered throughout the evaluation in order to address issues of educational equity.

Findings

Relevance

        AL demonstrates high relevance to Azerbaijan's national priorities, to the policies of national and international partners, and to the United Nations guiding documents. These alignments are clear and intentional. There are direct links between statements in the national curriculum and national policies to the purposes of AL. The reform also has been widely supported by multiple organizations, which have claimed that AL is a necessary step in the educational reform process. Further, the AL philosophy encompasses the core contents of the Convention on the Rights of the Child (CRC).

        The AL project demonstrated relevance to teachers through its direct alignment with curriculum and teaching methods. However, some teachers' perceptions of relevance appeared to depend on availability of resources. Teachers who had access to greater resources tended to see greater value in AL than those with few resources. While teachers believed in the inherent value of AL, they did not view it as a relevant approach if they did not have the necessary materials to implement it. It was more difficult to evaluate pupils' perceptions of the relevance of AL, but a majority did report enjoyment in coming to school. Most parents appeared to see the value of AL in the curriculum because they had observed its support for children's greater independence. Many parents did not know the details of AL, but they believed that it should continue.

Effectiveness

While teachers reported a high level of satisfaction with the AL philosophy, impediments to implementation appeared to deter the maximum level of effectiveness. Teachers repeatedly used strategies to engage students actively in their lessons, but the evaluation found minimal evidence of critical thinking and problem solving. Instead, lessons tended to include a large number of AL techniques with few links to the overall objectives of the lessons. Teachers often equated quality AL lessons with those in which a large number of strategies were utilized. Some evidence of teachers' attention toward rights-based approaches was apparent in these strategies, even though rights were not often explicitly discussed. For example, students' right to participate in their education was viewed through their eagerness to be involved in activities. In addition, their self-confidence appeared to be very high across every school context.

The new AL assessment approach appeared to be one of the most difficult components to implement. While teachers found value in using formative assessments, they frequently spoke about the time intensity required for implementation. In addition, teachers did not appear to know how to use the results of the assessments in planning their future lessons. Many parents also expressed confusion over the new assessment methods and requested a return to the former ways.

There appeared to be strong relationships between teachers and parents, but the extent of parent involvement varied by school. Individual parent-teacher meetings were the primary form of involvement mentioned in every school, but involvement in school decision-making processes was almost non-existent. Differences in perceptions existed between parents in the capital schools and those in the district schools, with those in the capital showing stronger agreement on items related to effectiveness and support from parent associations. Students from the capital schools were also more likely to report that teachers and parents worked together than did students from district schools. Relationships between teachers and students also appeared very strong. Students frequently smiled during lessons, hugged their teachers in the hallways, or reportedly shared their secrets and dreams. According to teachers and parents, this is in sharp contrast to relationships during the previous curriculum.

Efficiency

Efficiency is developed through initiatives with low cost and high impact. The data showed that the UNICEF model of sensitization is efficient in creating awareness of base-level understanding of AL, but not in creating authentic AL environments in schools. While the 10-day training model introduced a large number of teachers to AL through a relatively low-cost investment, it has not fully supported teachers in their day-to-day implementation of AL. This has resulted in teachers not understanding how to align the content with their teaching approaches. In other words, they applied the strategy without having a clear rationale for their approach. A coaching model with increased attention to school-level teacher professional development is recommended as a possible next step for the next phase of the AL project.

Another source of inefficiency lies in the fact that teachers are not trained in AL until after their pre-service training. Rather than waiting until teachers have graduated from the pedagogical university, it would be more efficient to introduce teachers to AL during their pre-service training. The investment in preparing instructors at the pedagogical university will have a multiplier effect, since new teachers will already possess knowledge of AL. Furthermore, resources were not used with maximum efficiency. Materials were scarce, and teachers may have invested more of their personal resources than necessary to execute particular lessons. An efficient approach may involve ordering materials in bulk quantities to reduce the per-unit cost of supplies. Finally, efficiency could be increased through a per-capital funding model that would address inequities between schools. This would ensure that resources are spread equally among schools depending on their enrollment and other equity-based considerations (e.g., rural schools, IDP, or special needs).

Impact

The AL program demonstrated various levels of impact on children, teachers, and parents. These encompassed social, economic, as well as environmental impacts across the groups. As the primary beneficiaries of AL, children demonstrated strong evidence of engagement in class lessons by asking questions, offering ideas, and working with classmates. However, it was unclear how this translated into increased cognitive development. There was little evidence of critical thinking and problem solving, but this could be assessed in the future through changes in the national assessment scores over time. On the other hand, teachers generally supported the shift toward AL because of the impact on pupil learning. However, they were burdened by the financial implications of AL due to an increased need to purchase materials and supplies for lessons. Parents also faced financial burdens and could not always purchase the pre-requisite materials for their children's education. In addition, they have been impacted by the shift in assessment formats and expressed limited understanding of their students' achievements in school.

Sustainability

An intervention's sustainability depends on the capacity of stakeholders to integrate and continue its activities independent of the initial support mechanisms. At the school level, sustainability depends upon support from local stakeholders, including school administrators. Teachers shared examples of how AL could be sustained through the engagement of a supportive school director. In some cases this included classroom visits, targeted training opportunities, and time for reflection on lessons. While most respondents agreed that their school director supported AL, there were disparities between capital and district schools in terms of general perceptions of support. More teachers in the capital schools perceived there to be external support of AL than those from district schools. In addition, more teachers in the capital schools than district schools believed that training courses, materials, and in-service training were suitable. These data point to an equity concern between what tend to be the country's highest and lowest resourced schools.

Key results

Based on the findings above, nine key results from the AL program have been identified.

1. Clear alignment of curriculum and methods
2. Widespread awareness and usage of AL strategies among teachers
3. Differentiated levels of awareness and involvement from parents
4. Consistent engagement of students in their lessons
5. Limited growth of critical thinking and problem-solving skills
6. Strengthened relationships between teachers and students
7. Growing acceptance among various entities for AL
8. Insufficient materials to support classroom implementation of AL
9. Far-reaching in-service training efforts

Conclusions, Recommendations, and Lessons Learned

In this evaluation, AL was frequently defined as strategies used by teachers to engage students in their learning. However, as part of a learner-centered approach, AL should include more than techniques alone. Despite the use of interactive strategies during lessons, learning may not be meaningful without thoughtful application and careful reflection about how the teaching methods align with the curricular goals. A continuum model depicts the spectrum of classroom application that is possible in an AL context. The far left side describes a teacher with no knowledge of AL strategies. This was the case in Azerbaijan prior to implementation of the new curriculum. The middle of the continuum demonstrates utilization of AL methods, but with little thought about their rationale. This is where a majority of the classrooms in this evaluation existed. Finally, the far right side points to a classroom in which the teacher reflectively selects and adapts methods according to the specific

objectives of a lesson. This is where the education system in Azerbaijan should aim to be in the next five to ten years.

Progress toward this goal is realistic with continued support and attention to key issues. Several short-term and long-term recommendations are highlighted in this report for MOE, UNICEF, Districts, Schools (teachers and parents), the Pedagogical University, Teacher Training Institutions, and the UNICEF Regional Office. Key recommendations point to the importance of strengthening the policy efforts by considering a shift toward a coaching model and school-based model of professional development; increasing efficiency by purchasing materials in bulk; moving toward a pre-service training system that includes AL; increasing the teacher compensation package; promoting collaboration between teachers; and strengthening parent involvement in schools.

Several global lessons were learned through this evaluation. First, the scaling up of initiatives requires support from governmental and non-governmental bodies. The solid integration of AL into the national curriculum has forged this key link in Azerbaijan. Second, full knowledge of how to implement AL cannot be achieved through a short workshop alone. In Azerbaijan, additional models for continuing professional development must be considered. Third, implementation of AL requires additional classroom resources beyond what many teachers can provide. The support of implementation from MOE should include provisions for government-supplied materials. Fourth, sustainability requires integration of the new methods into the pre-service teaching curriculum. Without this alignment, vast inefficiencies will continue to persist. Finally, sustainability depends upon the work done after a new policy has been instituted. Attention must continually shift according to the needs of those involved in the reform.

"Out of the Box":
A Formative Evaluation of Active Learning Policy and Practice

The traditional way of teaching was like teaching
in a box...and now we have freedom.
Teacher from an IDP School, Sheki District

In the new active learning pedagogies, children are very
active in class, and teachers are facilitators of learning.
Teacher from an urban school, Guba District

1. Introduction

1.1 Active Learning in Azerbaijan

Azerbaijan has invested extensive resources in educational improvement through curricular reform and pedagogical training for teachers. Beginning in the late 1990's, the United Nations Children's Fund (UNICEF) began discussions with Azerbaijan's Ministry of Education (MOE) around active learning (AL) reforms, which were intended to complement curricular reforms already in place in Azerbaijan. Both UNICEF and the Ministry of Education (MOE) agreed to undertake a process of linking new, post-independence national curriculum with interactive and learner-centered strategies. The rationale for this shift rested in the logic that a learner-centered system would encourage interactive, participatory and problem-solving approaches that facilitate independent thinking and a deeper understanding of concepts. The desired outcome is targeted at stronger educational outcomes and better response to the labor market demands.

In 1999, UNICEF Azerbaijan conducted its first analysis of the need for AL in Azerbaijan, which was followed by trainings for teachers in pilot AL schools. Evaluations in 2002 and 2004 demonstrated a change in classroom environments as a result of AL, and in 2008 the MOE endorsed AL by including it in the national curriculum for primary education as the only recommended teaching methodology. Since 2004, UNICEF's contributions to AL have included development of new methodology, teachers' training, preparation of trainers, capacity development of teacher training NGOs, and preparation of training programs for teachers. As a result of their efforts, 6,000 teachers were trained in AL using a comprehensive 10-day training module.

UNICEF's AL work was tied into its global initiatives in May 2010, when Child Friendly Schools (CFS) standards were set and evaluated. A Miske Witt and Associates Inc. (MWAI) report (Clair & Kaufmann, 2010) noted that the AL project had laid the foundation for child-centered pedagogy, the development of the CFS approach, and the development of CFS standards in Azerbaijan. Subsequent to this 2010 report, Azerbaijan developed a set of CFS standards and indicators, which are based on the principles of the Convention on the Rights of the Child (CRC). These standards include a commitment to effective teaching and learning, as implemented through AL.

1.2 Purpose of the report

UNICEF Azerbaijan contracted with Miske Witt & Associates Inc. (MWAI), St. Paul, Minnesota USA to conduct a formative evaluation on AL in Azerbaijan. The objective was to assess the impact of the ongoing AL methodology as part of the overall Education System Reform. Specifically, the objectives were to inform policy decisions on the overall Education System Reform in Azerbaijan; to inform next steps for UNICEF in its support of MOE initiatives; and to document the results achieved and lessons learned. As stated in the Terms of Reference (TOR), the intent of the report is to follow up on the 2004 and 2008 evaluations of AL in Azerbaijan. (See Annex A.) The 2004 report found that AL was being implemented across pilot schools, but that there were challenges to implementation in schools with lower levels of UNICEF or Ministry support (Harris & Gayaneva,

2004). The 2008 report focused on strengthening communication, dissemination, and implementation of the new curriculum to ensure that all teachers understood the document as well as its requisite teaching strategies (Crisan, 2008). As such, this report aims to identify the current status of the national implementation efforts and make recommendations for the next steps. Specifically, the outcomes are reported in the context of the evaluation criteria of *relevance, effectiveness, efficiency, impact* and *sustainability*. These five criteria are used internally within UNICEF to determine continued support of programs, evaluate effectiveness of ongoing programs, and chart a course for future engagement with local stakeholders.

2. Methodology

2.1 Evaluation Questions

The UNICEF Azerbaijan Country Office in consultation with the MOE supervised the evaluation activity, and they identified several key questions under each of the five criteria to guide the evaluation. (See the TOR in Annex A.) Each criterion was evaluated in relation to the project's external environment, in particular with consideration for local, national, and international contexts relevant to the educational reform.

2.2 Evaluation Design

Dr. Christopher Johnstone and Dr. Lisa Burton carried out the evaluation following a desk review of all available documents. They designed instruments, conducted the data collection, and analyzed the data respective to the key questions identified in the TOR. Dr. Johnstone visited four schools, while Dr. Burton visited six schools. Their collaborative involvement in the data collection ensured consistency and awareness of the various issues present in Azerbaijan related to AL. They debriefed frequently to ensure consistency of their practices in the field.

Stakeholders from 10 schools in five districts participated in this evaluation, including schools in Baku, Sheki, Gabala, Masally, and Guba. Eight of the 10 schools participated in the 2004 AL Evaluation and were selected in order to observe changes over time. Four of these schools are classified as early adopters of AL (i.e., original pilot group), and four are classified as later adopters of AL (i.e., original control group). Two additional schools joined the current evaluation in order to provide a wider perspective on equity issues in implementation of active learning. These included one school for Internally Displaced Populations (IDP) and one school in a remote village. The 2004 AL evaluation team selected the original pilot schools based on their perceived capacity to implement AL and geographic diversity across Azerbaijan. They selected the control schools based on their similarity to the pilot school from the same district. The 2013 evaluation team added one IDP and one remote school to the sample based on availability in one of the districts and as exemplars of schools facing unique challenges in Azerbaijan.

The evaluation included one day at each of the 10 schools. The logistics varied slightly depending upon the schedule of the school and availability of teachers and parents, but a similar process was conducted in each location. Methods in the schools included focus groups, surveys, and classroom observations. In all cases, participants were informed that their participation was voluntary and that their identities would be protected. For one part of the evaluation, teachers and parents participated in the focus group discussions, which were facilitated in Azerbaijani with the assistance of translators. (See Annexes E and F.) School directors selected six to eight parents with a range of involvement in the school, including at least two males and two females. They also selected six to eight teachers to participate. Where possible, this group included representatives from each grade-level, varied in experience, and had a mix of males and females.

Teachers and students completed questionnaires as a second part of the evaluation. (See Annexes C and D.) Students completed two-page questionnaires in their classroom without the

teacher or director present, while teachers completed four-page questionnaires in empty classrooms or meeting rooms without the director present. The translator read aloud each of the student questionnaire items, and teachers completed the questionnaire on their own. Evaluators attempted to minimize answer sharing by having participants spread out or cover their papers. Students from two classrooms completed the questionnaire. In order to collect reliable data, these were only administered to grade three through five students. All first through fifth grade teachers were invited to participate in the teacher questionnaire and focus groups.

For a third part of the evaluation, the evaluators conducted classroom observations for 30 to 45 minutes in two classrooms at each school. (See Annex G.) They included one lower-grade class (i.e., first or second grade) and one upper-grade class (i.e., third, fourth, or fifth grade). With the help of the interpreters, evaluators recorded notes about the learning climate, classroom instruction, assessment methods, student engagement, student problem-solving, teacher capacity, instructional materials, relationship between teacher and pupils, and relationship between students. Translation occurred simultaneously with the lesson from the back of the room.

In addition to school-level data, the evaluators collected data from key informants through interviews. (See Annex H). UNICEF identified individuals from a variety of agencies and organizations to participate. These individuals came from the Ministry of Education the Azerbaijan Teacher Training Institute, the Pedagogical University, Parent-Teacher Association, Inkishaf, and the Center for Educational Problems. They provided a wide array of expertise and knowledge on the implementation of AL, as well as visioning for the future. Interviews were facilitated at the respective offices of each of the interviewees. Some were conducted in Azerbaijani through the assistance of a translator, while others were conducted in English. Interviews were audio recorded and saved for future use.

Table 1 provides a summary of the data sources and methods used in this evaluation. It also provides the sample size for each method.

Table 1: Summary of data sources, methods, and sample sizes

Type of Data	Data Source	Method	Males (n)	Females (n)	Total (n)
Quantitative	Students	Questionnaire	190	186	406
	Teachers	Questionnaire	19	132	161*
Qualitative	Parents	Focus Group	17	37	54
	Teachers	Focus Group	8	67	75
	Teachers	Classroom Observation	2	19	21
	Key Informants	Interview	8	2	10

*11 teachers did not specify male or female

2.3 Methodological and Results Framework

The proposal for this evaluation was developed in a "utilization-based evaluation" framework (Patton, 2008) in which the methodological framework was designed to meet the client's specific needs. In this case, specific needs were communicated via a TOR agreed upon by UNICEF Azerbaijan and MWAI. Building on Patton's philosophy, the evaluation team developed research questions, instruments, and analyses based on the information requested in the TOR. The TOR for this evaluation emphasized the five main criteria of relevance, effectiveness, efficiency, impact, and sustainability). Because AL has been "scaled up" in Azerbaijan, results were framed from a national level. This framing was different from the 2004 and 2008 evaluations, where programs were still in a pilot phase. According to MOE and UNICEF sources, AL is now widespread in Azerbaijan. Since a project results framework was not available, the results reported below are based on the five criteria from the TOR. The overall evaluation framework is presented in Annex B.

This evaluation maintained a human rights-based approach in two regards. First, AL was directly linked to the United Nations Convention on the Rights of the Child (CRC), as demonstrated in Table 3 below. By linking AL and the CRC, the evaluators attempted to identify any issues that may be present for pupils in schools. These issues were both educational and rights-based. Further, pupils responded to items about their rights in school, and teachers answered questions about the extent of their support for developing such rights in children. In addition to a human-rights based approach, the evaluators explicitly focused on this report through an equity lens. At multiple times in the report, challenges for specific population groups (i.e., IDP and remote village schools) are mentioned and solutions are proposed. Table 2 represents the overall framework of the report, based on TOR components and utilization-based data collection and reporting.

2.4 Methodological Limitations

Despite attempts to minimize the methodological limitations for this evaluation, four areas may affect the generalizability and interpretations of the findings. First, the schools in this study were not randomly selected. As mentioned above, eight of the schools were included in the 2004 AL evaluation and were selected through a purposeful sampling method to include diverse geographic regions. This evaluation expanded the purposeful sampling method by including one IDP and one remote school to the sample. Despite these efforts, the school sample may not be representative of the entire population. Regardless, the diversity and range of schools included and the extensive data collection allow for key issues to be highlighted, which will be pertinent for advancing the AL efforts in Azerbaijan.

Second, teachers and parents were not randomly selected to participate in the focus group discussions. This may have biased the results if there was not a representative sample of participants included in the data collection. To overcome this limitation, selection criteria guided selection of participants. This process helped ensure a diversity of viewpoints, yet it is not certain the extent to which the criteria were utilized. Given the large number of focus groups conducted for each stakeholder group, there is a greater chance that a wide variety of perspectives were heard.

Third, some students struggled to answer items on the student questionnaires. Efforts were made to counter this limitation by reading all items aloud and providing clarification where necessary. In addition, less weight was given in the analysis to the items that caused the most confusion amongst participants. In most cases, this was due to difficulties with the written translation. These items were pointed out when giving directions and clarification questions were encouraged.

Fourth, as with any evaluation, there is a concern about participants responding in socially desirable ways. The evaluators emphasized to respondents the importance of providing honest feedback and ensured the confidentiality of their responses, but it is unknown the extent to which this actually occurred. Focus group questions were often probed for deeper meaning or reworded in different ways to check for the validity of responses.

3. Findings

The evaluation originally intended to compare the 2004 and 2013 evaluation results as a way of looking at changes over time for the pilot and control schools. Since all schools in 2013 had adopted AL methodologies, the 2013 evaluation could presumably look for differences between the early adopter schools (i.e., pilot) and the late adopter schools (i.e., control). However, it quickly became apparent that there were very few differences between early and late adopter schools. In other words, being a pilot school in 2004 made little difference to their implementation in 2013. Instead, the biggest differences existed between capital and district schools, which is why these categories became the focus of the analyses in this section. In sum, these findings represent the current situation of AL following its gradual implementation from 2008-2013 throughout the country's schools.

Results from this evaluation are reported below and presented according to the five key criteria: relevance, effectiveness, efficiency, impact, and sustainability. These criteria were established in the TOR as the areas of interest for evaluating the AL project. Summaries of the data are included in the annexes in order to verify the findings. Questionnaire results are reported in Annex I for teachers and Annex J for students. Focus group summaries are included for teachers in Annex K and parents in Annex L. Classroom observation data is summarized in Annex M.

3.1 Relevance

In order to evaluate the relevance of the AL program, it is important to identify the actors or parties affected by the innovation. In the case of Azerbaijan's AL program, the primary intended target group is education stakeholders, which include teachers, pupils, and parents. Beyond stakeholders, a program is relevant if it aligns with national priorities, national and international partners' policies, and addresses the United Nations conventions (e.g., the CRC). In all cases, relevance can be defined as the qualitative or quantitative alignment of the innovation with the educational or social goals of the stakeholder or organization.

Teachers

Throughout the 2000s, the MOE and UNICEF worked to scale up the AL project to reach all schools in Azerbaijan through in-service training programs for teachers so that all teachers in all schools would implement AL strategies. However, some teachers were more receptive to AL and its relevance to their teaching than others. Their opinions on its relevance appeared to be related to resource availability. For example, in four schools with high resources[1] (e.g., consistent electricity, computers, projectors), teachers believed that there was clear and valuable alignment between the national curriculum and the methods used to teach it. Teachers believed the curriculum was an important mechanism for preparing children to become, as one teacher explained, "adapted to the new world." In another late-adopting village school with fewer resources, some teachers questioned the ability to implement AL given the current conditions of their school, including a lack of materials for lessons.

In many ways, the alignment of curriculum, teaching methods, and a view toward a highly modernized Azerbaijani state demonstrated the relevance of AL for teachers. Teachers claimed that "in the past children were more passive," but now children are far more "independent" and therefore prepared to live in a modern world. Some teachers, however, questioned the relevance of AL and its alignment with teachers' goals. In one late-adopting village school, teachers questioned whether the approaches actually make a difference in student learning. According to teachers at this school, pupil success in school and preparation for post-school life depend on individual student effort. The teachers utilized AL to a certain extent but noted that no curriculum or pedagogy will deter motivated pupils or truly enlighten unmotivated pupils. "The ones who want to study, study," said one teacher "and the ones who don't, don't."

Pupils

The relevance of AL to pupils' perception of their educational goals and future plans was difficult to measure. Because students in primary schools have only ever experienced AL, it is unknown whether they find the strategies more or less relevant than traditional methodologies. At the same time, AL methodologies appear to be engaging pupils in ways they enjoy. For example, nearly 98 percent of students surveyed stated that they liked coming to school. (See Table 2.) Based on reports from teachers and parents, AL methods create more relevant experiences for students since they are encouraged to find connections between school and their everyday lives.

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[1] These included three urban schools (two early-adopters and one late adopter) and one early-adopting village school.

Table 2: Students' enjoyment with school

	N	% no	% yes
I enjoy coming to school.	369	8 (2.2%)	361 (97.8%)

Parents

The parents who were interviewed identified two main educational and social goals as important. First, parents hoped that children were learning in school. Second, parents hoped that their children were developing socially. In both cases, parents believed AL contributed to these goals. In schools where parents were quite familiar with AL, they could point to specific examples of AL and its relevance to content learning and social development. Parents shared stories of their own education during a time when students were expected to be "robots." According to one parent, "Today pupils are taking part in the learning process. The main driving point is thinking skills."

Parents' understanding of AL varied from school to school. Much of the variation appeared to be related to the effort schools took to explain the methodology. In one school, parents were quite involved, but did not always know what teachers were doing in classrooms. Despite their lack of knowledge of specific methods, parents reported that their school had "nice teachers, good schools, and new methods." Even parents with little knowledge of AL saw the innovation as relevant since children were becoming more independent. According to parents, their children were active in the classroom and that logical thinking was "the main thing now."

National Priorities

The development and subsequent adoption of Azerbaijan's national curriculum from the period of 2004-2006 was a major landmark in the development of the education system. According to the MOE curriculum explanation, "a student stands in the center of the pedagogical process. The whole learning and educational work is directed to meet students' interests and needs, as well as to improve their capability, skills and potential capacity". Based on this statement, there is strong alignment with the goals of the new curriculum and the intended outcomes of AL.

The relevance of AL to the new curriculum is clear and intentional. Mr. Amvar Ambassov, Director of the Curriculum Center (Institute of Educational Problems) explained the link between curriculum and AL strategy, which exemplifies the relevance of AL to Azerbaijan's national educational priorities via its new curriculum:

> Active Learning is not something different, it is integrated into the curriculum. Curriculum is a general concept which includes active learning and technologies. Active Learning is a special part of the new curriculum. The National Curriculum covers pedagogical process, and principles regarding pedagogy. Those principles support active teaching methods. According to the national curriculum, each division has a learning strategy. Each subject has three divisions: 1) context; 2) strategies; and 3) assessment. Learning strategy includes active learning. It includes requirements on learning forms, planning, and interpretation of standards. We also added technology as a recommendation. Learning methods and planning for lessons are all based on Active Learning. Really, all activity is based on Active Learning.

National and International Partners

In discussions with stakeholders in Azerbaijan, four prominent national and international partners related to Active Learning were identified. These included the following: MOE, World Bank, Inkishaf Training Center, and the National Parent Teacher Association (PTA). For each stakeholder group, there appeared to be high levels of relevance to the missions and policies of their

organizations. As stated above, the MOE intentionally integrated AL into the curricular reform efforts to ensure that the two reforms were relevant and connected, rather than two separate initiatives.

The World Bank primarily has supported teacher training relevant to the new curriculum, and there appears to be parallel relevance between the World Bank curricular training and UNICEF's Active Learning agendas.. Through a series of tenders, World Bank has contracted with non-governmental organizations (including Azerbaijani private universities) to provide curricular trainings to teachers. Under the World Bank scheme, open tenders are circulated relevant to specific regions and subject trainings. World Bank's main focus is on processing tenders for training of teachers, although recently they have also begun to evaluate the success of trainings. Since the main focus of such trainings is on the curriculum content, UNICEF trainings that focus on pedagogy appear to complement World Bank funded trainings. Relevance is then established due to the above-mentioned interplay between content and pedagogical strategies.

The Inkishaf Training Centre and National PTA are two non-governmental organizations operating in Azerbaijan. Inkishaf primarily serves teachers, and the national PTA serves parents of schoolchildren. Inkishaf reported that it has been the main instigator of conversations regarding AL. It has been very active in providing training to teachers and conducting research on the use of AL strategies in schools. The PTA focuses on engaging parents in communication and shared governance of schools. Ms. Tamara Sharifova, Director of Azerbaijan's National PTA noted that she wanted parents to be both "customer and participant" in schools and she trained parents in how to play such roles via AL strategies. Although there was no hard evidence that parents were involved in the governance aspects of schools, parents appeared at least to be active "customers" of their children's learning.

United Nations Guiding Documents

The guiding philosophies of UNICEF's AL strategies are to promote active engagement in classrooms, support deeper learning of content, and help children understand their rights as citizens. The innovation does not appear to deeply focus on other UNICEF initiatives such as WASH or HIV awareness. The relevance of these initiatives are questionable given neither WASH nor HIV awareness is spelled out clearly in Azerbaijan's curriculum. Rather, the broader notion of life skills is covered in the curriculum through curricular targets that are aimed to ensure "mastering of necessary information on human rights and freedoms, moral and spiritual values, safety of practical activity, nature, people-nature and individual-community relationships, transferring of initial skills for distinguishing of and commenting on items and events by their nature and implementing of economical, environmental and communicative activities" ("National Curriculum," 2006).

Despite the lack of congruence with some UNICEF initiatives, there is a clear link with the overall guiding principles of the CRC. Table 3 provides an overview of some of the key articles in the CRC and their relevance to AL.

Summary

In conclusion, the AL initiative appears to align well with local goals for the education and social development of children, national priorities of the new curriculum, and United Nations conventions. The decision to integrate AL into curricular reforms appears to have helped this reform initiative become highly relevant to the goals and aspirations found within the national and local educational systems in Azerbaijan.

Table 3: Links between the CRC and active learning

Articles in the CRC	Active Engagement	Deeper Learning of Content	Children Understanding their Rights
Article 2: Respect Rights			X
Article 3: Best interests of child	X	X	X
Article 5: Rights of parents		X	
Article 6: Right to survival			X
Article 12: Right to be heard in court			X
Article 15: Right to Peaceful Assembly			X
Article 16: Right to Privacy			X
Article 17: Access to Information	X	X	
Article 19: Protection from Violence	X		
Article 23: Mentally and physically disabled children should enjoy a full and decent life	X		
Article 28: Right to Education	X	X	X
Article 29: Child's development of self	X	X	X
Article 31: Right to Leisure and Recreational play	X		
Article 37: No child shall be subjected to torture or abuse	X		X
Article 42: Convention on Rights of Child protocols should be widely known			X

3.2 Effectiveness

The AL program was evaluated for its effectiveness in six areas: teacher satisfaction, teaching and learning methods, child rights, assessment, community participation, and relationships. Findings from each are presented below, with the key highlights and evidence supporting the claims.

Teacher satisfaction

Teachers who were interviewed expressed satisfaction with AL methodologies. They said the new approach encourages children to search for their own answers rather than having teachers provide the answers, and this provides children with greater opportunities and freedom to share their ideas and learn. In nearly every focus group, teachers said AL relies on collaborative activities in which mutual learning is fostered between teachers and students. In this learning environment, the teacher is no longer the director but a facilitator of knowledge. Teachers offered stark comparisons between passive methods where teachers did most of the talking and the new AL approaches.

Results from the teacher questionnaire showed that more than 90 percent (91.2%) of teachers agreed or strongly agreed that students learn more from interactive teaching methods than from traditional approaches. (See Table 4.) One teacher, fearful that the curriculum was going to change in the near future, stated that AL should remain despite all the challenges. Others echoed this viewpoint and said the AL approach offers many benefits for students. In general, the data suggest that teachers believe in the AL philosophy and are doing their best to implement its methods.

Table 4: Teachers' perceptions of the effectiveness of AL

	n	% strongly disagree	% disagree	% agree	% strongly agree
Students learn more from interactive teaching methods than traditional lecture approaches.	152	5 (3.3%)	8 (5.3%)	80 (52.6%)	59 (38.8%)

Teaching and learning methods

Survey and interview data from this evaluation suggest that students are actively engaged in their learning under the new curriculum. This was revealed in classrooms where multiple examples of AL methods were observed, including small group work, role playing, class discussions, and questioning. Nearly all respondents (95%) agreed or strongly agreed that they utilize AL methods in their class with even more (96%) expressing confidence in their ability to use these methods. (See Table 5.) This was further evidenced by the fact that a majority (at least 80%) of the teachers characterized 15 out of 18 methods as "active" in UNICEF-sponsored training programs. (The three unfamiliar methods included aquarium, decision tree, and conflict situation.) Similarly, at least 80% of the teachers have used 10 of the 18 methods. (Methods not used included auction, word associations, aquarium, project development, decision tree, conflict situation, zigzag, and carousel. See Tables 30 and 31 in Annex I for a summary of these methods.)

Table 5: Teachers' perceptions of interactive teaching methods

	n	% strongly disagree	% disagree	% agree	% strongly agree
I utilize interactive methods in my lessons.	159	1 (.6%)	7 (4.4%)	95 (59.7%)	56 (35.2%)
I am confident in my ability to use interactive teaching methods.	153	1 9.7%)	5 (3.3%)	88 (57.5%)	59 (38.6%)

Students' and teachers' questionnaires pointed to high student involvement during lessons. This validated teachers' perceptions that interactive teaching methods are used during lessons. Nearly all teachers said that students ask questions (97.6%), share ideas (96.9%), and work together on learning tasks (91.6%). In addition, a majority of students said they ask questions (79%), share ideas (83.6%), and work with other students (80.3%). (See Tables 6 and 7.) Evaluators frequently observed this during lessons when students accomplished tasks through group work. During group work students asked questions of one another and shared ideas about how to complete the assignment. Teachers commented that students under the new curriculum felt more comfortable expressing themselves and becoming involved. Rather than a few top-performing students dominating the lessons, the observations pointed to involvement from a majority of the class. Some teachers perceived that the low-ability students were hidden in small group work, but this was typically followed by comments that student involvement still surpassed its previous level under the former curriculum. While there is room for improvement in engaging more students in all of the learning tasks, a general comparison with the 2004 active learning evaluation confirms that there has been growth in the original control schools.

Table 6: Teachers' perceptions of students' participation in lessons

	n	% strongly disagree	% disagree	% agree	% strongly agree
Students ask questions in class.	155	1 (.6%)	3 (1.9%)	48 (29.8%)	102 (63.4%)
Students share their ideas in class.	156	0 (0%)	5 (3.1%)	64 (39.8%)	86 (53.4%)
Students work together on learning tasks.	156	2 (1.3%)	1 (7.1%)	71 (45.5%)	72 (46.2%)

Table 7: Students' perceptions of their participation in lessons

	n	% no	% yes
I ask questions in my classroom.	376	79 (21%)	297 (79%)
I am free to share my ideas in class.	377	62 (16.4%)	315 (83.6%)
I work with other students in my classroom.	375	74 (19.7%)	301 (80.3%)

The evaluation revealed that teachers relied heavily on the curriculum for implementing their lessons. Although guidebooks offer valuable strategies for engaging students, lessons often resembled a checklist of activities that did not flow together smoothly. Teachers typically changed activities every five to ten minutes, and it was unclear how the frequent changes connected to the primary learning objectives. For example, during one 30-minute observation, the students worked in groups on various tasks related to autumn. Then they participated in a whole-group discussion about climatic zones. This was followed by another conversation about the difference between people and animals. Finally, they discussed the various forms of water. There were no transitions to indicate how each of these components linked together or contributed to the overall goal of the lesson. Even though the students were engaged in activities throughout the entire time period, the meaningfulness of their learning was unclear.

Focus group data indicated that teachers followed the curriculum devotedly with the purpose of simply fitting in as many activities as possible in a 45-minute period. When asked about the meaning of AL, one teacher stated, "It is about 'the more you can teach in 45 minutes, the better'". Other teachers expanded upon this by saying that AL requires many strategies to be used in the same lesson. Some differences were noted between urban schools (i.e., Baku and Guba) and village schools.[2] For example, urban school teachers appeared to have both more resources at their disposal and a better sense of how to link AL strategies with educational goals. In the village schools, it was more common to see methods used in succession without clear cohesion.

Often students were actively engaged in the learning process, but their involvement lacked meaning. Classroom observations provided little evidence that critical thinking was being developed. Many of the lessons relied on knowledge-level questions, memorization, or repetition of teacher statements. Teachers frequently asked closed-ended questions, such as, "How many pictures are there on this card?" rather than asking students to use their own critical thinking to demonstrate conceptualization of numbers. In the few cases where students were tasked with solving a problem, the teacher had already modeled a similar problem. In other words, the students simply replicated what they observed using slightly different circumstances. Students' engagement was frequently confined to basic tasks that, while enjoyable, limited the opportunities for students to generate meaningful knowledge.

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[2] Throughout the evaluation, comparisons emerge most frequently between the capital schools (i.e., Baku) and district schools. This is the only instance in which differences were observed between urban and village schools.

It is important to note this is likely a first stage in the progression toward a more fully adopted AL model. While there is room for growth, anecdotal evidence points to student acquisition of knowledge. This educational outcome cannot be confirmed quantitatively through test scores, but teachers and parents reported gains in learning as a result of AL. Further attention to the creation of meaningful learning experiences will ensure additional benefits of critical thinking and problem-solving skill development.

Learning about Child Rights

By nature, AL methods offer a rights-based approach to learning by focusing on the child. While teachers did not comment on children's rights in the focus groups, on questionnaires, more than 99 percent of teachers indicated that they talk about child rights, and almost 93 percent said they teach about the CRC. (See Table 8.) A conversation about child rights was observed in one classroom where the teacher inquired about students' rights as part of a life skills lesson on taking care of others. Other data suggest that rights-based approaches are enacted by teachers, even when they are not explicitly discussed with students.

Table 8: Teachers' perceptions of their integration of child rights into lessons

	n	% strongly disagree	% disagree	% agree	% strongly agree
I teach my students about their rights.	158	0 (0%)	1 (.6%)	53 (33.5%)	104 (65.8%)
I teach my students about the Convention on the Rights of the Child.	151	3 (2%)	8 (5.3%)	79 (52.3%)	61 (40.4%)

Students' right to participate or to be involved in their education was evidenced through their eagerness to participate in lessons. A majority of students were observed volunteering to answer questions, read texts aloud, or perform other tasks. Teachers in some focus groups commented that students are happier in school now because they are allowed to interact during lessons, especially during group work. Parents and teachers said that AL methods have helped increase students' confidence in their academic abilities. Nearly all students (97.3%) believed they were good at reading. Slightly fewer thought they were good at writing (89.8%) and math (87.4%), as well as generally smart (90.3%). Furthermore, almost all students had dreams of attending college someday (96.8%). (See Table 9.) These statistics indicate high levels of self-confidence among students. There were no statistically significant differences between students from village schools and urban schools on these measures.

Table 9: Students' academic self-confidence

	n	% no	% yes
I am good at reading	374	10 (2.7%)	364 (97.3%)
I am good at writing.	373	38 (10.2%)	335 (89.8%)
I am good at math.	374	47 (12.6%)	327 (87.4%)
I think I am smart.	372	36 (9.7%)	336 (90.3%)
I would like to go to college some day.	373	12 (3.2%)	361 (96.8%)

One equity concern present in the sample schools was that, according to some teachers and parents, students without any preparatory education (i.e.., kindergarten) struggled in school. They

suggested that this greatly impacted children's ability to learn, and, related to this, positively influenced their self-confidence. While kindergarten is not commonly available to students in village schools, teachers said that high parent involvement in education has the ability to counter a lack of formal preparatory education. The right for children to be more prepared to enter school was a theme in almost every focus group discussion.

Assessment methods

Teachers applied formative assessment methods using self-created rubrics in which students were scored according to several criteria. Rather than providing a numerical score of one through five as they had done with the previous curriculum, teachers are now evaluating student progress and providing them with written feedback according to their performance on the criteria. Such practices align with AL methods because the rubrics allow for assessment of tasks and projects. In one classroom, the evaluator observed a teacher providing feedback on a group activity. The teacher had told the students ahead of time the criteria on which they would be graded. Following the activity, the teacher provided real-time feedback on their performances. Teachers in another school highlighted group feedback as valuable because they could assess multiple students at a time during a lesson.

Generally, teachers saw great value in the formative assessment methods. They said that the new assessments allowed students to understand the rationale for their marks rather than receiving a number with no meaning behind it. However, teachers were quick to say that it is time-consuming to develop rubrics for each standard. Since the MOE allowed for the elimination of the formative assessment journal, some schools have decreased the assessment requirements, but other schools have chosen to maintain the original rigor. Despite the shift toward rubrics, a majority of teacher respondents (82.3%) agreed or strongly agreed that students are assessed primarily through tests. On the other hand, almost all of the teachers (97.5%) agreed or strongly agreed that they have used other methods. Nearly all teachers expressed confidence in their ability to assess students on their learning (98.7%). (See Table 10.) Teachers' capacity for creating formative assessments appeared to be at an early developmental stage, however. Although teachers followed the assessment requirements, they did not appear to use the information learned from the assessments to inform their planning of future lessons. Instead, the assessments seemed simply to be another item on an AL checklist.

Table 10: Teachers' perceptions on assessment

	n	% strongly disagree	% disagree	% agree	% strongly agree
Students are assessed primarily through tests.	153	1 (.7%)	26 (17%)	53 (34.6%)	73 (47.7%)
I use other forms of assessments besides tests.	158	1 (.6%)	3 (1.9%)	64 (40.8%)	90 (57.3%)
I am confident in my ability to assess students on their learning.	157	0 (0%)	2 (1.3%)	78 (49.7%)	77 (49%)

Parents reported mixed feelings on the formative assessment methods. There appeared to be a division between those from district and capital schools. Parents from urban schools expressed greater awareness of the new assessment system and commented that the rubrics provide specific information about where the child needs to improve. Others noted that young children sometimes receive hand-drawn smiles and stars on their papers, a practice that does not damage their self-confidence as is the case with the numeric grading scale of one through five. Parents from the village schools, however, tended to not know much about the new assessment method. They reported feeling confused about the meaning of the information provided to them. Some wished that the former one through five-point system would be returned, which they believed was easier to interpret. In all cases, parents expressed a desire to learn more about the grading system.

Parent involvement

The extent of parent involvement varied by school, but relations between teachers and parents generally were positive. In every school, parents said parent meetings were their primary means of communication with teachers, noting that these meetings generally revolved around academic or behavior concerns. In addition, parents and grandparents reported visiting schools occasionally in order to monitor their child's performance. Parents in some schools described parent associations or committees in which they were involved, which included planning recognition events, holding fundraisers, and addressing school safety concerns. Teachers and parents spoke of a clear divide in their roles related to the operation of the school, however, with parents' primary responsibilities focused on assisting with children's education at home.

Teacher questionnaire data revealed that a majority of teachers think they meet regularly with parents (91.2%) and that they regularly invite parents into the classrooms (89.8%). (See Table 11.) While there were no statistically significant differences between the capital and district schools on these items, more students from the capital schools (69.1%) than from district schools (54.8%) said their teachers and parents work together.[3] (See Table 12.) Other statistically significant differences appeared between capital and district schools with regard to parent associations. More teachers in Baku than in the district schools perceived the PTA to be effective (100% vs. 74.8%) and supportive of AL (94.6% vs 69.9%). Teachers in the capital also agreed more strongly that parents were involved in the governance of schools (97.2% vs. 62.7%).[4] (See Table 13.) However, focus group data showed that very few to no parents actually were involved in management or governance of school operations.

Based on focus group data, it appeared that parents' involvement in the IDP and remote village schools was limited to individual parent-teacher meetings. One parent at the IDP school said that ideally they would be more involved in helping the school, but they could not do so since they "work night and day with overloaded brains trying to manage everyday problems". A parent from the remote village school lamented that they are uneducated rural people and do not know much about the school. These beliefs point to inequities for parents in the most under-resourced of the country's schools.

Table 11: Teachers' perceptions of interactions with parents

	n	% strongly disagree	% disagree	% agree	% strongly agree
Teachers in this school meet regularly with parents.	159	3 (1.9%)	11 (6.9%)	62 (39%)	83 (52.2%)
Parents are invited into the classroom.	157	2 (1.3%)	14 (8.9%)	65 (41.4%)	76 (48.4%)

Table 12: Student perceptions of teacher and parent relationships

	School	n	% Yes	Pearson chi-square	p-value
Teachers and parents work together at my school.	**Baku**	110	69.1%	6.66	.01
	Districts	281	54.8%		

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[3] These differences were statistically significant, as indicated by a chi-square test.
[4] These differences were statistically significant, as indicated by a Mann-Whitney U test.

Table 13: Teacher perceptions of the PTA

	School	n	% agree or strongly agree	z-score	p-value
The PTA is effective at this school.	**Baku**	37	100%	5.73	<.001
	Districts	115	74.8%		
The PTA has been supportive of AL.	**Baku**	37	94.6%	5.97	<.001
	Districts	113	69.9%		
Parents are involved in the governance of the school.	**Baku**	36	97.2%	5.06	<.001
	Districts	110	62.7%		

Relationships

Teachers commonly described strong relationships between teachers and students, and this was observed in the schools as well. This may be one of the strongest outcomes of AL methodologies thus far. In focus groups, teachers believed that their relationships with students have been strengthened as a result of AL. Teachers in one school explained that they were no longer viewed as formidable personalities but more as friends. Other teachers in various schools said that the children approach them more readily, offer hugs, and share their secrets. These actions were observed in many of the schools where children were seen running to greet teachers with smiles on their face or talking with them in the hallways. Children indirectly affirmed these findings with nearly all of them stating that teachers are friendly to students (94.9%) and that teachers and students in the school are happy (93.4% and 96.8%, respectively). (See Table 14.)

Table 14: Students' perceptions of the teacher and student happiness

	n	% no	% yes
Teachers are friendly to students at my school.	373	19 (5.1%)	354 (94.9%)
Teachers at my school are happy.	376	25 (6.6%)	351 (93.4%)
Students at my school are happy.	373	12 (3.2%)	361 (96.8%)

While relationships between teachers and students appeared to be strengthened under AL, this was not necessarily the case for student-student relationships. The lessons observed tended to demonstrate competitiveness among students and a lack of compassion toward those who provided the wrong answer. In some cases, students taunted other students for providing the wrong answer and appeared to fight for the teacher's attention. Furthermore, only 70 percent of students said they feel safe on the playground, and only about two-thirds of students (64.8%) said it was easy to make friends. (See Table 15.) There were statistically significant differences between Baku and district schools on two areas related to student relationships. More students from district schools said they were friends with people different from them. However, they were also more likely to say that there are bullies in their school.[5] (See Table 16.) These findings could be a result of the smaller social circles in the district schools.

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[5] These differences were statistically significant, as indicated by a chi-square test.

Table 15: Students' perceptions of safety and ease of relationships

	n	% no	% yes
I feel safe on the playground.	370	111 (30%)	259 (70%)
I find it easy to make friends.	372	131 (35.2%)	241 (64.8%)

Table 16: Students' perceptions of relationships

	School	n	% yes	Pearson chi-square	p-value
I am friends with people who are different from me.	**Baku**	56	52.3%	11.38	.001
	Districts	203	70.5%		
There are bullies at my school.	**Baku**	39	35.8%	15.41	<.001
	Districts	160	58%		

3.3 Efficiency

Efficiency is often understood as a low-cost intervention, but in reality low-cost interventions or initiatives can bring about poor results. Rather, an efficient model is one that both costs little and elicits high results. In order to achieve efficiency, initiatives must undertake evaluative activities to foster the best results from available resources. Figure 1 demonstrates the optimal model for efficient initiatives.

Figure 1: Efficiency matrix

	High Cost	**Low Cost**
High Impact	Expensive	***Efficient***
Low Impact	Ineffective	Inexpensive

Adapted from UNESCO (n.d.)

For the sake of this project, UNICEF is focused on identifying results that have emerged from its own investments in AL. UNICEF's involvement in AL implementation in Azerbaijan has primarily been through financial support of 10-day training sessions designed to support mass orientation of teachers on AL strategies. In many ways, this approach could be characterized as a low-cost approach. In this section, costs and results will be reported in order to determine whether the curriculum reform and parallel UNICEF training could be characterized as expensive, efficient, ineffective, or inexpensive. This section of the report illustrates where efficiency of the AL project could be improved through slight changes in programming and operations.

Efficiency: UNICEF Program

Based on data reported above, it appears as if the UNICEF model of sensitization is an efficient way of creating awareness of base-level understanding of AL in teachers, but not in creating authentic AL environments in schools. To this end, the 10-day model appears to be very efficient for the purposes of training large numbers of teachers and introducing them to AL, but it has not been

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effective in supporting teachers in day-to-day application and implementation of AL, where the most support appears to be needed.

Supporting data for the above paragraph comes from teachers, who report that UNICEF trainings were extremely useful in undertaking AL approaches in classrooms. However, the effectiveness of this single-event training is challenged repeatedly in research on training and teacher professional development (World Bank, 2008). Results from this evaluation also point to opportunities for greater efficiency through new structures of teacher development.

The effectiveness section of this report reported numerous examples of teachers feeling overwhelmed by the notion of attempting to implement multiple strategies in a 45-minute period; teachers and schools perplexed by the resource needs for active learning (this presented an equity dilemma for low-resource schools); and a lack of alignment between strategies and curriculum. These examples represent inefficiencies in training because teachers were working at a more feverish pace than may be necessary to optimize student learning; teachers may be investing more in materials than needed, thus straining school-level and personal resources; and teachers are not aligning content with teaching approaches (i.e., they are simply applying AL strategies in succession), which results in unintended consequences.

At this stage of implementation, a more efficient model would be to: 1) continue short trainings for those completely uninitiated into AL strategies, with a view to ending the trainings in the next few years; and 2) implement a coaching and reflection scheme for the rest of teachers to support more efficient implementation of AL on a consistent basis. In order to enact this model, UNICEF would need to work more closely with MOE in order to identify and train "mobile coaches" who would be available to work with schools and districts. Currently, the 10-day model reaches 137 teachers per trainer per year for initial training. An AL coach located in a district or urban area could support as many as four to five teachers per day with customized suggestions on how to improve AL. Over the course of a school year, it may be possible to triple the number of teachers reached through UNICEF programming (4 teachers per day x 100 coaching days = 400 teachers). This model would most effectively and efficiently be aligned with a "professional learning community" approach, where teachers in each school would meet regularly as a professional learning community to reflect on lessons learned from coaches and to share insights gained from reflecting on their own teaching practice.

Efficiency: MOE

One of the reasons why AL has not been implemented in a deep way in classrooms is because teachers are not receiving information about this approach until after they are already practicing. A 10-day in-service program is helpful, but may not be enough to change existing approaches. According to Mr. Fakhraddin Yusifov of the State Pedagogical University, AL is not fully implemented into the pre-service curriculum that prepares teachers. Therefore, teachers are engaging in non-AL approaches for their pre-service training, then UNICEF funds are spent to introduce new methods after graduation. Rather than waiting until teachers are already in classrooms, an efficient mechanism for reaching thousands of teachers is to immerse pre-service teachers in AL strategies. Investments in curricular reform at pedagogical institutes will likely have a multiplier effect on Azerbaijan schools, as thousands of new teachers entering schools will already have knowledge of AL and not require re-training (see Vavrus et al., 2011 for further discussion on teacher training institutes' role in systems change).

A second approach to becoming more efficient at the Ministerial level is to examine the procurement of materials and support of at-risk pupils. Currently, Baku and District schools make budget requests to MOE, which provides resources back to schools and districts for teacher salaries, utility expenses, and materials requested. In this scenario, schools act as individual units for purchasing of materials. Frequently, teachers reported that this model was ineffective because teachers and parents bore the costs of necessary materials for AL. A stakeholder with knowledge of

both World Bank and MOE discussed an alternative, efficiency-focused model. If a minimal package of materials for AL can be identified (e.g., two reams of paper, flip charts, markers, computer, and screen for every teacher), MOE can order such materials in bulk, thus reducing the per-unit cost of such materials dramatically. More research is needed to identify the most desired and effective AL materials package, but it is clear that teachers feel they need more materials. Current procurement practices could benefit from efficient identification and purchase of such materials.

A third approach to both introducing efficiency and improving equity in schools is to introduce a per capita funding model. Rather than funding schools and districts on perceived needs, efficiencies may be introduced by identifying a specific cost per pupil and distributing block funds to districts and schools. Such costs, however, would necessarily vary in order to circumvent some of the inequities demonstrated between schools in this study. In addition to a blanket per pupil allocation, supplemental equity allocations for at-risk students (e.g., rural, IDP, special needs) could mitigate needs for additional staffing or material needs in an efficient manner. Miske Witt & Associates' per capita formulas developed for UNICEF Serbia offer detailed and useful examples (unpublished report available upon request).

Conclusions

Overall, both UNICEF and MOE have been highly successful in introducing AL into the contemporary Azerbaijan schooling system through careful integration with the curriculum. However, efficiencies can be introduced by: 1) reaching teachers earlier (focusing on Pedagogy Institutes to inculcate AL strategies); 2) focusing on deeper implementation (coaching teachers to be thoughtful and efficient implementers of AL as it aligns with curriculum); and 3) re-thinking how schools are funded in order to support material needs for AL and supplemental needs for pupils who need additional supports.

3.4 Impact

The AL program impacted various stakeholders in the education system of Azerbaijan, including children, teachers, and parents. As derived from the findings in the effectiveness section of this report, the impacts can be categorized as social, economic, and environmental. Each of these areas provides insight into future directions for the AL program related to building an educational system that maximizes impact.

Children

Children are the primary beneficiary of the AL program with a goal of increasing their capacity for critical thinking and preparing them for careers in the global economy. While increased cognitive development is an intended outcome of learner-centered methods, the evidence of this is not yet clear in Azerbaijan. The scarcity of resources and a lack of on-going training appeared to negatively influence implementation of AL. These factors have strong potential for hindering the desired gains in children's cognitive development. However, progress has been made. Children are more engaged in their learning now than they were when using the traditional methods. As noted earlier, students asked questions, offered ideas, and worked with classmates. Equally important, children reported enjoyment in school. This may be related to the positive relationships that they have developed with teachers since the implementation of AL.

Even though learning achievement data were not available, students clearly have benefited from the implementation of AL. While this indicates a move in a positive direction for children, there is additional room for growth. Impact was observed to be the greatest in terms of active engagement and the weakest in terms of critical thinking and problem-solving skills.. The challenge is to make all engagement meaningful through intentional connections to student learning outcomes or to standards in the curriculum. Future data from the international PISA, TIMSS, and PIRLS assessments will

provide useful comparison data to evaluate the long-term impacts of the AL method on student development.

Teachers

Teachers generally supported the shift toward AL because of its impact on their teaching and on pupil learning. Despite the economic challenges, teachers freely described their work environment as safe, comfortable, and supportive. They explained that this environment was conducive to student learning, which affected their ability to teach more effectively.

Nevertheless, the vast economic implications also impact teachers' implementation of AL. Since the new curriculum and AL methods require additional resources, teachers have been burdened with additional financial expectations. Their salaries do not support the purchase of additional materials, yet the new curriculum requires more materials than previously used. While teachers worked their best to implement AL in an under-resourced environment, they struggled to do so and expressed frustration to the point of despair. The financial aspects of AL were some of the challenges that teachers in the focus groups discussed most frequently.

Parents

Parents also faced additional financial burdens. This impact extended to students who often felt ashamed for not having the necessary tools with which to support their own learning. Theoretically, the long-term impact of AL could prove beneficial for families, but it is uncertain at this time. The intent of the new curriculum is to prepare students for a global economy by developing critical thinking and problem-solving skills. If this is accomplished, it could open up greater entrepreneurial and financial opportunities for students in the future. However, short-term economic implications could hinder the potential growth.

Parents have also been impacted by the shift in assessment formats. They expressed confusion around the meaning of narrative text associated with the rubrics. Many wanted to return to the previous numbering system for student assessment because they did not understand the new approach. This appeared to have a greater impact on parents from village schools than those from city schools. While the narrative assessment methods actually provide parents with more information on their child's learning than previous numeric-based systems, some parents appear nostalgic for older, rankings-based systems.

3.5 Sustainability

The sustainability of any initiative depends on the capacity of stakeholders to integrate and continue activities independent of initial support mechanisms (Fullan, 2001). In the case of AL in Azerbaijan, sustainability will require support at the school, district, and national level.

School Level Sustainability

The sustainability of any intervention hinges on many factors. One factor paramount to UNICEF is support from local stakeholders, including school administrators. In Azerbaijan, 93 percent of teachers reported that their school director supported AL. When asked what directors were doing to support this innovation in schools, teachers reported that they were generally supportive of teachers attending outside trainings on AL. In one school, the director incorporated opportunities for teachers to reflect on their teaching practice together. Teachers were also supportive of AL because they believed the philosophy had the potential to maximize student learning.

During focus groups, teachers shared examples of how AL could be sustained at the school level through engagement of a supportive principal. In one school with a highly involved director, teachers were involved in peer learning through model lessons and reflection periods. This director

frequently visited classrooms to offer constructive suggestions for improvement. In another model AL school, the director implemented occasional trainings to support the specific needs of teachers. While these instances may not be typical throughout the country, they are "home-grown" Azerbaijani examples that could be extended to schools across the country. These examples demonstrate the value of strong leadership in the implementation of AL and are a model for sustainability.

At the same time, teachers reported that there is not enough financial support for the implementation of AL, and they are heavily burdened by the need to purchase materials that are helpful for implementing interactive methods in the classroom. Additionally, teachers must rely on material provisions from parents, which families cannot easily afford. A teacher in one focus group explained that any system is dependent upon its many components. In the case of AL, he said there must be sufficient wages, proper training, and ample resources. Despite the fact that most teachers believed in the AL philosophy, they agreed that implementation greatly suffered because of a lack of attention to these three areas. Teachers in two schools suggested that the AL approach does not consider the unique conditions in Azerbaijan. One teacher said, the new curriculum "is imitated in our country from other countries rather than implemented in the real sense of the word". They believed that AL expectations needed to be adapted to fit their educational context.

Further, there were disparities between schools in the capital and schools in the districts in terms of the available resources. Schools in Baku typically had greater access to technology to support their teaching, such as overhead projectors, smart boards, and computers with Internet. Survey results indicate teachers from Baku were more satisfied than teachers from district schools with their AL training courses (100% vs. 79.8%) and the availability of materials (100% vs. 31.1%). They were also more likely to say that in-service trainings were promoted in their school (96.4% vs. 85.6%).[6] (See Table 17.)

Table 17: Teachers' perceptions on training and materials

	School	n	% agree or strongly agree	z-score	p-value
Training courses were adequate for practical implementation of AL.	**Baku**	34	100%	4.49	<.001
	Districts	114	79.8%		
There are enough teaching materials to help me teach in an active way.	**Baku**	36	100%	7.49	<.001
	Districts	119	31.1%		
In-service trainings are promoted by directors, inspectors, or district administrators.	**Baku**	28	96.4%	4.39	<.001
	Districts	112	85.6%		

Statistically significant differences existed on teachers' perceptions of support at both the school and district level. Six items were averaged together to create a mean scale score for measuring overall support. These included support from school managers, directors, MOE inspectors, district administrators, MOE officials, and UNICEF.[7] Teachers in both the capital and district schools agreed that these stakeholders support AL, yet there were differences between them.[8] Teachers in capital schools had stronger perceptions of support than their counterparts in the district. Their support was more consistent, while the support in the district schools showed greater variability. (See Table 18.)

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[6] These differences were statistically significant, as indicated by a Mann-Whitney U test.
[7] A reliability test on the six items indicates an alpha score of .86, which offers strong support for grouping these items together for measuring a single construct.
[8] These differences were statistically significant, as indicated by an independent samples t-test.

Table 18: Teachers' perceptions of external support for AL

	n	Mean*	sd	t	p-value
Baku	38	3.78	.34	5.33	< .001
Districts	123	3.32	.50		

*The mean is based on a scale of 1-4. A score of one equals strongly disagree, and a score of four equals strongly agree.

Overall, there appeared to be a rural-urban divide in terms of perceived support. Although most stakeholders would agree with the face validity of claims that Baku and district schools are different, the above data demonstrate that nationwide sustainability may hinge on more equitable models of support across geographical areas – sometimes known as affirmative action or positive discrimination – in order to reduce disparities in perceived support for sustainable implementation of AL.

District and National Level Sustainability

The AL project in Azerbaijan has structures in place at the district and national levels for supporting ongoing professional development opportunities for teachers. These include workshop trainings and supervisory support from MOE and district inspectors. Currently, the MOE is working in collaboration with the World Bank and the Teachers' Institute to provide in-service training on Azerbaijan's new curriculum, which is tied directly to AL. Teachers reported in focus groups that MOE trainings were helpful. In addition, 92 percent of teachers overall agreed or strongly agreed that MOE inspectors (i.e., inspectors for Baku) were supportive of AL. However, only 76 percent of teachers believed that district inspectors supported AL. The reason for the discrepancy is unknown, but these findings align with overall findings in this report. Baku schools, which are directly affiliated with the MOE, tend to have more positive views and more authentic implementation of AL than district schools. Such findings appear to align with perceived levels of support from central and district inspectors.

3.6 Summary of Key Results

Key Result #1: Clear alignment of curriculum and methods

Since the 2004 evaluation was conducted, UNICEF and MOE have collaborated to envisage national policy that incorporates a new curriculum rooted in AL methodologies. By all measures, the efforts from both UNICEF and MOE have produced an educational reform that shows solid alignment between these two areas. Parents and teachers consistently correlated the new curriculum with AL approaches to learning. In addition, the curriculum provides teachers with AL strategies to utilize during lessons, which teachers relied upon in their lesson planning. These examples demonstrate the effectiveness of UNICEF and MOE efforts to build a cohesive policy aimed at improving student learning through more learner-centered approaches.

Key Result #2: Widespread awareness and usage of AL strategies among teachers

The evaluation clearly demonstrated widespread awareness among teachers for AL strategies. In every focus group, teachers spoke freely about the rationale behind AL methodologies, in addition to detailed descriptions of its practice. Beyond talking about AL, teachers implemented the strategies in their lessons. Nearly every observation included some element of student engagement, including small groups, questioning, and role plays. Stakeholders consistently attributed this success to UNICEF's efforts to develop and roll out teacher training throughout the country. Several key informants interviewed during this evaluation identified UNICEF as a critical actor in the implementation of AL by.

Key Result #3: Differentiated levels of awareness and involvement from parents

Parents in village schools demonstrated less awareness of and involvement in the education reform than those in the capital. This was especially the case for the IDP and remote village school in this evaluation's sample. Parents in the capital had greater opportunities for involvement in parent-teacher associations, while involvement appeared to be limited to individual parent-teacher meetings in the village schools. Capital city parents also spoke more clearly about curricular changes that have occurred under the new AL education reform. Parent involvement is a core component of child-friendly schools, as well as the AL initiative. The trainings did not focus heavily on building community awareness for the reform, and most teachers and parents did not think levels of involvement had changed as a result of the AL project. Future efforts from UNICEF and the MOE would prudentlyfocus on building greater community participation in the educational reform.

Key Result #4: Consistent engagement of students in their lessons

According to teachers, their utilization of AL methods engages students to a greater extent than the previous education system where students were more passive during lessons. Further, students' active participation was observed in classrooms where they asked questions and participated in small groups. Achievement data was not available for this evaluation, so quantitative assessments of learning growth are not possible. However, there was ample anecdotal evidence to suggest that students learned more simply by being engaged at greater levels. For example, teachers and parents commented that students learned content more easily because they freely asked questions and participated in class activities. These outcomes resulted from UNICEF and MOE efforts to implement a curriculum that challenges teachers to engage students.

Key Result #5: Limited growth of critical thinking and problem-solving skills

While anecdotal evidence pointed to students' increased capacity for knowledge development in AL classrooms, there was little evidence that pointed to advancement of critical thinking or problem-solving skills. Students' engagement in lessons was typically confined to learning facts rather than to constructing their own ideas about a topic. While the 10-day training included components that focused on critical thinking and problem-solving, the limited amount of available time may have required greater attention on the most basic aspects of implementation. As a result, teachers appeared to be more comfortable executing particular strategies than encouraging higher-level thinking. This result highlights an area of focus for future UNICEF involvement with MOE.

Key Result #6: Strengthened relationships between teachers and students

Strong relationships were observed between teachers and students in nearly every classroom and school. For example, students smiled frequently during lessons and appeared comfortable in their verbal interactions with teachers. Their teachers' approachable dispositions and friendly demeanors likely influenced this level of comfort. Students in some classrooms continued to abide by Soviet-era procedures for sitting still and silent, but in most cases students were encouraged to interact freely. Teachers commented on changes in their interactions with students, citing more open lines of communication under the new curriculum. In addition, students greeted teachers and school directors with hugs and smiles. This result occurred following adoption of the new curriculum and under encouragement from UNICEF and the MOE to foster stronger relationships with students.

Key Result #7: Growing acceptance among various entities for AL

Teachers in every district had strong perceptions of stakeholder support and acceptance for AL. They believed that directors, MOE inspectors, district administrators, MOE officials, and UNICEF all support AL efforts. Teachers in the capital schools held stronger perceptions of this support, but even teachers in the district schools had relatively strong perceptions of support in this area. Implementation of national reform efforts is an enormous challenge that requires the

involvement of multiple stakeholders. The evidence suggests growing support for the reform. Some key stakeholders still reject the ability of AL to transform the education system, but the strength behind its supporters may be enough to push the efforts forward. This is a result of UNICEF's intentional efforts to work collaboratively among various entities to institutionalize AL throughout Azerbaijan.

Key Result #8: Insufficient materials to support classroom implementation of AL

Implementation of the AL project has not led to greater material support for teachers. Teachers reported greater needs for basic materials to implement the new curriculum and stated that their current wages could not support the purchase of these supplies. Where possible, parents provided classroom supplies; however, this was primarily confined to the capital schools. While teachers agreed that greater access to technology would strengthen their lessons, most pointed out that provision of the most basic materials was more important. Teachers' lessons relied on the availability of paper in particular, and they expressed a great disadvantage for the students in instances where this could not be supplied. Future attention to this issue must focus on either the provision of necessary materials or on revising the training to emphasize implementation in a low-resource context.

Key Result #9: Far-reaching in-service training efforts

A reform of this magnitude requires great attention to the training current teachers. Over and over again, key stakeholders in this evaluation commented that this effort would not have been possible without UNICEF's contributions. UNICEF played a major role in the development of the training curriculum as well as in the preparation of NGOs to implement it nationally. As a result, 1,000 individuals were trained as trainers. In a four-year time period they subsequently trained 40,000 teachers. This massive effort points to the foresightedness of UNICEF in the whole scheme of AL.

4. Conclusions and Recommendations

This report has established the relevance of AL to various stakeholders, national priorities, and international policies. Despite some hesitance among a few teachers and parents, it is largely deemed as a valuable reform that is essential for advancing the quality of education in Azerbaijan. However, questions still linger about its effectiveness, efficiency, impact, and sustainability. The conclusions drawn below address the overall effectiveness and impact of AL in relation to educational research on the topic. This is followed by recommendations for advancing the effectiveness and impact of AL in ways that are efficient and sustainable.

4.1 Conclusions

AL has been conceptualized in a variety of ways globally. Teaching methods that are intended to engage learners in active collaboration, generation of knowledge, and participation in classroom discussions have been termed as learner-centered (Schweisfurth, 2011), participatory (Aikman, 1998), post-colonial (Gu, 2005), child-centered, and democratic (Sripakash, 2010). In all cases, pedagogical reforms have intended to supplement or subsume traditional teaching pedagogies, which are characterized by teacher lecture and student listening, with new pedagogies that are designed to promote independent thinking and active engagement in the curriculum.

This evaluation revealed that AL is frequently defined as strategies used by teachers to engage students in their learning. In other words, the students should be doing something rather than sitting passively. However, AL as a "learner-centered" pedagogy should encompass more than technique alone. Schweisfurth (2013) offers a framework for conceptualizing learner-centered education (LCE) beyond dichotomous views of a classroom (i.e., active vs. passive). She suggests that it needs to be viewed as a continuum that ranges from "less learner-centered" to "more learner-centered". This model was adapted to fit the Azerbaijan context, as seen in Figure 2. The far left side of the continuum depicts situations in which AL is unknown and where interactive methods are not

utilized in lessons. The middle of the continuum represents a circumstance where active strategies are utilized, but with little attention to their purpose. The far right side points to instances where there is a clear connection between the AL methods utilized and the larger curricular goals. Teachers' abilities to reflect carefully on lessons and to select interactive methods most suited to the objectives represent the ideal point of achievement for the AL project. This point on the continuum marks the transition from active learning to meaningful learning.

Figure 2: Continuum of active learning

| No knowledge of AL strategies | Application of AL methods with little thought about which methods and why | Thoughtful application with careful reflection and matching methods with curricular goals |
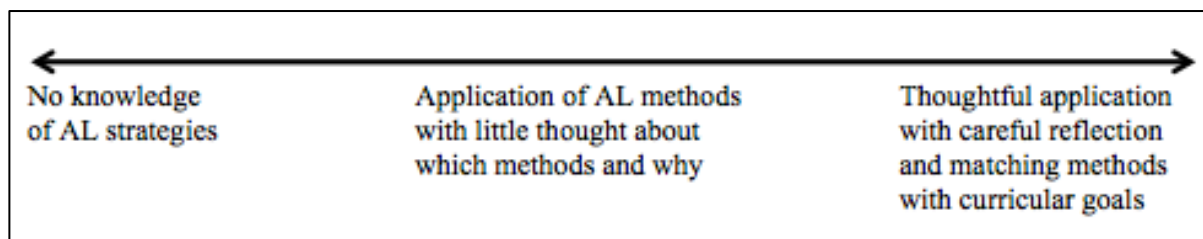
Based on the findings of previous evaluation reports, teachers have progressed from possessing no knowledge of AL strategies to incorporating AL techniques in their lessons. It was promising to observe teaching practices that incorporated these methods. However, there did not appear to be clear connections between the overarching lesson objectives and the techniques utilized. As a result, teaching practices in Azerbaijan have progressed to incorporate more widespread examples of AL methods, but they are not consistent in their ability to create meaningful learning experiences. There is room for growth in teachers' capacity for aligning curricular methods and goals. A shift toward more intentional classroom instruction that includes careful reflection on lesson design will increase the potential for creating student-centered lessons that incorporate critical thinking and problem-solving.

Movement toward the right side of the continuum is a challenging shift in pedagogy that requires ample support and time for practice. A reform of this magnitude produces disequilibrium (Piaget, 1971) for teachers where they may feel uncomfortable with the necessary changes. When there is too much disequilibrium, they retreat to a form of teaching that is familiar to them. This is an expected part of the process. Educational reforms take many years to fully implement and to be deeply understood (Fullan, 2001). There is evidence that Azerbaijan is on this path. The continuum above represents a process, or a journey, on which lessons gradually become more meaningful. It cannot be categorized as an either-or achievement. Progress has been observed with teachers beginning to understand and incorporate AL strategies into their lessons. They have identified the benefits and voiced their acceptance for its continuation. The challenge lies in equipping teachers with the necessary expertise, reflective capacity, and resources to implement AL in ways that produce students who can think critically and solve problems. This is what transforms active learning into meaningful learning.

4.2 Recommendations

Learner-centered strategies have met with mixed results worldwide (Schweisfurth, 2011; Vavrus, 2009). The promise of active, learner-centered approaches lies in improved comprehension of academic content, improved relations between pupils and teachers, improved relations between pupils, and the support of pupils acting as engaged citizens in schools. However, changing teacher behavior and classroom dynamics is a difficult process because teachers may not have the capacity to change, or cultural expectations prevent pupils from understanding what is expected of them in an AL classroom.

As AL moves forward in Azerbaijan, there are many opportunities for improved practice and efficiency related to creating meaningful, and not just active, learning experiences. From the schools visited, there is a sense that AL is present and utilized to a certain extent to facilitate learning.

Building on the continuum presented above, and Schweisfurth's assessment that reforms such as AL should be context-specific, the evaluation team proposes several recommendations to various entities for sustaining or improving the effectiveness, efficiency, and sustainability of AL in Azerbaijan. These recommendations surfaced during conversations with key informants, as well as with teachers and parents. They were validated as potential next steps by key stakeholders in relation to the findings of this evaluation.

Figure 3: Recommendations for next steps

		Short term recommendations (2014-2016)	**Long term recommendations (2017-2026)**
MOE	1	Maintain the current policy for AL and continue expansion into secondary grades.	Conduct an evaluation to determine the efficacy of implementation in the secondary grades.
	2	Develop and pilot national achievement tests that align with student learning outcomes and AL methodologies.	Implement revised achievement tests on a national scale. Monitor changes in achievement disaggregated by district.
	3	Determine the extent to which teachers utilize formative assessment data to inform future lessons.	Adjust formative assessment requirements to be less time-intensive and more focused on its utilization in lesson planning.
	4	Conduct a study to determine the most commonly utilized materials in AL lessons. Purchase materials in bulk to receive a lower per-unit price.	Continually evaluate "priority materials" required for teachers to implement AL. Adjust purchasing as necessary.
	5	Facilitate meetings with administrators and instructors at the pedagogical university, along with other organizations familiar with higher education, to discuss ways of aligning AL with pre-service teacher preparation. Develop a work plan and timeline for implementing these changes.	Continually monitor the alignment between pedagogical university training on AL with the MOE requirements for teachers.
	6	Develop a teacher compensation system that provides wages or other rewards for lesson planning time, in addition to actual teaching time.	Continue to compensate teachers for preparation and teaching time with attention toward cost of living increases.
	7	Organize a committee to conduct a cost-benefit analysis on adopting a per-capita funding structure.	If appropriate, implement a per-capita funding structure with allotments designated for students with additional challenges (e.g., IDP or special needs).
UNICEF	8	Work with MOE to develop (or further expand) an educational portal for teachers to share resources. Ensure alternative methods for teachers without access to technology.	Maintain the functionality of the education resource portal.
	9	Work with NGOs and school districts to design a coaching/school-based professional learning community model of professional development that will eventually replace the current 10-day training model. Emphasize the role of	Evaluate the effectiveness, efficiency, and sustainability of the coaching/school-based professional learning community model.

		coaches to build teacher capacity for building opportunities for critical thinking and problem-solving.	
	10	Work with NGOs and school districts to develop and implement training for AL coaches.	Create a structure for sustaining the AL coaching/school-based professional learning community model beyond UNICEF support.
	11	Work with NGOs and school districts to develop and implement training for school directors and deputy directors on AL methods and school-based professional learning communities.	Conduct periodic assessments of director capacity for supporting AL and school-based professional learning communities.
	12	Support MOE's conversations with the pedagogical university to further align AL into pre-service teacher training.	Facilitate workshops with instructors at the pedagogical university to develop syllabi that incorporate and teach AL methodologies.
Districts	13	Train directors and deputy directors on AL methods so they can provide technical support at the school-level.	Allow time for directors to discuss the challenges of AL and brainstorm solutions during monthly cluster meetings.
	14	Work with UNICEF and NGOs to develop a coaching model of professional development. Hire coaches to work one-on-one or in small groups with teachers in district schools.	Expand the coaching model to the entire district by hiring master teachers to work as part-time coaches in their district.
	15	Promote collaboration between teachers for sharing lesson ideas and resources through professional learning communities.	Continue providing opportunities for teacher collaboration and supporting the development of school-based professional learning communities.
	16	Design tools (e.g., school report cards) for school personnel to self-assess their progress on AL and note areas where further support is required.	Monitor changes in the various categories on the tool (e.g., school report card) and adjust strategies depending upon the areas of need.
	17	Develop a school readiness plan to ensure students are prepared for first grade (e.g., offering kindergarten; providing parent education courses on school readiness; facilitating short-term school preparation sessions/camps).	Provide ongoing support on school readiness issues.
Schools (Teachers/ Parents)	18	Collaboratively identify the roles and responsibilities of teachers and parents in the education of a child.	Periodically revise the roles and responsibilities based on new ideas or needs.
	19	Create or strengthen the school's parent-teacher association. Consider ways of involving parents in decision-making processes in the school.	Maintain regular meetings between teachers and parents to discuss school improvement plans.
	20	Develop a communication plan for sharing important information with parents. Teach parents about the new curriculum, methods, and assessment procedures.	Conduct periodic "listening sessions" between teachers and parents to identify areas where they require further support.
Pedagogical University	21	Develop a plan for institutionalizing AL into the pre-service teacher	Require and collect evidence for the integration of AL into course

		curriculum.	curriculum.
	22	Create professional learning communities for instructors to share ideas for integrating AL into course curriculum.	Provide ongoing support for professional learning communities between instructors.
	23	Partner with the AL center at the pedagogical university.	Maintain opportunities for instructors to partner with the AL center. Provide incentives for instructors who successfully prepare teachers in AL methodologies.
Teacher Training Institutions	24	Continue implementing the 10-day training on AL until teachers are fully prepared during their pre-service training at the pedagogical university.	Provide ongoing in-service support for AL coaches.
	25	Integrate AL methods into various in-service training modules.	Monitor the capacity and comfort level of teachers in utilizing AL methodologies.
UNICEF Regional Office	26	Organize a regional meeting to share experiences in implementing and monitoring AL in various country contexts.	Compile cross-country resources to support ongoing development, monitoring, and evaluation of AL efforts.

4.3 Lessons Learned

        Through this evaluation, several important lessons were learned that have direct implications for next steps. Although these lessons are described throughout the evaluation report, they are presented in summary below.

Widespread presence of AL

        Visits to 10 schools and discussions with numerous stakeholders have demonstrated that AL is an important facet of primary education in Azerbaijan. In all schools, teachers demonstrated some understanding of AL. The clear linkage between the AL initiative and Azerbaijan's new curriculum appears to be a very strategic move and has helped in scaling AL practice nationwide. UNICEF training appears to have been an effective sensitization tool in facilitating basic knowledge and skill in teachers.

        A global lesson learned is that an initiative can scale up across an entire country if there is support from governmental and non-governmental bodies. Azerbaijan's linkage of AL to the national curriculum provided policy legitimization of UNICEF's initiative plus an approach that was integrated into the everyday work of teachers. In sum, the combination of integration into national policies coupled by strong sensitization efforts may be a powerful tool in generating improved educational practice.

Further deepening of AL institutionalization

        Despite teachers' application of AL in classes, there is a clear and distinct need for a more nuanced version of AL. Teacher observations and interviews demonstrated that teachers' beginning-level knowledge of AL is exemplified in lessons that are characterized as fast-paced and active but are lacking coherency and clear linkages between content and pedagogy. In only a few instances were teachers observed carefully selecting a few, targeted AL strategies to help students understand academic content. More often, teachers were using as many strategies as possible in hopes of engaging pupils. Pupils were engaged in classes, but their depth of understanding was not visible.

A next step can be found in the continuum displayed above, suggesting that AL depends upon careful alignment between curricular goals and methods. UNICEF's training successfully provided teachers with the skills to utilize AL strategies. A clear next step for the organization is to move teachers toward a deeper and more thoughtful approach to AL. This likely cannot be achieved through mass trainings but through consistent coaching and support of teachers as they become reflective practitioners in AL.

A global lesson learned from this evaluation was that a certain depth of knowledge on the part of teachers is required in order to achieve optimal results. Such depth cannot be imparted through workshops alone, but requires intensive reflection on the part of teachers and supportive coaching from their supervisors and mentors.

Attention to resource distribution

As in many countries around the world, resource levels varied between schools in Azerbaijan. Teachers in schools outside of Baku expressed concern that they did not have the materials necessary to carry out lessons in AL. Part of the resource conundrum may be addressed by teachers using AL methods more strategically than in their current practice. However, if the expectation is that all teachers use AL, then some supports must be provided centrally. A next step in the AL evolution is to identify commonly-used and commonly-needed materials, then find cost efficient ways (e.g., bulk ordering) to supply these to teachers. Another approach is to implement a per-capita funding formula, which provides supplemental funding for children in certain categories (e.g., IDPs, special needs, rural).

A global lesson learned was that Active Learning methods (and all Child Friendly methods) require teachers' repertoire of approaches to align with materials that facilitate learning. Teachers cannot be held responsible for the purchase of such materials. Rather, the general support of implementation should include provisions for government-supplied materials.

Pre-service teacher education

While one-time, in-service education to prepare teachers for utilizing AL is a necessity, it should be a short-term solution for a long-term reform. Once teachers reach the field, in-service training provides an opportunity to influence practice. However, helping pre-service teachers who have not yet reached the field develop AL practices is a more efficient and sustainable solution. A shift in focus to include pre-service teacher education (which will require that teacher educators also are well versed in AL) will ensure that all schools eventually will be staffed with teachers trained in AL. In-service methods may take decades before reaching every school and teacher.

Evolution, not revolution

Azerbaijan's new curriculum and AL pedagogy represent an educational revolution, purposefully designed to move away from the Soviet model to a contemporary, cosmopolitan, and globally-focused model. This model does not need to be eliminated, nor does another educational revolution need to take place in Azerbaijan. Rather, the next phase should focus on evolution of the current AL model to one that emphasizes pre-service training, coaching, material support, and the development of reflection and deep knowledge of AL. These efforts will support the potential for sustainability of AL over the long term. UNICEF and MOE should take pride in the strides made to date. Next steps are laid out in this report to support the further evolution of AL in Azerbaijan.

In general, the work that occurs after a major policy shift will ensure its sustainability. As UNICEF seeks to create change in education globally, careful focus should be placed on the professional development needs of pre- and in-service teachers. Evaluations such as this one provide information on how to shift commitments to meet current needs. Such shifts do not represent

shortcomings on the part of programs, but a need to adjust programming in order to reflect current needs.

Conclusion

      This AL reform has been accompanied by many positive changes in the education system. Teachers, parents, and pupils all appear to be satisfied with the approach. The integration of target pedagogies into the national curriculum and assessment systems holds great promise for its continued implementation. The next logical steps are to focus on the quality and depth of the program in order to build on the successful spread of the reform throughout Azerbaijan's schools.

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Annex A: Terms of Reference

UNITED NATIONS CHILDREN'S FUND

TERMS OF REFERENCE
for external formative evaluation of Active Learning Policy and Practice Project in Azerbaijan.

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1. **Programme information:**
   PCR (No. & Name): Access to Responsive Child Friendly Services   0310/A0/04/001
   IR   (No. & Name):   Access to Child Friendly Education   0310/A0/04/001/001
   Activity Reference: Teacher Training / New Curriculum   0310/A0/04/001/001/001

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2. **Background and Context:**

Economic, social and political context
Azerbaijan is an upper middle-income country and since independence its GDP has risen sharply and poverty has fallen dramatically. The share of those living below the poverty line fell from 50 per cent in 2001 to 7.6 per cent in 2011, according to official government statistics.

Rapidly growing economy has intensified a need for sustainable, long-term reforms in the country's education system. According to the World Bank's assessment, primary enrolment is comparable to the level of high-income countries and indicate wide access to basic education. However, enrolment in preschool and higher education still remains low. In addition, the quality of educational outcomes at all levels shows scope for improvement.

Key inequities in education
Azerbaijan's school system is made up of primary education (Grades 1-4), basic education (Grades 5-9), and secondary education (Grades 10-11). Up to Grade 9, school education is compulsory under the Law on Education, and in practice it is nearly universal, regardless of wealth, gender, or geographic location.

Until 2009, Azerbaijan took part in the international PISA tests for schoolchildren. However, following poor performance in 2006 and 2009, the Government decided it would discontinue participation until 2017. The Ministry of Education recognises a need to improve the quality of schooling, and it has introduced national assessments, a new curriculum in selected grades that will be implemented in all grades over the next few years, and a nationwide, in-service teacher training programme to support the curriculum rollout.

The Ombudsman's Office has also expressed concern that because of poor teaching at schools, most final grade pupils seek assistance from private tutors to pass their university entrance exams – access to higher education for children from low-income families may be constrained if they cannot afford services of private tutors.

According to UNESCO data, net enrolment in primary education fell from 89 per cent in 1999 to 84 per cent in 2010, with secondary education slightly higher, at 86 per cent (87 per cent for boys and 85 per cent for girls).

Under the current education legislation children with registered disabilities are supposed to be educated at special secondary and boarding schools or at home, while in fact the vast majority receive no education at all. This legislation and practice causes an isolation of children with disabilities from their age mates and society.

A second group of children not attending school is girls who have entered child marriages. A 2008 study by the State Committee on Family, Women and Children Affairs and UNICEF found that most girls entering child marriage did not continue their education after marriage, but discontinued their study at secondary school. However, over 70 per cent of men who marry adolescent girls had completed secondary education. This inequity is not conducive to equal relations. In addition, the 2006 DHS showed that children of better

educated mothers are almost always better off than their peers whose mothers have completed basic education or less. School dropouts among girls who have entered child marriage are reportedly most common in southern Azerbaijan, which is more conservatively Islamic, and in the northern Quba district among the small Jewish community.

The Ombudsman's Office has expressed concern about informal payments being collected from schoolchildren for a "school fund" that is used for unclear purposes, and that the role of school authorities in procuring school uniforms can lead to discontent in the population. Such informal payments will disproportionately affect the poorest families.

Key policies relevant to the object of evaluation
The Government of Azerbaijan (GOA) is committed to reform the education sector on the basis of the Education Reform Program of 1999 and the 10 Years Education Reform Strategy (2003-2013) prepared by the Ministry of Education (MOE). The main purpose of this reform program and strategy is to address many key sectoral issues, to improve the quality of education and to realign the sector with the needs of the emerging market economy and social conditions.

The first phase of the WB/MOE Education Sector Reform Project APL2 (2003-2008) succeeded in assisting the Government of Azerbaijan to plan education reforms and increase the capacity to manage them. Over the past four years, significant progress has been made in several key areas: (i) design of the curriculum reform and introduction of a new textbook policy entailing the free distribution of textbooks in core subjects; (ii) establishment of a national system of student assessment involving national testing and participation in international assessment; (iii) establishment of the EMIS and the Policy Analysis and Planning Units at the Ministry of Education; (iv) the approval of a plan for the reorganization and staffing of the Ministry of Education; and (v) adoption of a national strategy for the professional development of teachers.

The APL 2 Project benefits from the collaboration and effective working relationship established under the APL1 with UNICEF as its key donor partner. Under the APL 1, the Bank and UNICEF successfully collaborated in the implementation of a number of priority reforms in the education sector. These cover new teachers' training curriculum and in-service teacher training, textbooks development, primary school curriculum etc. Moreover, the Active Learning methodology was introduced with UNICEF's support as in-service training to primary school teachers and Rayon Education Departments in three of the APL 1 pilot rayons.

In 2006-2007 the mainstreaming of Active Learning (AL) into pre service and in service teacher training curricula produced encouraging results with Active learning being integrated into national curriculum. UNICEF further supported textbooks development to ensure that active learning is practically embedded into all textbooks, teacher guides and children's workbooks, thus integrating AL in every grade one classroom in terms of teaching and learning processes. As UNICEF and the World Bank are the main development partners in the education sector, there has been a conscious and sustained effort by the CO to work together. UNICEF provided critical technical support to the World Bank and Ministry of Education in the development of Phase Two Education Reforms and will be a full partner in two of the four components – school readiness and teacher professional development.

Since 2008, AL was endorsed by MOE and included into the national curriculum for primary education as the only recommended teaching methodology. In December 2010, UNICEF initiated a monitoring exercise in randomly selected schools in Baku and districts to clarify the main obstacles and needs of teachers in implementation of new curriculum and instructional methodology. This exercises revealed a great need of teachers for tailored in-service training on the application of AL in the new curriculum; in response to this need, a comprehensive 10-day training module for in-service training of primary school teachers was developed and around 6,000 teachers attended this training.

Since 2004, UNICEF's financial input into implementation of the project can be estimated at a level of US $300,000. UNCEF's investments went into development of new methodology, teachers' training, and as of 2008 preparation of trainers, capacity development of Teacher Training NGOs, and preparation of training

programmes for teachers.

Programme theory and theory of change
UNICEF started to support Government of Azerbaijan in piloting Active Learning methods at schools in 2000 within the 2000 – 2004 UNICEF Country Programme. In 2004 Evaluation of the Active Learning and School Leadership project was implemented. Piloting of the Active Learning methods was a response to the need to shift from out-dated Soviet education system to a more learner-centred system that encourages interactive, participatory and problem-solving approaches and as a result generates stronger educational outcomes and better responds to the labour market demands.

Hence, piloting, scaling up and institutionalization of the use of Active learning methods at school is considered to be significant step towards modern education system and important milestone in Education System Reform.

Objective of the activity

The main purpose of this consultancy is to provide high level technical expertise to the Ministry of Education to assess the impact of the ongoing Active Learning methodology as a part of the overall Education System Reform in Azerbaijan.

It is important to carry out the evaluation at this particular point in time to
- inform policy decisions on the overall Education System Reform in Azerbaijan;
- inform finalisation of the UNICEF MTR process;
- document the results achieved and lessons learned.

3.   Purpose of the assignment

Under the supervision of the UNICEF Azerbaijan Office and in consultation with Ministry of Education, the main task is to conduct a formative evaluation to identify to what extent the project meets the criteria of relevance, effectiveness, efficiency, impact and sustainability. and document the project's results achieved to date. The project will be evaluated in relation with its external environment, in particular in relation with government plans and with similar approaches or programme interventions tested by UNICEF at global and regional level and by other partners such as the EU and World Bank

The results of the evaluation will be used to further advance use of the Active Learning methods at school education by informing decision-making in the overall Education System Reform.

The period under review is: 2008 - 2013

Key intended users of evaluation are:
- UNICEF, EU and the World Bank.
- Ministry of Education.
- Other interested parties

Key evaluation stakeholders are:
- UNICEF, EU and the World Bank.
- Ministry of Education;
- Parents, teachers, pupils, Parents and Teachers Association.

4.   Duty station: Azerbaijan

5.   Supervisor: Kenan Mammadli, Child Development Specialist

- **Major tasks to be accomplished:**

Overall approach to evaluation:
Evaluation is expected to be based on the Human Rights Based Approach and be guided by the UN CRC and its principles as well as other international instruments such as CEDAW and CRPD. Reference to the outstanding recommendations of the UN CRC Concluding Observations 2012 needs to be made while assessing the results of the project and its overall impact on the situation of children in the area of education. Gender perspective also needs to be mainstreamed into evaluation process and taken into account while making conclusions, developing recommendations and documenting results and lessons learned.

Within its focus on equity, UNICEF pays particular attention to children from the most disadvantaged and excluded groups and fulfillment of their rights to quality education and participation in family, community and social life. In the context of education in Azerbaijan this particularly applies to children with disabilities, children from low-income families, girls who entered child marriages and potentially also children from IDP populations. In the course of the current evaluation participation of children from these groups needs to be ensured to the extent possible. Their rights and best interests also need to be taken into account while developing evaluation recommendations.

The evaluation is utilization focused. Evaluator/evaluation team is expected to develop realistic and workable recommendations based on which response will be developed for subsequent implementation.

To make an assessment as impartial and objective as possible, evaluator/evaluation team are encouraged to use mix of methods and triangulation to receive information from different sources to come to unbiased judgments and conclusions.

For each of the above criteria, the formative evaluation will provide answers to the following questions:

Relevance

- What is the value of the Active Learning Project in relation to primary stakeholders' needs, national priorities, national and international partners' policies and global references such as human rights and in particular, the Convention on the Rights of the Child (CRC), and the Concluding Recommendations of the UN Committee of the Rights of the Child made to Azerbaijan?

- How appropriate is the current Active Learning model and what adjustment needs to be made to make it comprehensive by including child rights promotion, WASH, healthy life style and HIV/AIDS awareness?

- Is UNICEF seen as essential to the present state of achievement of the project? If yes, what was the main UNICEF contribution to the project?

Effectiveness:

- Has the Active Learning Project appeared to strengthen or add value to the curriculum reform effort in the education system of Azerbaijan? If yes, to what extent? What are the quantitative or qualitative outcomes that can be measured / identified at national level?

- To what extent is the project <u>effective at</u> school level in terms of school environment, teaching and learning methods, assessment methods? What are the key achievements and lessons learnt? In particular, to what extent the Active Learning project has enriched and added value and relevance to the curriculum as well as to what degree the learning and teaching environment has been renewed through the implementation of interactive and participatory methodologies?

- Has the Active Learning Project resulted in: Greater class participation? Freedom to engage in dialogue and opinion exchange? Improved problem solving skills? Improved learning achievements? Improved

capacity for relationship building and increased tolerance for difference? Improved self-esteem and improved participation of pupils in their own learning process?

- Are there any indications that the number of drop outs has decreased in pilot schools as a result of the implementation of new curriculum and teaching methods?

- Has the Active Learning Project resulted in: Increased satisfaction and comfort of teachers with interactive and participatory teaching methods? Increased effectiveness in keeping pupils engaged in the learning process and improved academic achievement? Improved understanding of their role as facilitators and not as lecturer merely imparting information? Increased capacity of teachers to develop and tailor their own lessons, exercises and pedagogical activities? Improved capacity to test and evaluate pupils' learning achievements through unbiased and transparent assessment methods?

- Has the piloting of the Active Learning Project resulted in: Improved school and community relations? Creation or strengthening of Parent-Teacher Associations? Greater involvement from parents in pilot school governance and management?

- What is the extent of community involvement through the PTA (how active is PTA?). What can UNICEF do to support PTAs at local but also regional levels?

Efficiency

- How do the actual costs of the Active Learning Pilot schools compare to national benchmarks? (Cost analysis of project schools against control (non project) schools).
- What would be the most cost-effective way to obtain the expected results?
- How many pupils are covered by the Active Learning Pilot schools and what is the per capita cost in the pilot schools compared to other schools?

Impact

- What social, economic and environmental effects the Active Learning project made on children (including their cognitive development), schools, related institutions, parents and communities?

Sustainability

- Have school principals, inspectors, administrators of education departments at district levels as well as MOE officials all strongly supported the implementation of the Active Learning pilot project?

- Feasibility/potential for establishment/ operationalization of school-based resource centers?

- Are school principals, inspectors and administrators of education departments at district levels promoting in-service training within their regions?

The answers to these questions may not be explicit. The evaluation may rather document the reasons for programme adjustments and comment on whether this process was driven by a focus on results.

Methodology:

Evaluability and reliability of the disaggregated data
The project's logical framework and baseline data will be provided to evaluator/evaluation team by UNICEF Azerbaijan. Also, some data of potential use to evaluators were collected during the previous project evaluation in 2004.

Basic statistics on education (number of educational institutions, enrolment rates, etc.) is available from

official Government statistics. More specific information can also be found on a Ministry of Education website in English at http://www.edu.gov.az

At the same time, not all disaggregated data required to answer evaluation questions may be available. In case the required data cannot be obtained, this will need to be mentioned as methodological limitation in the Methodology section of the Evaluation Report.

The evaluation needs to employ the following methods:
▪ Desk review of existing literature and data;
▪ Structured and semi-structured interviews with key informants;
▪ Focus groups and facilitated discussions;
▪ Classroom observation;
▪ Any other methods that evaluator/evaluation team will consider necessary for achievement of the evaluation objectives.

Evaluator/evaluation team is expected to use triangulation to the extent possible to ensure objective and impartial information/data collection and evaluation.

Evaluation instruments:
All instruments developed for the purposes of this evaluation will need to be discussed and agreed with UNICEF before use.

Key informants:
▪ Teachers, parents, pupils;
▪ Ministry of Education officials;
▪ UNICEF, EU and the World Bank.

Data collection and major sources of data:
Evaluation will use both primary and secondary data and will use the following data sources:
▪ Official education statistics;
▪ Active Learning project evaluation carried out in 2004 of the project that was implemented during 2000 – 2004 (for baseline information and data);
▪ Information and data collected through the interviews, focus group discussions and questionnaires.

Technical aspects of evaluation will need to meet UNEG norms and standards; evaluation process needs to be in line with UNICEF evaluation policy.

Ethical considerations
Evaluator/evaluation team is expected to comply with UNEG ethical guidance to evaluation. Particularly, ethical considerations need to be taken into account while interviewing children.

7.   Outcomes and deliverables:

By 5 July 2013, the Evaluation Team is expected to provide the Azerbaijan Deputy Representative with a final evaluation report of 30 pages (excluding annexes) following the structure provided below. The evaluation of the relevance, effectiveness and efficiency of the Active Learning methodology in Azerbaijan as well as an analysis of sustainability and potential for scaling up of the approach needs to be provided in the Evaluation Findings section. Annexes will provide detailed information collected during field visits (evaluation instruments, focus group discussion reports, summaries of interview sheets, summaries of responses to questionnaires, etc.).

Schedule of deliverables:
By 1 May 2013:Contract signed
By 7 May 2013: Evaluation methodology and instruments developed and agreed with UNICEF
By 15 May 2013: Evaluation field work completed

By 15 June 2013: First draft project evaluation report available
By 25 June 2013: Second draft project evaluation report available
By 5 July 2013: Final project evaluation report available
By 10 July 2013: Presentation of the evaluation results held

The report – in both its format and content - will have to comply with the <u>UNICEF Evaluation Report Standards</u>, which will be made available to the Evaluation Team at the beginning of the consultancy. The report will have to contain an assessment of the evaluation methodology, including its limitations.

The Evaluation Report will have the following structure:
        Executive Summary (2 pages)
I.   Introduction and background (2 pages)
II.   Methodology and methodological limitations (2 pages)
III.   Key evaluation findings (including documentation of the key results if any) (12 pages)
IV.   Conclusions, Recommendations and Lessons learned (12 pages)
        Annexes (evaluation instruments, list of people interviewed, references to the documents reviewed, etc.)
The report will be submitted in English typed in Word Format, Font Times New Roman 11. UNICEF reserves the right to withhold all or a portion of payment if performance is unsatisfactory, if work/outputs are incomplete, not delivered or for failure to meet deadlines.

8.   Time-Frame:

5 May 2013 – 15 July 2013 (revised)

9.   Qualifications or specialized knowledge/experience required:

<u>Composition of the Team</u>

In view of the purpose, scope, focus of the evaluative work, the evaluation will be conducted by an <u>external institution</u> or <u>consulting firm</u> with expertise in evaluation of education projects, quality of education, teacher and curriculum development, education policies, formulation of education sector plans, planning of education programmes and coordination of research work, familiar with Active Learning concept and principles.

The consulting firm/institution will have to put together a multidisciplinary team, composed of at least 2 international consultants with different responsibilities, as follows:

▪ The first consultant will be responsible for conducting school observations in the field and assess the changes induced by the AL methodology and approach at school level in terms of teaching and learning environment, curriculum revision, teachers capacity and teaching methods, examination methods, school governance and management, parents and teachers participation.

▪ The second consultant – which will also be the team leader will be responsible for assessing the potential of the project to be scaled up. This consultant will also be responsible for ensuring the oversight and coordination of the entire evaluation and reporting work.

The qualifications, experience and competencies required from the consultants will be the following:

▪ Advanced degree in Educational Sciences.
▪ 8-10 years of professional experience at the national and international level.
▪ Previous experience of research, documentation and evaluation of education projects; 2-3 major publications an asset.
▪ Ability to work in an international environment; previous experience of working in CEE & CIS countries an asset.

- Excellent analytical and report writing skills.
- Familiarity with UNICEF's mission and mandate an asset.
- Fluency in English and knowledge of Russian an asset.

The team needs to be gender balanced, culturally diverse and, ideally, also include representatives of disadvantaged groups.

Qualified individuals and teams who were involved in the previous phases of the Government of Azerbaijan – UNICEF Active Learning Project, will NOT be selected as the project evaluators because of the conflict of interest.

10. Estimated cost :	
Consultancy fee is to be proposed by a potential individual or organization and agreed with UNICEF in line with UN rules and regulations.	

11.   Procedures and logistics:

UNICEF is going to provide the background information and any other relevant documentation, organize meetings and filed visits and provides comments on the drafts.
Background information will include:
1) Regional Analysis of the 2006 PISA
2) MOE national assessments that will characterize learning achievements in the country,
3) Evaluation report of Active Learning and School Leadership Project 2004
4) Active Learning & School Leadership Project Formative Evaluation 2002
5) Active Learning Training Reports

12.   Prepared by:
        (Programme/Project Officer)
 	
        Kenan Mammadli
        Child Development Specialist
	Signature and Date:

13.   Authorized by:
        Deputy Representative
 	
        Rashed Mustafa
        Deputy Representative
	Signature and Date:

14.   Read and signed by:
        Consultant
        (Name and Title)
	Signature and Date:

15.   Application:
Interested individuals and teams should send:

a)   A Project Proposal;
b)   the organizational profile or individual resume;
c)   in case of an organization the resume of each of the proposed team members;
d)   reference of previous relevant work (if applicable);
in a sealed envelope/email to:

Human Resources

United Nations Children's Fund (UNICEF)

Dalgha Plaza, III floor

24 Neftchilar Ave,

Baku AZ1095, Azerbaijan

or send the documents mentioned above electronically to baku@unicef.org

All applications will be treated with strict confidentiality. UNICEF is an equal opportunity employer.

UNICEF is mandated by the United Nations General Assembly to advocate for the protection of children's rights, to help meet their basic needs and to expand their opportunities to reach their full potential.

Deadline: 30 April 2010, 15:00hrs GMT+4

For further information please contact: Kenan Mammadli, kmammadli@unicef.org

Annex B: Evaluation Matrix

TOR Component	Evaluation Method	Population Sampled	Analysis
Relevance: Stakeholders	Interviews	National stakeholders	Qualitative coding
Relevance: Policy	Policy review, Interview	Desk review, National stakeholders	Content analysis, Qualitative coding
Relevance: Human Rights	Review of CRC, Alignment of AL	Desk review, Literature review	Content analysis
Relevance: UNICEF contribution	Interviews	National stakeholders, Teachers	Qualitative coding
Effectiveness: Supporting curriculum reform	Curriculum and AL document review	Desk review	Content analysis
Effectiveness: Classroom practice	Observations, Focus Groups, Questionnaires	Teachers, Pupils, Parents	Qualitative coding, statistical analysis
Effectiveness: Pupil engagement	Observations, Focus Groups, Questionnaires	Teachers, Pupils, Parents	Qualitative coding, Statistical analyses
Effectiveness: Drop-out rate	Not evaluated due to unavailability of data		
Effectiveness: Teacher Capacity	Observations, Focus Groups, Questionnaires	Teachers, Pupils, Parents	Qualitative coding, Statistical analyses
Effectiveness: Parent and Community Interactions	Observations, Focus Groups, Questionnaires	Teachers, Pupils, Parents	Qualitative coding, Statistical analyses
Effectiveness: PTA involvement	Interviews, Focus Groups, Questionnaires	National Stakeholders, Teachers, Pupils, Parents	Qualitative coding, Statistical analyses
Efficiency: Cost comparisons of AL schools vs. non-AL schools	Not evaluated, all schools are now AL schools		
Efficiency: Cost effectiveness	Interviews, Focus Groups, Observations	National Stakeholders, Teachers	Qualitative coding
Efficiency: Per capita costs	Not evaluated: per capita costing model does not exist in Azerbaijan		
Impact: Children	Interviews, Observations, Focus Groups, Questionnaires	National Stakeholders, Teachers, Pupils, Parents	Qualitative coding, Statistical analyses
Impact: Schools	Interviews, Observations, Focus Groups, Questionnaires	National Stakeholders, Teachers, Pupils, Parents	Qualitative coding, Statistical analyses
Impact: Parents and Communities	Interviews, Observations, Focus Groups, Questionnaires	National Stakeholders, Teachers, Pupils, Parents	Qualitative coding, Statistical analyses
Sustainability: National support	Interviews, Observations, Focus Groups, Questionnaires	National Stakeholders, Teachers, Pupils, Parents	Qualitative coding, Statistical analyses
Sustainability: Feasibility of School-based Resource Centers	Interviews, Observations, Focus Groups, Questionnaires	National Stakeholders, Teachers, Pupils, Parents	Qualitative coding, Statistical analyses
Sustainability: In-service training	Interviews, Observations, Focus Groups, Questionnaires	National Stakeholders, Teachers, Pupils, Parents	Qualitative coding, Statistical analyses

Annex C: Teacher Questionnaire

Thank you for agreeing to complete this questionnaire to help improve the quality of education in Azerbaijan. Your responses will remain confidential, but you may choose not to answer certain questions if you choose.

Please place a tick in the box if you agree to complete this questionnaire.

Please make a tick mark in the box that corresponds with your response.

Example:

	Strongly Agree	*Agree*	*Disagree*	*Strongly Disagree*
I like being a teacher.	✓			

Students:	**Strongly Agree**	**Agree**	**Disagree**	**Strongly Disagree**
1. Students learn more from interactive teaching methods than traditional lecture approaches.				
2. Students have opportunities to learn through exploration.				
3. Students make decisions in class.				
4. Students work together on learning tasks.				
5. Students have positive relationships with one another.				
6. Students ask questions in class.				
7. Students share their ideas in class.				
8. Girls and boys participate equally in class activities.				
9. Students actively participate in lessons.				
10. Students solve challenging problems in class.				

Teacher:	**Strongly Agree**	**Agree**	**Disagree**	**Strongly Disagree**
11. I utilize interactive methods in my lessons.				
12. I am confident in my ability to use interactive teaching methods.				
13. I encourage students to express their own opinions.				
14. I teach my students about their rights.				
15. I teach my students about the *Convention on the Rights of the Child.*				

16. Teachers support each other at my school.				
17. Teachers have the opportunity to share experiences with colleagues from other schools.				

Parents:	Strongly Agree	Agree	Disagree	Strongly Disagree
18. Teachers in this school meet regularly with parents.				
19. Parents are invited into the classroom.				
20. The PTA is effective in this school.				
21. The PTA has been supportive of active learning in the school.				
22. Parents are involved in the governance of the school.				

School Management/Support:	Strongly Agree	Agree	Disagree	Strongly Disagree
23. The school is managed well.				
24. The school managers support active learning.				
25. My director values my teaching.				
26. My director values my work in active learning.				
27. The principal supports active learning efforts.				
28. MoE inspectors support active learning efforts.				
29. District administrators support active learning efforts.				
30. MoE officials support active learning efforts.				
31. UNICEF supports active learning efforts.				

Planning/Assessment:	Strongly Agree	Agree	Disagree	Strongly Disagree
32. Students are assessed throughout the year.				
33. Students are assessed primarily through tests.				
34. I use other forms of assessments besides tests.				

35. I plan my lessons daily.				
36. Planning helps me to be a better teacher.				
37. I am confident in my ability to create high quality lesson plans.				
38. I am confident in my ability to assess students on their learning.				

Teaching Methods	39. Have you heard of this strategy?		40. Have you ever used this strategy?	
	Yes	No	Yes	No
a. Brainstorm				
b. KWL				
c. Auction				
d. Cluster				
e. Questions				
f. Lecture				
g. Establishing a definition				
h. Word associations				
i. Discussion				
j. Aquarium				
k. Role play				
l. Venn diagram				
m. Project development				
n. Questionnaires and interviews				
o. Decision tree				
p. Conflict situation				
q. Zigzag				
r. Carousel				

Training (initial support)	No training	Before Jan. '02	Jan. '02- Dec. '05	Jan'06- Dec. '09	After Jan. '10
41. When did you receive your first training for active learning?					

Training (continued support)	None	1-2	3-4	5-6	7 or more
42. How many in-service trainings on active learning have you attended?					

Training and Material Support	Strongly Agree	Agree	Disagree	Strongly Disagree
43. The training courses were adequate for the practical implementation of active learning.				
44. There are enough teaching materials to help me to teach in an active way.				

45. In-service trainings are promoted by principals, inspectors, or district administrators.				

Please write your answer below each question.

46. What are the strengths of the Active Learning project?

47. How can the Active Learning project be improved?

Sex: ☐ Male   ☐ Female

Number of years in teaching, counting this year:
☐ 1-5 years   ☐ 6-10 years   ☐ 11-15 years   ☐ 16 or more years

What grade do you teach?
☐ Grade 1   ☐ Grade 2   ☐ Grade 3   ☐ Grade 4   ☐ Grade 5

School name: _____

District (rayon): _____

What is your first language? _____

What other languages do you speak fluently? _____

Annex D: Student Questionnaire

Thank you for helping us learn about your education. This is not a test. There are no right or wrong answers. Your teachers and parents will not know what you have written.

Please place a tick in the box if you agree to complete this questionnaire.

For each statement below, place a tick in the "yes" box if you agree and in the "no" box if you disagree.

Example:	*Yes*	*No*
I like school.	✓	

About Me	**Yes**	**No**
1. I am good at reading.		
2. I am good at writing.		
3. I am good at math.		
4. I think I am smart.		
5. I enjoy coming to school.		
6. I find it easy to make friends.		
7. I am friends with people who are different from me.		
8. I would like to go to college some day.		

My Participation	**Yes**	**No**
9. I ask questions in my classroom.		
10. I am free to share my ideas in class.		
11. I have choices in my classroom.		
12. I work with other students in my classroom.		
13. I can solve challenging problems at school.		
14. I am in school almost every day.		

My Classroom	**Yes**	**No**
15. My teacher does most of the talking in class.		
16. My teacher listens to students' ideas.		
17. My teacher tells me how well I do on assignments.		
18. My teacher rewards hard work.		
19. My teacher helps me understand my school work.		
20. Students sit in their desk most of the day.		
21. My teacher has discussed my rights as a student.		

My School	**Yes**	**No**
22. I feel safe on the playground.		
23. There are many bullies at my school.		
24. Teachers are friendly to students at my school.		
25. Teachers at my school are happy.		
26. Students at my school are happy.		
27. Teachers and parents work together at my school.		

Please write your answer below each question.

28. What do you like about your school?

29. What would make your school better for all children?

Are you a girl or a boy?   □ Girl   □ Boy

How old are you? _____

What grade are you in?   □ Grade 3   □ Grade 4   □ Grade 5

What is the name of your school? _____

Where were you born? _____

What language did you learn to speak first? _____

Annex E: Teacher Focus Group Protocol

Thank you for agreeing to participate in this focus group discussion to help improve the quality of education in Azerbaijan. The focus group will last for about one hour. Your responses will remain confidential.

1. Please go around the room and give your name and the grade you teach.

2. What is active learning?
    a. What does it look like in a classroom?
    b. How is it different from previous approaches?

3. How do you implement active learning in your classroom?
    a. What strategies do you use?
    b. What materials do you use?

4. How has your teaching changed as a result of active learning?
    a. Teaching methods?
    b. Assessment methods?
    c. Role of the teacher?

5. What changes have you seen as a result of active learning?
    a. Class participation?
    b. Engagement in dialogue?
    c. Problem-solving skills?
    d. Learning achievements?
    e. Relationship building and tolerance for difference?
    f. Self-esteem?
    g. School environment (e.g., safety)?

6. What is the relationship between the school and parents/community members? How are parents/community members involved in the school?
    a. PTA involvement?
    b. Meetings with parents/community members?
    c. School governance and management?

7. What has **helped** you to implement active learning? What **challenges** have you faced in implementing active learning?

8. From where are you receiving support for active learning? What kind of support is provided?
    a. From UNICEF?
    b. From principals and district administrators?
    c. From MoE inspectors and officials?

9. What else would you like us to know about active learning in Azerbaijan?

Annex F: Parent Focus Group Protocol

Thank you for agreeing to participate in this focus group discussion to help improve the quality of education in Azerbaijan. The focus group will last for about one hour. Your responses will remain confidential.

1. Please go around the room and give your name and the age(s) of your children.

2. What are some important educational issues in Azerbaijan currently?

3. What is active learning?
   a. What does it look like in a classroom?
   b. How is it different from previous approaches?

4. What changes have you seen as a result of active learning?
   a. Class participation?
   b. Engagement in dialogue?
   c. Problem-solving skills?
   d. Learning achievements?
   e. Relationship building and tolerance for difference?
   f. Self-esteem?
   g. School environment (e.g., safety)?

5. What is the relationship between the school and parents/community members? How are parents/community members involved in the school?
   a. PTA involvement?
   b. Meetings with teachers/parents/community members?
   c. School governance and management?

6. What kind of support could UNICEF provided for PTAs?
   a. At the local level?
   b. At the regional level?

7. What else would you like us to know about active learning in Azerbaijan?

Annex G: Classroom Observation Tool

Date: _____   Data collector initials: _____   Start time: _____ End time: _____
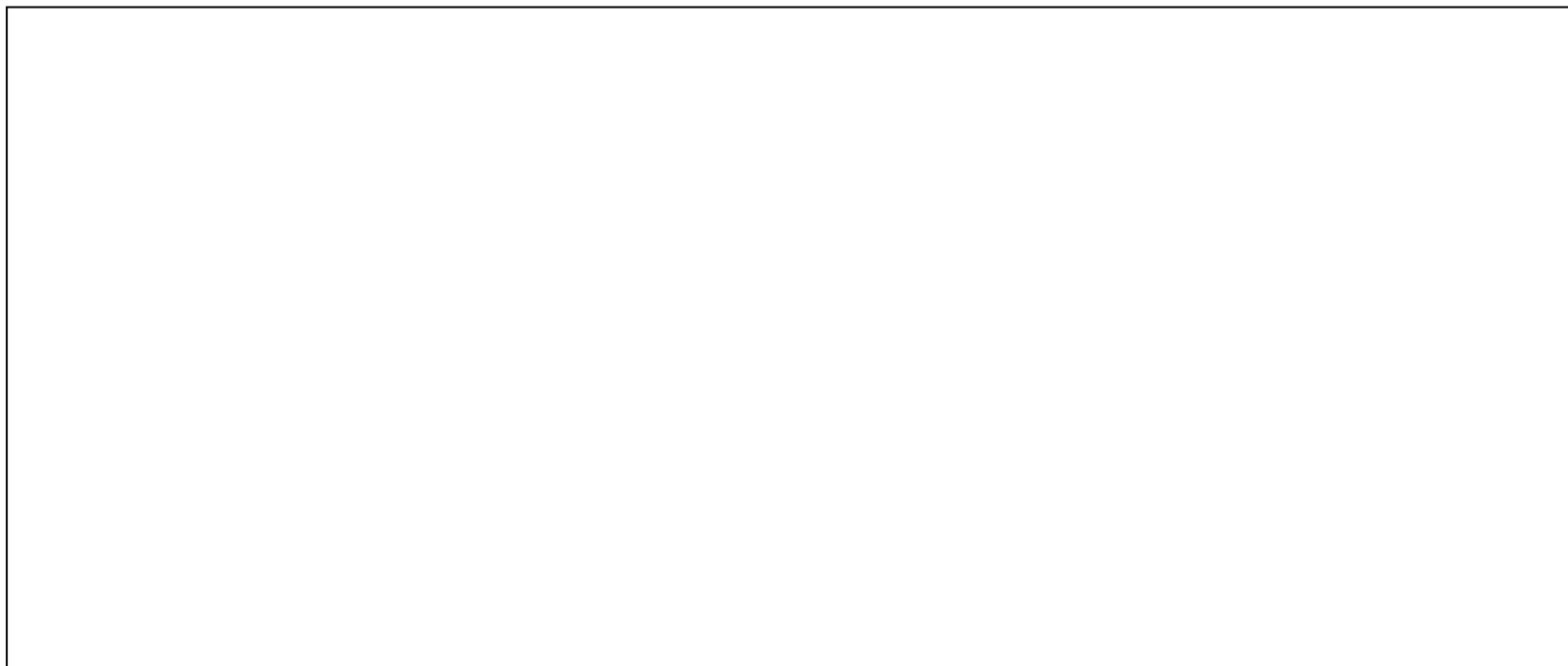
Name of teacher: _____   Name of school: _____

Grade / class: _____   Topic / subject: _____

Number of students: _____ girls   _____ boys

Part I. Draw a classroom map. Include the following:
- Seating arrangement (desks, girl/boy seating, accessibility, teacher positioning)
- Wall displays (learning aids, children's work)
- Materials/resources (e.g., textbooks, chalkboards, whiteboards, visual aids, worksheets)

Part II. Record what the teacher and students are doing and saying in each five-minute block of time.

	Teacher	Students
0:00-5:00		
5:00-10:00		

10:00-15:00		
15:00-20:00		

20:00-25:00		
25:00-30:00		

Part III. Place a tick mark to indicate your general assessment of the following areas.

1. Learning climate: Teacher-centered ____   ____   ____   ____   ____ Student-centered

2. Classroom instruction: Lecture-based ____   ____   ____   ____   ____ Interactive

3. Assessment methods: Traditional ____   ____   ____   ____   ____ Authentic

4. Student engagement: Low Involvement ____   ____   ____   ____   ____ High Involvement

5. Student problem-solving: None ____   ____   ____   ____   ____ Ongoing

6. Teacher capacity: Low Capacity ____   ____   ____   ____   ____ High Capacity

7. Instructional materials: Very Few ____   ____   ____   ____   ____ Wide Variety

8. Relationship between teacher/students: Weak ____   ____   ____   ____   ____ Strong

9. Relationship between students: Weak ____   ____   ____   ____   ____ Strong

Annex H: Key Informant Interview Protocol

Thank you for agreeing to participate in this interview. It will last for about 60 minutes. Your
responses will remain confidential and will be used to assist in the evaluation of active learning.

All:
1. Tell me about your past experiences and current role in education for Azerbaijan.

2. What is active learning?
    a. What should it look like in a classroom?
    b. How is it different from previous approaches?

3. What impacts have you seen as a result of the active learning project?
    a. Social and environmental effects?
    b. Effect on children, schools, and parents?

Teacher Training Institutions:
4. What role do teacher training institutions play in the active learning reform?
    a. What has been done so far?
    b. What have been the challenges?
    c. What are the suggestions for moving ahead?

5. How has UNICEF supported the work of teacher training institutions in active learning? To
   what extent have these contributions from UNICEF impacted active learning outcomes in
   Azerbaijan?

Ministry Officials:
6. What have been the successes of the active learning reform in Azerbaijan?
    a. To what do you attribute the successes?
    b. How can the successes be sustained?

7. What have been the challenges of the active learning reform in Azerbaijan?
    a. To what do you attribute the challenges?
    b. How can the challenges be overcome?

8. How has UNICEF supported the work of the Ministry of Education in active learning? To
   what extent have these contributions from UNICEF impacted active learning outcomes in
   Azerbaijan?

Affiliated NGOs:
9. What role has your NGO played in the active learning reform?
    a. What has been done so far?
    b. What have been the challenges?
    c. What are the suggestions for moving ahead?

10. How has UNICEF supported the work of your NGO in active learning? To what extent have
    these contributions from UNICEF impacted active learning outcomes in Azerbaijan?

All:
11. What else would you like us to know about active learning in Azerbaijan?

Annex I: Teacher Questionnaire Results

Table 19: Grade-level of teachers (n=141)

	Frequency	**Percentage**
1st grade	14	9.9
2nd grade	15	10.6
3rd grade	17	12.1
4th grade	19	13.5
5th grade	65	46.1
Multiple grades	11	7.8

Table 20: Sex of teachers (n=150)

	Frequency	**Percentage**
Female	19	12.7
Male	132	87.3

Table 21: Teachers' School (n=161)

	Frequency	**Percentage**
Village School #1 (Sheki, Remote)—LA	16	9.9
Village School #2 (Sheki, IDP)—LA	13	8.1
Village School #3 (Masally)—EA	29	18
Village School #4 (Masally)—LA	16	9.9
Village School #5 (Gabala)—EA	11	6.8
Village School #6 (Gabala)—LA	8	5
Urban School #7 (Guba)—EA	13	8.1
Urban School #8 (Guba)—LA	17	10.6
Capital School #9 (Baku)—EA	28	17.4
Capital School #10 (Baku)—LA	10	6.2

LA=late adopter school; EA=early adopter school

Table 22: Teachers' years of experience (n=148)

	Frequency	**Percentage**
1-5 years	15	10.1
6-10 years	25	16.9
11-15 years	24	16.2
16 or more years	84	56.8

Table 23: Date of first active learning training (n=143)

	Frequency	Percentage
No training	10	6.2
Before January 2002	48	33.6
January 2002-December 2005	5	3.5
January 2006-December 2009	23	16.1
After January 2010	57	39.9

Table 24: Number of active learning trainings attended by teachers (n=157)

	Frequency	Percentage
None	8	5.1
1-2 trainings	100	63.7
3-4 trainings	25	15.9
5-6 trainings	12	7.6
7 or more trainings	12	7.6

Table 25: Teachers' perceptions of students

	n	% strongly disagree	% disagree	% agree	% strongly agree
1. Students learn more from interactive teaching methods than traditional lecture approaches.	152	5 (3.3%)	8 (5.3%)	80 (52.6%)	59 (38.8%)
2. Students have opportunities to learn through exploration.	155	1 (.6%)	8 (5.2%)	79 (51%)	67 (43.2%)
3. Students make decisions in class.	155	0 (0%)	9 (5.8%)	77 (49.7%)	69 (44.5%)
4. Students work together on learning tasks.	156	2 (1.3%)	11 (7.1%)	71 (45.5%)	72 (46.2%)
5. Students have positive relationships with one another.	150	4 (2.7%)	3 (2%)	86 (57.3%)	57 (38%)
6. Students ask questions in class.	155	1 (.6%)	3 (1.9%)	48 (31%)	102 (66.5%)
7. Students share their ideas in class.	156	0 (0%)	5 (3.2%)	64 (41%)	87 (55.8%)
8. Girls and boys participate equally in class activities.	155	3 (1.9%)	7 (4.5%)	54 (34.8%)	91 (58.7%)
9. Students actively participate in lessons.	157	3 (1.9%)	4 (2.5%)	84 (53.5%)	66 (42%)
10. Students solve challenging problems in class.	158	3 (1.9%)	27 (17.1%)	90 (57%)	38 (24.1%)

Table 26: Teachers' perceptions of teachers

	n	% strongly disagree	% disagree	% agree	% strongly agree
11. I utilize interactive methods in my lessons.	159	1 (.6%)	7 (4.4%)	95 (59.7%)	56 (35.2%)
12. I am confident in my ability to use interactive teaching methods.	153	1 (.7%)	5 (3.3%)	88 (57.5%)	59 (38.6%)
13. I encourage students to express their own opinions.	161	0 (0%)	0 (0%)	57 (35.4%)	104 (64.6%)
14. I teach my students about their rights.	158	0 (0%)	1 (.6%)	53 (33.5%)	104 (65.8%)
15. I teach my students about the Convention on the Rights of the Child.	151	3 (2%)	8 (5.3%)	79 (52.3%)	61 (40.4%)
16. Teachers support each other at my school.	159	3 (1.9%)	9 (5.7%)	53 (33.3%)	94 (59.1%)
17. Teachers have the opportunity to share experiences with colleagues from other schools.	158	6 (3.8%)	18 (11.4%)	72 (45.6%)	62 (39.2%)

Table 27: Teachers' perceptions of parents

	n	% strongly disagree	% disagree	% agree	% strongly agree
18. Teachers in this school meet regularly with parents.	159	3 (1.9%)	11 (6.9%)	62 (39%)	83 (52.2%)
19. Parents are invited into the classroom.	157	2 (1.3%)	14 (8.9%)	65 (41.4%)	76 (48.4%)
20. The PTA is effective in this school.	152	4 (2.6%)	25 (16.4%)	74 (48.7%)	49 (32.2%)
21. The PTA has been supportive of active learning in the school.	150	6 (4%)	30 (20%)	72 (48%)	42 (28%)
22. Parents are involved in the governance of this school.	146	5 (3.4%)	37 (25.3%)	65 (44.5%)	39 (26.7%)

Table 28: Teachers' perceptions of school management and support

	n	% strongly disagree	% disagree	% agree	% strongly agree
23. The school is managed well.	158	4 (2.5%)	15 (9.5%)	55 (34.8%)	84 (53.2%)
24. The school managers support active learning.	158	1 (.6%)	9 (5.7%)	56 (35.4%)	92 (58.2%)
25. My director values my teaching.	158	3 (1.9%)	10 (6.3%)	56 (35.4%)	89 (56.3%)
26. My director values my work in active learning.	154	3 (1.9%)	10 (6.5%)	57 (37%)	84 (54.5%)
27. The director supports active learning efforts.	157	1 (.6%)	5 (3.2%)	64 (40.8%)	87 (55.4%)
28. MOE inspectors support active	153	2	11	69	71

	n	(1.3%)	(7.2%)	(45.1%)	(46.4%)
learning efforts.					
29. District administrators support active learning efforts.	142	4 (2.8%)	16 (11.3%)	73 (51.4%)	49 (34.5%)
30. MOE officials support active learning efforts.	144	4 (2.8%)	10 (6.9%)	58 (40.3%)	72 (50%)
31. UNICEF supports active learning efforts.	148	1 (.7%)	3 (2%)	51 (34.5%)	93 (62.8%)

Table 29: Teachers' perceptions of planning and assessment

	n	% strongly disagree	% disagree	% agree	% strongly agree
32. Students are assessed throughout the year.	155	0 (0%)	4 (2.6%)	50 (32.3%)	101 (65.2%)
33. Students are assessed primarily through tests.	153	1 (.7%)	26 (17%)	53 (34.6%)	73 (47.7%)
34. I use other forms of assessments besides tests.	158	1 (.6%)	3 (1.9%)	57 (36.1%)	97 (61.4%)
35. I plan my lessons daily.	157	1 (.6%)	2 (1.3%)	64 (40.8%)	90 (57.3%)
36. Planning helps me to be a better teacher.	158	0 (0%)	2 (1.3%)	58 (36.7%0)	98 (62%)
37. I am confident in my ability to create high quality lesson plans.	157	1 (.6%)	2 (1.3%)	80 (51%)	74 (47.1%)
38. I am confident in my ability to assess students on their learning.	157	0 (0%)	2 (1.3%)	78 (49.7%)	77 (49%)

Table 30: Teaching methods of which teachers have heard

	n	% no	% yes
a. Brainstorming?	161	4 (2.5%)	157 (97.5%)
b. KWL?	155	7 (4.5%)	148 (95.5%)
c. Auction?	145	19 (13.1%)	126 (86.9%)
d. Cluster?	155	10 (6.5%)	145 (93.5%)
e. Questioning?	156	2 (1.3%)	154 (98.7%)
f. Lecture?	152	7 (4.6%)	145 (95.4%)
g. Establishing a definition?	145	6 (4.1%)	139 (95.9%)
h. Word associations?	146	10 (6.8%)	136 (93.2%)
i. Discussion?	153	4 (2.6%)	149 (97.4%)
j. Aquarium?	135	32 (23.7%)	103 (76.3%)
k. Role play?	148	10	138

		(6.8%)	(93.2%)
l. Venn diagram?	149	9 (6%)	140 (94%)
m. Project development?	138	12 (8.7%)	126 (91.3%)
n. Questionnaires and interviews?	147	6 (4.1%)	141 (95.9%)
o. Decision tree?	135	31 (23%)	104 (77%)
p. Conflict situation?	129	31 (24%)	98 (76%)
q. Zigzag?	147	11 (7.5%)	136 (92.5%)
r. Carousel?	147	15 (10.2%)	132 (89.8%)

Table 31: Teaching methods of which teachers have used

	n	% no	% yes
a. Brainstorming?	148	7 (4.7%)	141 (95.3%)
b. KWL?	138	16 (11.6%)	122 (88.4%)
c. Auction?	121	44 (36.4%)	77 (63.6%)
d. Cluster?	136	26 (19.1%)	110 (80.9%)
e. Questioning?	140	5 (3.6%)	135 (96.4%)
f. Lecture?	131	15 (11.5%)	116 (88.5%)
g. Establishing a definition?	131	17 (13%)	114 (87%)
h. Word associations?	127	26 (20.5%)	101 (79.5%)
i. Discussion?	110	11 (10%)	99 (90%)
j. Aquarium?	96	48 (50%)	48 (50%)
k. Role play?	111	16 (14.4%)	92 (85.6%)
l. Venn diagram?	111	11 (9.9%)	100 (90.1%)
m. Project development?	97	27 (27.8%)	70 (72.2%)
n. Questionnaires and interviews?	105	10 (9.5%)	95 (90.5%)
o. Decision tree?	94	47 (50%)	47 (50%)
p. Conflict situation?	90	46 (51.1%)	44 (48.9%)

	n		
q. Zigzag?	108	29 (26.9%)	79 (73.1%)
r. Carousel?	106	32 (30.2%)	74 (69.8%)

Table 32: Teachers' perceptions of training

	n	% strongly disagree	% disagree	% agree	% strongly agree
43. The training courses were adequate for the practical implementation of active learning.	148	4 (2.7%)	19 (12.8%)	74 (50%)	51 (34.5%)
44. There are enough teaching materials to help me teach in an active way.	155	30 (19.4%)	52 (33.5%)	39 (25.2%)	34 (21.9%)
45. In-service trainings are promoted by principals, inspectors, or district administrators.	140	6 (4.3%)	11 (7.9%)	83 (59.3%)	40 (28.6%)

Annex J: Student Questionnaire Results

Table 33: Grade-level of students (n=378)

	Frequency	Percentage
3rd grade	135	35.7
4th grade	73	19.3
5th grade	170	45

Table 34: Sex of students (n=376)

	Frequency	Percentage
Female	186	49.5
Male	190	50.5

Table 35: Students' School (n=378)

	Frequency	Percentage
Village School #1 (Sheki, Remote)—LA	38	10.1
Village School #2 (Sheki, IDP)—LA	14	3.7
Village School #3 (Masally)—EA	42	11.1
Village School #4 (Masally)—LA	28	7.4
Village School #5 (Gabala)—EA	42	11.1
Village School #6 (Gabala)—LA	38	10.1
Urban School #7 (Guba)—EA	22	5.8
Urban School #8 (Guba)—LA	45	11.9
Capital School #9 (Baku)—EA	56	14.8
Capital School #10 (Baku)—LA	53	14

LA=late adopter school; EA=early adopter school

Table 36: Students' perceptions of themselves

	n	% no	% yes
1. I am good at reading.	374	10 (2.7%)	364 (97.3%)
2. I am good at writing.	373	38 (10.2%)	335 (89.8%)
3. I am good at math.	374	47 (12.6%)	327 (87.4%)
4. I think I am smart.	372	36 (9.7%)	336 (90.3%)
5. I enjoy coming to school.	369	8 (2.2%)	361 (97.8%)
6. I find it easy to make friends.	372	131 (35.2%)	241 (64.8%)
7. I am friends with people who are different from me.	375	134 (35.7%)	241 (64.3%)

8. I would like to go to college some day.	373	12 (3.2%)	361 (96.8%)

Table 37: Students' perceptions of their participation

	n	**% no**	**% yes**
9. I ask questions in my classroom.	376	79 (21%)	297 (79%)
10. I am free to share my ideas in class.	377	62 (16.4%)	315 (83.6%)
11. I have choices in my classroom.	370	139 (37.6%)	231 (62.4%)
12. I work with other students in my classroom.	375	74 (19.7%)	301 (80.3%)
13. I can solve challenging problems at school.	369	193 (52.3%)	176 (47.7%)
14. I am in school almost every day.	371	54 (14.6%)	317 (85.4%)

Table 38: Students' perceptions of their classroom

	n	**% no**	**% yes**
15. My teacher does most of the talking in class.	371	139 (37.5%)	232 (62.5%)
16. My teacher listens to students' ideas.	375	16 (4.3%)	359 (95.7%)
17. My teacher tells me how well I do on assignments.	377	23 (6.1%)	354 (93.9%)
18. My teacher rewards hard work.	372	24 (6.5%)	348 (93.5%)
19. My teacher helps me understand my school work.	373	15 (4%)	358 (96%)
20. Students sit in their desk most of the day.	371	129 (34.8%)	242 (65.2%)
21. My teacher has discussed my rights as a student.	363	41 (11.3%)	322 (88.7%)

Table 39: Students' perceptions of their school

	n	% no	% yes
22. I feel safe on the playground.	370	111 (30%)	259 (70%)
23. There are many bullies at my school.	369	181 (49.1%)	188 (50.9%)
24. Teachers are friendly to students at my school.	373	19 (5.1%)	354 (94.9%)
25. Teachers at my school are happy.	376	25 (6.6%)	351 (93.4%)
26. Students at my school are happy.	373	12 (3.2%)	361 (96.8%)
27. Teachers and parents work together at my school.	374	158 (42.2%)	216 (57.8%)

Annex K: Teacher Focus Group Summaries

Village School #1, Sheki—remote (8 females)

Teachers were very familiar with the new curriculum, as well as the requirement to use active learning methods. They described active learning as children being more active in the class and having greater communication opportunities. Several times they mentioned children having more freedom to share and learn. Teachers commented that prior to the new curriculum teachers would work with three to five students only, while now they address all children in the class. Examples included using group work, beginning the lesson in a planned way, using teaching aids, and motivating children to come up with the name of the lesson's topic without giving it to them first. A teacher summed up active learning by saying the previous approach focused on the teachers, while the current approach focuses on students.

When asked what has helped them implement AL, teachers suggested that the learning aids were beneficial. Some of the aids came from the government, while the teachers made others. Those made by the teachers were based on instructions provided by the government. Some teachers commented that there are open lessons where they can observe other classes. Relatedly, there are methodologists that come to the school periodically to update teachers on government policy and expectations. These people provide consultation to the teachers. This occurs at variable times, ranging from one to two times per month to less often.

Some challenges faced by teachers are the time it takes to plan. Teachers unanimously and unambiguously exclaimed that it is much more time intensive to plan under the new curriculum. They cited work on the computer (which they are learning to use), preparation of visual aids, and preparation of tests as primary users of time. Some teachers believe it is more difficult to implement AL because the students do not have any educational preparation prior to entering Grade 1 (i.e., no preschool or kindergarten). They said they are too shy for AL. Teachers also commented that the new curriculum is harder for parents because they are not familiar with it, having come from the Soviet time where there were no workbooks. Other challenges include the noisy classroom and the fact that some students are "hidden" in group work. They clarified that low-ability students can easily get lost because they rely on others too much. However, another teacher said group work is a good opportunity for the low-ability students to learn from others. A final challenge is around the lack of training. Most received training initially, but have had little follow-up training.

In terms of assessment, teachers prepare their own tests. This was a key part of the new curriculum mentioned by many people. Before there were only end-of-year exams, but now teachers must test students on material learned in each unit. Other forms of assessment include monitoring their workbooks and asking summative questions at the end of each chapter. Some teachers utilized self-assessment tools in which students completed such statements as "I was able to….." or "I was not able to…."

Teachers were asked about the changes they have observed in students. One teacher said the relationships between students and teachers have become more equal, or parallel. She said that when she was in school she thought teachers were extraterrestrial aliens, but now the children hug the teachers every day. The teachers attributed this change to the new curriculum. They also said that children's self-esteem is greater now and that they believe in themselves and are self-confident. Teachers were asked about problem solving, but this concept was not easily understood. They replied that if students were having trouble with a concept, teachers should give hints or help them make associations.

In terms of parent involvement, teachers mentioned the parents meetings. They said that a few parents will call teachers to find out about their child's performance. One teacher described an end-of-year gathering, but said it was mostly about praise. However, other teachers said that parents visit the

school more often now because they are curious about the new curriculum. They said parents are often surprised at how much freedom is held by the students.

Village School #2, Sheki—IDP (2 males, 6 females)

Teachers described the new approach as "receiving knowledge through research and through discussion." They said that students should find their own answers and that this typically involved small group work. Teachers commented that teachers should accept the opinion of children right away and give preference to them to speak more. The traditional methods (prior to the new curriculum) dictated the number of minutes required for each activity, but teachers pointed to freedom to utilize their time in other ways.

Most teachers agreed that AL is inherently good for the children. However, they commented that the "games and group work take so much time," which means there is "not enough time for learning to read and solving math problems." When asked the purpose of the games, they said it was to "involve all children in discussion on topics." They did not mention its value for learning itself.

Another challenge is the lack of resources. Teachers said AL requires so many more instructional teaching aids than the previous way of teaching, which they are expected to purchase on their own. They did not believe they could satisfactorily implement AL without the materials, yet could not afford to purchase them. One male teacher said he had to work other jobs to support his family. He said if he was "paid a decent salary," he would prefer to work only as a teacher. However, he must supplement his income in order to support his family.

Some teachers said they modeled AL strategies for inspectors when visiting, but that they do not fully implement when the visitors are not there. Another teacher observed that any system requires many components to be functional. He said that you need good wages, good training, and good resources. Without all of these things, the teaching will suffer. Teachers really liked the new methods, but because they do not have the necessary wages, training, and resources, they do not think they can implement it well.

Teachers in this focus group mentioned that the relations with children have improved. This was observed when we arrived at the school and one child ran to the acting director (also a Grade 2 teacher) to greet him with a large smile on his face. The traditional way of teaching was described as "teaching in a box…now we have freedom."

Assessment was understood by teachers to include formative and summative assessments. However, teachers are the ones responsible for the creation of assessment tools. They described this as a time-consuming process because they must develop a rubric for each standard to assess students at the end of every topic. The methods were described as beneficial, but required a lot of writing. They said it was beneficial to students now because they could understand "why" they received the mark rather than seeing a number alone.

In terms of training, teachers said that the 10 days of training is just a beginning. All of them have only had the initial 10 days of training. They said the older generation is having a harder time grasping the concepts and needs more training. One woman said there are rumors that AL methods will be removed. This concerned her, and said she did not want them to go away. There are challenges, but she thinks it is a good move. However, another teacher said the new curriculum "is imitated in our country from other countries rather than implemented in the real sense of the word." She believed that AL needed to be adapted to the Azerbaijan context.

Village School #3, Masally (1 male, 4 females)

Teachers were eager to describe the new curriculum. They said it is different from the previous curriculum because the children are in search of the answer rather than being given the

answer by the teacher, making the learning more active. Teachers commented that children develop in multi-dimensional ways and that their interest level is much greater now. The new curriculum requires creativity in children and moves away from traditional approaches in which only the teacher talks. One teacher also noted that children's self-confidence has increased. She observed that children appear to be happier doing group work because they are more independent.

The teachers identified several challenges with the new curriculum. They said the program is more difficult now and that it is very difficult for children who have not received kindergarten or other preparatory education. This has made teaching more difficult since the material must be adapted to suit the needs of the students. Generally, children in the rural areas have not had preparatory education. Teachers attempt to use the new approaches on a daily basis, but they admitted that they are not perfect in their strategies. One teacher said, "through teaching, we also learn ourselves."

When asked to identify specific strategies utilized during lessons, teachers provided a variety of examples. One Russian teacher invited children to the blackboard and had other students ask questions. In this way the Russian language was practiced through a question and answer session. The life skills teacher conducted a lesson about the advantages of not talking too much. She asked the students, "What do you understand about the advantages of not talking too much?" A third teacher explained that she had students complete a Venn Diagram about the topic of statehood. All of these teachers said the active learning strategies were taken from the curriculum rather than their own creativity. While they are encouraged to use their own ideas, they are mostly reliant on the curriculum for their lesson plans. They would like to use their own ideas, but do not have the skills to do so.

Teachers described differences in their relationships with students. They said the teacher is no longer a formidable personality, but rather more of a friend. For example, one teacher said the "children now approach me and kiss me." Another said that in the past students sat with one arm over the other and did not move. Now students are free to sit as they want. Some even disclosed secrets to their teachers and their wishes for the future. One teacher commented that these relationships extend to the upper grades, even though the new curriculum has not yet been implemented there. He said that the feeling has spread throughout the school.

According to teachers, part of the requirement for the new curriculum is that teachers and parents share the responsibility of their children's education. Teachers are in frequent communication with parents to discuss behavior and academic progress. Some parents attend classes to observe the performance of their children. In addition, parents have helped rehabilitate portions of the school, purchased materials, or brought wood to the class for warmth in the winter.

Teachers said they have received support from the MOE in terms of training and textbooks. However, they are in need of much more. They especially need more visual aids. The school has provided textbooks for the children, but the families are responsible for paying for the workbooks, which total more than 50 Manat per year. Many families cannot afford this. Teachers agreed that it is important for these materials to be provided for students to improve their learning.

Village School #4, Masally (1 male, 7 females)

Teachers were familiar with the meaning of active learning. They explained that children are more active, cooperate with each other, and investigate the topic rather than being told the answers. They emphasized cooperation between both teachers and students, as well as between parents and teachers. In general, they favored the curriculum but expressed many challenges. They said the children were not capable of handling the rigor of the new curriculum because they have not attended kindergarten or preparatory school. They said the new curriculum is best for the children who are smart and well-prepared for school.

This is a pilot school, which was explained by the teachers to mean that "in comparison with other schools, they are more advanced." However, when teachers were asked what made them more

advanced, they were unable to answer. After being prompted with some possibilities (e.g., more training, more resources, more collaboration), they still did not know the difference between pilot and non-pilot schools. It is important to note that only one of the eight teachers in the focus group was part of the school when it became a pilot school. The rest of the teachers were very young with less than six or seven years of teaching experience.

Teachers provided several examples from their teaching during the day. One said she used a Venn Diagram to have the children identify things that were used before, things used now, and things used both before and now. Another teacher described a brain attack strategy. These methods were suggested in the curriculum, but the teachers explained that the content was their own.

Teachers expressed a desire for more training. They said 10 days is not enough. For many of them, their last training was four years ago, and they have not furthered their skills. One teacher said she would like to observe an exemplary lesson or work together with a trainer to develop a lesson and receive feedback. They would also like training on additional strategies since they have only learned a few. They want to see them applied in practice. The biggest challenge is a lack of resources. Teachers do not receive high enough wages to pay for all of the test forms and other resources that are required.

Teachers believed that many parents are unhappy with the new curriculum because they are unfamiliar with it. Specifically, they are not used to the new marking system and do not understand the new curriculum in order to provide support to their children. Teachers said parents are involved in this school through parent meetings, but do not play a very active role.

Village School #5, Gabala (2 males, 9 females)

Teachers were very familiar with the new curriculum, as well as the requirement to use active learning methods. The biggest strength of the program, according to new teachers, is that children become "active and adapted to the new world." According to teachers, AL creates a new learning environment where the teacher is no longer the director, and one in which children are forced to get along and work together on projects. Teachers enjoy the new methodology, but struggle with their ability to provide what is needed.

"We only have school, children, and teachers," said one teacher, lamenting that it is difficult to find and afford the materials needed for an active learning environment. Teachers appear to be in support of the reform, but are searching for supports to help them implement. For example, they noted that primary textbooks have references to active learning, but these references are scant beyond Grade 5.

When asked to further describe the changes present in the AL reform movement, teachers said the old education system was about "memorization" and the new system is about "skills." Pupils are far more likely to be involved in an AL class and students are judged qualitatively, not quantitatively. Teachers, however, believed they could not mark students below a "2" in an active learning environment and were disappointed that some old assessment methods had gone away. Teachers believed that the lack of low marks had led to confidence in students, but it is unclear whether high marks for every student was an intended consequence of AL.

Overall, teachers appeared to be supportive of AL, but mentioned several concerns. First was the lack of materials that were provided to teachers to implement AL. Second, teachers noted that it took a lot of time to prepare for AL lessons. Third, teachers mentioned that a 45-minute period may not be enough to implement an AL lesson. Finally, teachers mentioned that if students are not active by nature, AL lessons are very difficult. In sum, teachers supported the initiative, but claimed they needed more support in learning how it worked. Overall, all teachers wanted further coaching and training on AL strategies. One said, "you need a quiet head" to plan for and implement AL.

Overall, teachers wanted more training and resources. Teachers noted that the 10-day workshop they received was not sufficient for long-term implementation of AL, but UNICEF training was helpful. Further, not all teachers had access to UNICEF training.

Village School #6, Gabala (2 males, 5 females)

When asked about active learning, the very first statement teachers said was, "it is about the more you can teach in 45 minutes, the better." When asked to clarify, teachers said that active learning is about using lots of strategies in the class. One teacher said it was not possible to do active learning in first grade (we observed a first grade class in the school that was using active learning just two hours earlier).

Teachers said that as a result of active learning, children are more independent and more likely to express opinions. All agreed this was a positive change because pupils used to be passive. However, they noted that "the ones who want to study, study, and the ones who don't, don't." Teachers believed that the active students succeed with this type of teaching, but the passive ones do not. One teacher noted that this approach was actually introduced in the 1920s and 30s, but that pedagogues at the time believed it was not a good approach because it ignored the individual student. This comment was made by the same male teacher who believed active learning was not possible in the early grades.

The conversation then flowed to the challenges teachers faced in schools with active learning. The biggest challenge, teachers reported, was materials. Teachers said there are no computers in classrooms in Vandam and that power frequently goes out. One more experienced teacher said, "How am I supposed to teach with technology when I don't understand it?"

Despite these challenges, teachers saw positive impacts in the classroom. They felt students were more active, helped the teacher, and helped each other. Teacher also thought the formative assessment aspect of active learning was helpful "we can assess 3+ students at a time during the lesson." Teachers noted, however, that summative assessment was still important for classrooms.

"Pupils are asking for grades," one teacher said. "A child should be assessed for work every day. They want grades." Overall, teachers believed formal assessment should play a larger role in classrooms, especially after Grade 4.

After the assessment conversation, teachers discussed active learning and contemporary education. Participants agreed that motivation was the most important predictor of success in the classroom. "If teachers can motivate their pupils, they can learn." They also agreed that children are motivated in this school. Part of it has to do with group work and the reinforcement students receive from each other and teachers. "The strong ones are helping the weak ones. The ones sitting in the back rows used to be passive; now they are involved." Overall, teachers thought this was important because modern life is different, and teachers need to find ways to motivate children. The teachers thought they were motivating children because they express dreams and desires—"I'll be a doctor, a police." They felt children talked about making money a lot, but that was not all bad, because "where there is money, there is motivation." One complaint of active learning is that "in the past children were oriented toward reading, now they just want to be entertained."

Teachers noted that parents are very involved. Teachers were not familiar with PTA, but noted that parents can come to classrooms any time they wish. There are also class committees with chairs, vice chairs, and members, which call meetings to discuss issues. Parents also are always welcome to discuss issues informally with teachers.

The biggest support this group receives or has received is from each other and the Education Department. Teachers also noted that the teachers of Sheki Teaching Institute have been helpful, as have the model lessons that were demonstrated in another school in the district.

Urban School #7, Guba (6 females)

This school appeared quite versed in active learning strategies. When asked about what AL means, teachers responded, "more independence for students" and children produce good work in the AL model. Further, children could express opinions freely. "In the past children were more passive," said one teacher. Another teacher said, "in the new active learning pedagogies, children are very active in class, and teachers are facilitators of learning."

When asked about how teachers implemented active learning, they listed a variety of approaches in rapid fire fashion: discussion, cluster, zigzag, internet, cluster, brainteaser, word association, and carousel. When asked how they use AL approaches, teachers said that it depends on the theme of the lesson. For example, one teacher used critical thinking analyses to read texts, then utilized analysis of content and had students share opinions. Each child has a portfolio in class and the research they do in class is collected in the portfolio. Assessment is integrated throughout the year in formative through "little summative" and "big summative" assessments.

Teachers unanimously agreed that they work more now than in the past. "We have to work at home, to prepare the visual aids," said one teacher. "If we were passive in the past, now we are active," said another teacher. Further, teachers noted that they need to work hard to stay ahead of students. "If a student does research at home, the teacher needs to do twice more. There are lots of questions and answers in lessons and we don't have time to rest." Another teacher added "Active learning is active. In traditional teaching we had short breaks when we assigned the exercises. In traditional teaching teachers worked *in* the lesson, now the work is done *pre-lesson.*"

Despite the extra work, teachers enjoyed active learning pedagogies because "the pupils used to refrain from expressing opinions. Now there is more sincerity, opinions, assessment of student learning, and children learn how to communicate."

Parent participation is active at this school. According to teachers, parents are very active and are interested in their children's achievement. A few parents come to sit in on lessons. There are also "open days" on Saturdays for parents of Grade 8 students. However, one teacher said, "This is a region and sometimes there is not studying at home. We have teachers assigned to these teachers to help them (the children not studying at home)." This school has an active PTA. The PTA has a charter and a committee. It came to being with the Effective Schools Project. Pupils and parents participate in regular meetings with the schools and the PTA sometimes organizes when the school or a family is in need. Teachers shared the story of a child who was sick and needed medicine that was very expensive. The PTA organized a way to support the parents financially. Children also participated by creating a journal that they sold to help the students defray medical costs.

The main problem with active learning, one teacher stated, was the lack of materials and visual aids. "Teachers to not have enough salary to pay for flip charts and visual aids." There is internet in every room in this school, but teachers need worksheets for group work. UNICEF used to support the school with materials but no longer does. The final other complaint teachers had was that 45 minutes is too short of a period to use active learning. Teachers stated that they always felt in a hurry and had to speed up to deliver the topic in time. Some believed extended class periods would help with this. Others requested training in the regions so they do not have to miss class. They gave an example of how half-day training could be presented twice per day for teachers. Teachers in afternoon shift could attend the training in the morning and vice versa.

The most effective support teachers have received is from MOE and their refresher courses. The Effective School Project was also deemed effective, as was the e-School Project and the 10-day training course over summer.

I asked them for one more example about connecting AL to content. A teacher talked about a lesson on fruits, where she first played a cartoon of a poet who discussed fruits – then students role

played and analyzed fruits for different qualities as a gardener, director, historian. In the end, the groups summarized their findings and ate fruit.

Urban School #8, Guba (6 females)

The teachers were able to describe the meaning of active learning. They stated that AL methods required involvement from students and that they could not sit passively. In addition, they cited several strategies that they used frequently in their teaching (e.g., brain attack, zigzag, and role play). Teachers from this school said they identified these strategies based on the needs of the lesson and the students.

While teachers saw the value in active learning, they offered a critical viewpoint. They said that active learning is a western notion that is valid in the right contexts. However, they said the Azerbaijani context was not considered when adopting this approach to the national curriculum. They argued that the classroom conditions and resources available are not suitable to implementing this approach in a positive manner. Some of the teachers preferred to go back to the traditional approaches because it was less confusing for them, students, and parents. They believed that schools like Avropa are successful not because of active learning, but because the students are already advanced when they enter the school (e.g., they must score in the top percentile on an entrance exam).

Teachers felt exasperated with the lack of resources and materials available to them. They said large flip chart papers in the past were valuable, but they have not been provided in a long time. They do not have high enough wages to support buying the materials. Teachers said their salaries are based on four hours of work, even though they spend many more hours at home. The new curriculum, especially the assessment methods, is very time-intensive. The teachers want to see changes, but felt doubtful that they will occur. As one teacher said, "Many times we have expressed our needs and nothing has happened. Why is this time different?"

Capital School #9, Baku (6 females)

The teachers were widely aware of the meaning of active learning. They suggested that in AL, the teacher acts as the facilitator of learning rather than as the distributor of knowledge. They said that the teacher's role is to develop children's thinking ability to deduce conclusions themselves. Learning was described as a mutual activity between teachers and students. Teachers agreed that active learning lays the foundation for students to develop skills later in life by linking discipline areas and developing critical thinking.

Teachers provided some specific examples of active learning from their lessons that day. Two teachers mentioned the use of brain attack, one discussed the zigzag method, one utilized the cluster method, another used deriving a concept, and another allowed children to prepare a hypothesis and conclusion. Another teacher said her lesson was not conducive to active learning, so she did not apply the strategies that day. While the teachers relied on the curriculum to formulate these ideas, they primarily used their own creativity and judgment about when best to use specific activities. As one teacher said, "We are doing much more than the curriculum specifies. The curriculum is just one part of our teaching." They emphasized that active learning is not appropriate for all lessons, stating that some content needs to be learned in other ways (e.g., memorization). Rather than trying to apply AL strategies to every lesson, they use their judgment to decide which approach is the most conducive to learning.

Teachers discussed their training. They said they receive new training almost every year. Not all trainings are directly related to AL, but all trainings play a role in their use of AL strategies. For example, their training on using the SmartBoards taught them how to use that technology to engage students successfully in the classroom. Along this line, teachers said that the use of technology was helpful for teaching, but it was not essential for using active learning methods. However, they said

that the technology saved them a lot of time and made preparation much easier. In this way, they had more time to plan lessons that included active learning strategies.

Some of the challenges for using AL include time constraints. Teachers are only given 40 minutes for a single lesson, which is often not enough time to develop a lesson fully when active methods are included. Some also suggested that the number of students in their classes is too large. When doing group work, they try to limit the number of students in groups, but that means there is not enough time for all of the groups to present. Materials were not a problem for this group of teachers. Equipment was provided by the school, while many classroom resources were provided by parents.

Teachers debated the change in relationships between students and teachers. One teacher with many years of teaching experience said that the children now feel closer to the teacher. Another young teacher argued that this was not a result of the active learning strategies, but depended on the teacher. Other teachers told her that she had never used traditional teaching methods, and thus had not been able to see the change in students firsthand.

Teachers believed that parents were highly involved at this school, and they worked to incorporate parent involvement into their classroom. For example, one teacher invited parents to attend a professional theater with her students. While there, parents and students interacted to create a scenario. Teachers also discussed the PTA that assists with organization of classroom needs. In addition, the parent organization identifies various tasks that need to be completed at the school and makes them happen. Some examples included parents identifying that the sports hall needed better ventilation. They worked to raise funds to improve it. They also worried about an unsafe traffic area in front of the school and placed a sign to slow the cars during school times. Finally, they have assisted in the creation and upkeep of the school website.

Capital School #10, Baku (10 females)

The focus group started with one of the teachers reporting that she was part of the 2001 Human Rights using AL training and has been working on AL ever since. She noted that the school has good results because of active learning (e.g., pupils take part in discussions, are more active in lessons). She expressed that she loves this application of the new curriculum. She noted that children were successful because they were always looking for a learning moment. Pupils think clearly about advantages and disadvantages of different things they learn every day.

Because of the range of experiences, I asked teachers with middle range experience (approximately 20 years) to describe changes in their teaching via active learning.

Teachers expressed that they use new methodologies, the internet, PowerPoint, and so on. Most pupils have their own PCs, so they participate in e-learning. Teachers communicate through IT in class. One teacher noted that all children are active, they are doing group work, and teachers are attending conferences and meetings. According to one teacher, the advantage of active learning is teaching in a creative way. Teachers use technology, Venn Diagrams, and engage children through application.

I asked the same question of less experienced teachers (eight years or less). They echoed the statements of more experienced teachers, but added that shy students sometimes feel ashamed in big groups, but in small groups they are more active and involved.

When asked about parents, teachers agreed that parents were very active in the school. They helped children to make sense of information, and were a good channel for learning. One thing that teachers noted is that parents do not really understand the new assessment system. The new assessment system primarily uses narratives, not numbers, and not all parents can understand the value in such a system.

When asked what UNICEF could do for teachers, they all said that exchange of information was important. Teachers believed that they had ideas to share but also wanted to learn from others. They hoped UNICEF could facilitate such learning and help with new ideas.

Annex L: Parent Focus Group Summaries

Village School #1, Sheki—remote (4 males, 4 females)

The parents were unfamiliar with the terminology of "active learning." Most described it in terms of good or bad behavior. They knew that there was a new curriculum but had little understanding of what it meant. Some associated AL with tests, saying that now there are summative tests quarterly and after every unit. However, parents recognized that teachers now work individually with each child. They said attention was only given to the "excellent children" before. The new curriculum is credited with this change. One man commented that they are uneducated rural people, and therefore do not know much about the things (i.e., curriculum, teaching methods) of which I am talking.

When asked about parent involvement, parent meetings were immediately discussed. Parents are occasionally invited to school to discuss the behavior or performance of children. These meetings are held in large groups with the head teacher. Sometimes parents directly contact the teachers to see about their children's performance. These meetings are conducted on an individual basis. There is no PTA at this school, but they have heard of them from the cities. Parents unanimously agreed that they were not involved in the decision making of schools. They said it would be beneficial but is not the case now. One parent said she would like to join the school leadership to petition for rehabilitation of the school, but now she does not have the opportunity. The parents were a little uncertain about the barriers that prevented them from being involved. They simply said that the school decides everything themselves.

Village School #2, Sheki—IDP (4 males, 2 females)

None of the parents were familiar with the terminology of active learning, nor the fact that there was new curriculum. When they described what happens in the classroom, they explained a traditional approach in which the teacher presents the content and asks if students understand. They also described the assessment method of the previous times in which a student received a grade of one through five. All participants said their children enjoyed school. They said children now do not seem to like to work hard on their studies, but they like attending school because their friends are there. Relationships with the teachers are "good," but they could not elaborate beyond that.

Parent meetings were the only form of involvement mentioned. Ideally, they thought parents should be more involved in helping the school, but this would only happen in working normal jobs. Instead, they stated that parents are working day and night with very overloaded brains trying to manage everyday problems. They do not have the ability to spend additional time thinking about school activities. Their hope for the future is that the teachers will be talented and well-educated. They desire modern equipment, textbooks, and uniforms for the students. One parent wished for field trips for the children to experience things outside of the school and home.

Village School #3, Masally (4 males, 18 females)

Parents were aware of the new curriculum. They observed that the biggest difference is that teachers now have their students work in groups. The parents commented that the new curriculum and teaching methods make the children think. While students previously gave answers to questions, the new approach requires them to use logical thinking to solve problems. In terms of disadvantages, parents suggested that the children are overloaded with too much work and information. They said the textbooks are difficult to understand and that the level is challenging. One parent mentioned that even some adults do not understand the material in the new textbooks. Other parents said that 45 minutes is not enough time for class now that the children are divided into groups. They said the new approaches take a lot of time.

Parents agreed that relationships between teachers and students have improved under the new curriculum. They said that children are not fearful to express their opinion, which is different from before. Since they are given the chance to speak in class, the environment is friendlier.

This school is perceived to have high parent involvement. (Note: Earlier the director noted that he has made special efforts in the last two years to invite parents into the school. He saw this modeled in Baku and wanted to follow a similar system.) Parents said they are involved in parent meetings. Some referred to this as the parent committee. There is a chairman, assistant chairman, and members. They monitor attendance and child behavior. In addition, they are responsible for organizing special recognition events for children. Four to five times a year there is a general assembly meeting, and about once a month there are other meetings where about 10-12 people attend. Parents are not involved in the decision-making at the school, but they are involved in the implementation.

Parents know about previous support from UNICEF many years ago related to health protection, but are not familiar with any support related to education.

Village School #6, Gabala (5 males, 3 females)

When asked to comment on the situation of education in Azerbaijan, there was 100% agreement from the sample that there were "no problems" with the education system in Azerbaijan. According to the parents, there are "nice teachers, good schools, and new methods." Parents did not know exactly what active learning meant, but knew that children were active in the classroom. By active, parents really meant that children were becoming more independent and free. Children are active in the classroom and tests are present once in a while, but logical thinking was "the main thing now."

Parents noted that this was a striking difference to when they were in school. Prior to the curriculum reform, children only learned reading and writing (according to parents). Now, the education system appears to be focused on thinking abilities, with logic and technology at the core of school experiences. More than ever, students are expected to think and not just memorize.

Overall, parents felt positively about the reforms because children will need to live in the modern world. "They grow up earlier," said a parent of a first grader, who said children how have the knowledge that a fifth or sixth grader did in the past.

Overall, parents are happy with the education system and the contact they have with the school. This school does not have a PTA, but parents meet with teachers on a quarterly basis to update them on children's progress. This group of parents said a PTA was not necessary until high school because children are mostly satisfied, still young, and educational stakes are lower. Parents were all happy with both the school and its pedagogy, although all were only marginally involved in quarterly meetings.

Capital School #10, Baku (10 females)

This parent group seemed very interested in what was happening at the school. They believed that parents should also be trained in active learning methodologies because they are not up to date on the latest teaching techniques. Parents, however, seemed to have a good understanding of active learning in the classroom. In their parents' estimation, in the past, the teacher was merely a trainer. Only knowledge would be explained, not processes or logic. Today pupils are taking part in the learning process. The main driving point is thinking skills. For example, students write poems and they are assessed in class.

Assessment overall is different as well. In the past, students would get a numerical mark but a parent would not know why. Today, a child might get a "3" but it does not damage them because there is specific information about where the child needs to improve.

Parents noted that young children are sometimes marked by smiles and stars so grading does not damage them. A parent of a fifth grader said that from Grades 1 to 4, this is fine, but by Grade 5 students should be getting grades. Another parent said to get rid of grades at all levels. Overall, parents said they wanted to learn more about the assessment systems and what was behind it so they could better understand where their children are.

In terms of classroom process, parents noted that children are more active than in the past. They get into dialogues with teachers, and pupils are more motivated. In traditional methods children would learn an exercise – now they are seeking information from different sources. The parents said that in their time they were "robots" and never really had a chance to share opinions in schools.

One complaint parents had was the amount of homework children received. They wished that students' lives were not about learn-study-learn-study and that children had more time to rest. One parent disagreed and said it is good to have so much homework—the more information, the better. She stated that the brain is like a muscle and needs to be exercised. Other parents agreed but said the workload is still too much.

In terms of teacher interaction, one parent shared a story. "Two to three years ago, a teacher called me to tell me my child needs help. She was doing her best was not learning. The teacher wanted her to learn." Parents liked that when children had problems, teachers would call them.

Overall, parents said they were satisfied with the work of the schools. They taught French, English, and Azerbaijani. Some parents complain about workload, but the children are digesting information. Overall, parents were happy with the instruction but desired further explanation on assessment.

Annex M: Classroom Observation Summaries

Village School #1, Sheki—remote (Grade 1 Math; 9 girls and 15 boys)

Objective: To teach about the number seven.

Classroom map: Students were sitting in pairs at each desk, in a boy-girl order in most cases. The teacher walked around the room occasionally. She used a variety of materials such as copybooks, workbooks, dominoes, sticks, number cards, magnetic numbers, and a chalkboard.

The teacher began the lesson by asking questions such as, "How much is this? What number is this?" She showed various magnets on the board to illicit these answers. Student responded chorally with the number being shown. They sat at their desks with most giving their attention to the teacher. Three times the teachers asked individual students come to the front of the room to count out loud. (All three times the students were boys.) For one student, the teacher provided sticks and asked the student to identify how many more sticks would be needed. The other students watched, but did not participate. The teacher attempted to relate meaningful examples to the numbers: sheep, stars, rainbows, and birds. She provided story problems about these animals and objects to provide context for the addition and subtraction problems.

The teacher asked the students to open their textbooks and find the number of houses. She walked around and provided guidance for finding the correct pages. All students had their own workbooks. The teacher pulled out dominoes to use as examples, which were the same as the pictures in the workbooks. Only the teacher was using the dominoes; the students looked in their books. At one time the teachers asked the students to show the correct number using their fingers. There was very little wait time to allow students a chance to think about their answer. Usually the students with their hands up were called on immediately. The teacher did not make effort to engage students who did not have their hands in the air.

In the middle of the lesson, the teacher asked the students to stand up and do some exercises to re-engage them. Students were enthusiastic about this activity, and it appeared to gain their attention again. The next task was practicing how to write the number seven. The teacher modeled on the chalkboard how to write it. The board was very small, and she was blocking it, so it may have been difficult for some students to see the process. The teacher walked around the room to help some students. She often said, "See, it's easy." Then, three boy students came up to the board separately to write the numbers one to seven. While the last one was writing, the other students were counting aloud, per the request of the teacher.

Students began to practice writing sevens. The teacher modeled again and explained that she wanted spaces between numbers. She went around and helped students again, often writing the numbers for them. Frequently, she showed examples of clean and messy work. Many students were distracted during this task and were not writing. However, most became engaged after prompting from the teacher.

Village School #1, Sheki—remote (Grade 3 Life Skills; 9 girls and 10 boys)

Objectives: To explain natural events in a simple form; to explain how autumn prepares for winter; and to distinguish the science of autumn.

Classroom map: Students were sitting two to a table, usually in a boy-girl order. The teacher utilized textbooks and the chalkboard. At one point the students moved to small groups of four or five, where the teacher provided each group with a piece of paper and directions. A majority of the class period relied on the textbook.

The teacher drew a concept map on the board and provided descriptions around the circle. She read the descriptors and asked students what it described. Two girls were called on to stand and respond. The teacher asked such questions as "What do people do in autumn? What fruits are harvested?" All questions were directed to the whole group. A majority of students were engaged by shouting out answers. The teacher explained why leaves fall to the ground in fall. This description was provided orally, and did not include any drawings or modeling.

The children were put into four small groups. Each was given a different task to complete. One group drew a picture of autumn, one listed fruits, one listed the science of autumn, and the other was unclear. The tasks were directly related to what the teacher had just described for them. Some students disengaged from this task, presumably because one to two students in each group were dominating the activity. The teacher did not walk around the classroom during group work.

Representatives from each group (i.e., three girls and one boy) came to the front of the room to present. These were the students who had been most involved in their group work. The presentations were not original ideas, but rather included the same content given by the teacher during her lecture. Many students appeared distracted during the presentation, looking around or visiting with a classmate.

The teacher moved on to the topic of climatic zones. She asked, "How many climatic zones in the world? (Chorus: 11.) How many are in Azerbaijan? (Chorus: 9.) What season comes after autumn? (Chorus: winter.)" These were all closed-ended questions with recited responses. The teacher asked an open-ended question, "Why are they called migratory birds?" One child said it is because they migrate to other places. Another commented that they might freeze if they stay here. A few of the students dominated this discussion from the middle of the room. The teacher had her back to students on one side of the room for a majority of this discussion. Many of those students were disengaged and were talking to one another. The teacher explained the difference between autumn and winter.

The teacher directed the students to look at a picture in the textbook and asked, "Who can speak about the picture?" This elicited some quality student feedback about what they observed. She repeated this with several pictures. The teacher asked the difference between people and animals. One student said that creatures cannot take care of themselves, while humans can. This conversation led a girl to tell a true story about taking care of a dog by giving it bread.

The teacher explained the process of rain and asked for other forms of water. Students were unsure of the answer, so she guided them to respond with "boiling" and "ice." She began to provide a long explanation of this process, which was followed by many students losing interest.

Village School #2, Sheki—IDP (Grade 2 Azerbaijani; 4 girls and 5 boys)

Objective: To teach children to differentiate between words written in a certain way and pronounced in another way.

Classroom map: The classroom had six tables arranged in three pods. There were two to four children at each pod. There was a chalkboard at the front of the room. Every child had a textbook and a copybook. There were two alphabet posters on the front wall.

The teacher asked a variety of questions to the class, such as "What do word combinations create?" (Choral response: "A sentence.") She asked students to create their own sentences. Children said things such as, "My father bought a ball for me. My mom took me to the market." The teacher was smiling throughout the questioning process, and nearly all of the students' hands were in the air eager to answer the questions. The teacher continued to ask many questions. Very little wait time was allowed between her question and the students' answers. The questions were primarily basic recall.

The teacher asked various students to read aloud from the textbook. She then put students into groups to discuss one of the questions. All students were engaged in the discussion. One student reported on the group's discussion at the end. The class continued to read through the story. Rather than the teacher reading and the students listening, everyone was engaged. They took turns reading and answering questions posed about the text. Most questions were fairly basic, but a couple required some critical thinking: "Why did she put the apple in the bag? Would you also help your brother? How?" The questions occurred in a fast-paced manner. While this kept the students involved, some may have gotten lost in the quick speed.

The teacher used the chalkboard to write some words and show a comparison between the written word and pronunciation. She underlined various letters. During this portion of the lesson there was a lot of explaining from the teacher without much student involvement. It was followed with each pod receiving a dictionary for an assignment.

Village School #2, Sheki—IDP (Grade 4 Azerbaijani, 4 girls and 6 boys)

Objective: To learn about the national leader.

Classroom map: There were six tables arranged in three pods with three to four students at each pod. The teacher used the blackboard at the front of the room. Each child had a textbook and copybook.

The teacher drew a concept map on the chalkboard with several descriptors around a blank middle circle. The students were reading a passage silently about their national leader and former president. The descriptors on the concept map said such things as "far-sighted, visionary, great orator, and so on." The teacher asked, "Who do these words describe?" The students responded with the name of their national leader. The teacher continued to tell the students that their national leader is all of these things listed on the board. She gave a lengthy description about the national leader while the students sat silently and listened. Then they opened their text and read again. Two girls stood to read a passage from the text, followed by a third girl who gave a summary of the passage. This was repeated, although a boy was involved in the reading the second time.

The teacher mainly stood in the front of the room, and occasionally walked to one of the groups near the front of the room. The teacher gave each group some statements made by the national leader with which the students used to construct their own speeches. All of the students were involved in this task. While the students were working, the teacher wrote a multiple choice question on the board that said, "Which is the singer that visited our national leader?" followed by various options.

Village School #3, Masally (Grade 5 French; 6 girls and 4 boys)

Note: This teacher has been trained as a national trainer for AL. She also received the 'teacher of the year' award.

Objective: To learn vocabulary related to clothing.

Classroom map: The students sat two to a table (usually in a boy-girl arrangement). The tables were arranged in a horseshoe shape so that all students can see each other as well as the front of the room. The teacher had several large colorful papers displayed in the room. These appeared to have been created by her. Students all had textbooks and workbooks. The lesson included the use of an overhead projector and laptop with images that the teacher took from the internet.

The children were each provided with a piece of paper that contained the lyrics of a French song. The children sang the song together. Then the teacher said a phrase in French that the students repeated. (It was unclear what the phrases meant.) The teacher then showed various photos of clothing on the overhead projector along with the vocabulary term in French. The students repeated the name of the vocabulary. Following this, the teacher showed several physical examples of clothing that she

made from various pieces of cloth. These did not have the French vocabulary written on them, and instead the students had to identify the correct term.

After about 10 minutes the students stood to sing the alphabet song in French. The teacher said they were tired and needed to re-energize. Next, the teacher wrote the research questions on the chalkboard. These related to identifying the types of clothing and categorizing them. She then proceeded to show more photos on the overhead. Additional photos were shown on paper. The teacher mentioned to me that she did her research to show clothing that was representative of the French culture. She said she also utilized resources from Oxford since the Azerbaijan curriculum did not offer all the resources they need to teach.

Students worked in pairs to complete a worksheet. Each worksheet required a slightly different task. The students actively worked together to accomplish the task. All students appeared to be engaged.

Village School #3, Masally (Grade 1 Writing/Math; 12 girls and 13 boys)

Objective: To practice writing and counting to the number 7.

Classroom map: There were two children sitting at each table with 25 students in the classroom. The tables were arranged in three rows with aisles between them. All students were facing the front. There was a chalkboard, as well as a small magnetic whiteboard in the front. There were some small tiles with numbers on the whiteboard. All of the students had copybooks for their handwriting. There were various teacher-drawn pictures hanging in the room. Six number cards were hanging on the wall, with number seven presumably being the next to be hung.

The teacher walked around the classroom assisting children with their handwriting of various letters. All students had their own copybook in which they printed several letters in a row. They sat silently with one arm over the other once their work was completed. The teacher provided assistance to students and collected books at the end.

The teacher asked several individual students to come to the front of the classroom to count to 20 and back. Some counted by twos. Then all students counted together as a class. The teacher showed some cards with numbers on them and asked students to recite. The teacher asked students to show certain numbers on their fingers, all the way from one through seven. The children complied. Then the teacher provided some examples of story problems (e.g., If you have five apples and buy one more, how many will you have?), and asked students to create their own and solve them.

At one point, seven consecutive boys walked to the front of the room to practice writing the number 7 on the small whiteboard. This was despite the fact that several girls were raising their hands. Finally, one girl came to the front. The teacher then showed cards with numbers and pictures on them. She asked, "How many pictures are there on the card?" The teacher drew a number "house" on the small whiteboard with 7 at the top and various number combinations to equal 7 underneath. It was very small for the children to see from the back of the room. Several children were straining to see, while others were distracted and not paying attention. It was mostly the students in the front who were participating.

Village School #4, Masally (Grade 2 Azerbaijani; 8 girls and 7 boys)

Note: This teacher had a fully developed lesson plan, which was different from other classrooms observed.

Objective: To learn that pronunciation and writing of words differ.

Classroom map: Students were seated in groups of four in pods. There were two tables put together with two children at every table. In most cases, there was a girl-boy rotation. The classroom had a chalkboard with a poster on the board used for the current lesson. Children had textbooks and workbooks.

Students worked in groups to accomplish different tasks related to the Azeri language. Some had to identify which words were not pronounced as they were spelled. Others had to list 10 words that were spelled as they were pronounced. Most students were actively involved in this activity, but a couple were lost in the process. For example, in one group, two of the students were doing most of the work while the other two were distracted and silent.

The teacher collected all of the papers and then called a representative from each group to come forward and present their work. Two girls and two boys came forward to present their work. Then the teacher asked the rest of the class if they thought the answers were correct. In all cases, the students said yes. They continued to work in their workbook on an assignment.

The teacher seemed comfortable in front of the class, and the students seemed comfortable with her. She walked around the classroom to each of the different pods to provide support.

Village School #4, Masally (Grade 4 Math; 10 girls and 10 boys)

Objective: To demonstrate the ability to solve a mathematic problem in a group.

Classroom map: Students were seated two to a table. Tables were lined up in two rows along the sides of the room with one aisle in the middle. The chalkboard was in front of one of the rows. There were several commercially-created math posters hanging on the wall.

The teacher stood at the front of the room and read from the textbook. He asked some questions to which students responded orally and wrote some math problems on the board (1000 + 1001=2001; 4725 – 2001=2724). Students were put into groups of four to solve their own problems. There was some degree of problem solving here, yet the tasks were very similar to the one on the board. It was unclear how much the students understood the concept and how much there were simply copying the step-by-step tasks. However, they were working diligently and collectively in their groups.

A representative from each of the five groups presented at the front of the room. This took a long time to complete, and the teachers' attention was primarily on the individual presenter. Very few students were paying attention. Several times the teacher had to tap his desk or call out to regain their attention. This strategy was not effective. The teacher recorded something, presumably marks, in a register after each presentation.

Urban School #7, Guba (Grade 5 Azerbaijani; 4 girls and 18 boys)

Objectives: To identify syllabification in Azerbaijani words and the main point of a paragraph.

Classroom map: The four girls were scattered throughout the room. As in most other Grade 5 classes, students are seated two-by-two. There are no all-girl tables.

During the first five minutes of class the teacher appeared to be reviewing double consonants in Azerbaijani. She asked the class questions, and students answered one by one (boy, girl, boy), then three students came to the board to write words with double consonants. The teacher coached them through pronunciation, saying that sometimes a double soft sound makes a hard sound.

The teacher then identified several double consonant words in the textbook and pronounced them in two ways. She asked the class which was correct and students responded chorally. After this practice, children approached the board one by one to write words on the board. The order of students was boy, girl, girl, girl, boy, boy. For the second and third girls, the teacher asked the students to extend knowledge by thinking of an additional word that follows the same rule as the word they wrote on the chalkboard. The activity finished with a boy raising his hand and stating the general rule, and the teacher saying "yes."

The class then entered into a discussion about disability, prompted by the teacher asking, "Do you ever meet new people who may have difficulties?" Children shared various interactions with people with disabilities with the teacher adding to the discussion by asking probing questions ("How did you help them?"), commenting on the scenarios described ("They find their way in life."), and highlighting positive comments by students ("You accepted them."). The teacher showed great sensitivity about the topic and kept students from rising out of their seats by briefly catching their eye and making a downward waving movement. At the end of the discussion the teacher asked children to open their books and read a story about innovations for persons with disabilities related to communication.

At the end of the paragraphs (which were read aloud by different students), the teacher created a chart on the board and asked for volunteers to come to the board and complete the chart. It organized different types of communication.

	Receptive	Expressive
Oral		
Written		

The teacher then led the discussion again on sign language and Braille. At the end of a short discussion, the teacher asked students to summarize the paragraph. Students raised their hands to summarize the paragraph (girl, boy, girl, girl, boy, girl order). Then the teacher asked students to think about what they would invent to help people with disabilities. The teacher provided encouragement ("interesting"), logic ("as a teacher, he would not be able to accompany someone everywhere"), and correction ("gestures do not tell, they show") to the conversation.

At the end of this discussion, the teacher explained what the conclusion of a story is, and asked children to identify the conclusion of the story (students raise their hands to answer: boy, boy, boy). She concluded the lesson with a KWL chart on the chalkboard, asking students what they know (K) about the topic, what more they want to know (W), and what they have learned (L). Following the KWL activity where students came to the board to write answers, the teacher assigned a homework essay: "What I am interested in about innovations." Students were allowed to use the internet, textbooks, or other sources.

Village School #5, Gabala (Grade 1 English; 10 girls and 9 boys)

Objectives: To identify parts of the body in English.

Classroom map: Students were sitting two to a table. Three tables were "boy-boy," one table was "girl-girl," and five tables were "girl-boy." One girl sat at her own textbook. The teacher remained at the front of the room with a small table covered with magazine pictures. She also had a picture of a face on the chalkboard.

The teacher started the lesson by showing students pictures of a face. She then called out each of the parts (eye, nose, mouth). She used a variety of photos to reinforce the body parts. After she called out the parts, student repeated.

After about five minutes, students transitioned to a game of "Simon Says." The teacher would say, "Simon says touch your head," then touch her head. Students would touch their own corresponding body parts. Some students touched body parts right away, while others looked around the classroom then touched the correct body part. This game continued for about four minutes.

After "Simon Says" the teacher asked students to say what she said. She said, "touch your hair," and touched her hair. Students would watch and repeat. This continued for about three minutes. About halfway through the lesson the teacher returned to magazine photos and used call-and-repeat methods with students (e.g., "this is an eye" was called by the teacher and repeated by the students).

After about three more minutes the teacher asked students to open their exercise books. The teacher then used call and repeat methods for parts of the head and face in the textbook. The students opened to the correct page and repeated after the teacher. About 17 minutes into class a little girl started crying in the second row. The teacher asked her if she need to go out. The child said "no" and cried for two more minutes while the teacher went on with her lesson. After she stopped crying the child rubbed her eyes and looked at the teacher. The child observed the teacher and her classmates for about two minutes and then started repeating the teacher's calls.

Following the textbook, the teacher returned to magazine pictures for more call and repeat. Students dutifully parroted the teacher for body parts on magazine photos. Following the magazine photos, the teacher again started asking students to repeat what she did. "Touch your face, touch your hair," and so on. This time, however, the teacher stopped modeling where the body part was (she would say "touch your eye" without touching her eye). Some students could touch their eye but others were not responding. The girl who was crying was unresponsive. The teacher then asked the students why they could not remember the body parts. One student said, "I always get mixed up between head and hair." In response to this comment, teacher advises students to think of a word in Azerbaijani that reminds them of "head" or "hair." This comment lost the students completely. No student was able to come up with an Azerbaijani word that reminded them of "head" or "hair."

The teacher then asked the class to come to the front of the room and make a circle. Once in a circle the children played "Simon Says" again. Students touched appropriate body parts as modeled by the teacher, but then one girl told on another girl for not participating. The teacher sided with the "teller" and told the non-participative girl to join the game.

Still in the circle, the teacher went from child to child, quizzing them on body parts. She called the students "you boy" and "you girl" instead of by their names. After several students missed questions asked by the teacher, she told the class, "You can tell it from the picture but you cannot tell it when I ask you." She then returned students to their seats and again encouraged students to think of Azerbaijani words which reminded them of English words for body parts. The teacher then said, "Do you know the word 'hey' – like when you say 'hey' to someone," and waved in front of her head. The teacher then said, "Can you associate this with head?" One student responded, "hello."

Village School #5, Gabala (Grade 4 Math; 10 girls and 8 boys)

Objective: To identify and use order of operation in multi-step mathematics problems.

Classroom map: Children were primarily seated in tables of two. Two tables were "boy-boy," four tables were "girl-girl," two tables were "girl-boy," and there were two single tables populated by girls and one single table populated by boys. The teacher stood in the center of the classroom in front of the chalkboard. The left wall (students' perspective) had a picture of a flower and the right wall a government poster (describing Ministry officials).

This classroom had a relaxed atmosphere where students were willing to volunteer quickly during the lesson. The class started with a student completing a multi-step math problem on the board. The teacher coached the child through the problem. At its conclusion, students were told they can

choose two problems from their workbook to complete for homework. There was some discussion among students about which problems to choose.

After homework discussion, the teacher introduced new problems by having students go to the board. Along the way, she asked questions about missing variables. Her selection order was:
- Girl (raises hand to volunteer)
- Group
- Girl (does not raise hand)
- Group
- Group
- Girl (raises hand)

During this process, the teacher asked specific questions about algebraic expressions (and after) geometric shapes. During the process, the teacher reinforced steps to completion and linked to the students' workbook regarding geometric figures.

Next, the teacher asked another girl to approach the board and complete an algebraic expression. The girl student approached the board and explained to the other students what she was doing. The teacher coached the girl through the process. During the problem, the teacher also explained multiplication shortcuts that can be used when completing large, multi-step problems. During this process the teacher asked a question. A boy student raised his hand and answered.

The teacher asked for another volunteer for a second problem. The teacher then told the student to invent her own problem (along with the rest of the class). After, the teacher said, "Add 230 to your made-up problem."

Village School #5, Gabala (Grade 2 English; 12 girls and 12 boys)

Objective: To identify colors in English.

Classroom map: Children were seated in tables of two. Two tables were "boy-boy," two tables were "girl-girl," seven tables were "girl-boy," and one single table was populated by a girl and one single table populated by a boy. The teacher stood in the center of the classroom in front of the chalkboard. No other decorations were present at the beginning of the lesson.

This lesson was a model lesson, for which the teacher requested an observation (read: set-up). The teacher placed a poster on the wall and then proceeded to show students an online cartoon. During the cartoon she held the laptop with keyboard perpendicular and she swayed to the music, which made seeing the video difficult.

During this time the children watched and called out words they knew in the video. They did not know all the words, but seemed to enjoy the activities. Throughout the video, there were little feet kicking under desks and eyes directly on video. Teacher encouraged students to follow along. Students knew some of the words, but not all.

Next, the teacher asked students to come to the chalkboard to color parts of the picture. The order of volunteers was: girl, boy, girl, boy, boy, girl.

Once children painted the pictures, the teacher asked students to present on their pictures. She told the students their colorful contributions were "beautiful." At this point in the lesson, only one student (a boy) was sitting in his seat. The rest were watching the drawing happening on the poster.

The teacher continues to assess students informally by sending them one by one to the board (almost always in girl-boy order). She referred to the students as "you." When the students had finished, the teacher told them that their paintings were "beautiful."

Next the teacher handed out a series of strips of paper and asked students to paint them a particular color. If students were unsure, the teacher provided needed attention. At the completion of this activity, the students posted rainbow strips on the chalkboard and asked who knows particular colors. Students struggled with identifying colors.

Village School #6, Gabala (Grade 1 Azerbaijani; 10 girls and 10 boys)

Objective: To identify the 'a' sound in Azerbaijani and create word combinations using the 'a' sound.

Classroom map: Students were sitting two to a table. There were equal numbers of boy- and girl-only tables.

The teacher had a set of letter blocks at the chalkboard. The teacher asked a child to come up and spell the word "Mala" at the chalkboard. A boy came to spell "Mala." The teacher rearranged the letters, and then a girl came to the chalkboard to do it again. The teacher then asked students to open their textbooks and tell her what they see. The students called out answers (students familiarizing themselves with page).

The teacher then asked the students, "What are they selling?" on the picture on the page. She asked children to give names to the girls and boys in the book. Students appeared to be really enjoying calling out answers. The students were generating stories about the pictures in text (rather than repeating what the teacher said). Through call-outs, children developed a whole scenario about what they thought was happening in the book.

From there, the teacher pointed to a word in the book and the children repeated. She then read words very slowly and phonetically. After reading some words, the teacher asked the whole group some comprehension questions. Both girls and boys called out answers. At this point the classroom was quite loud and children were standing up, but all appeared to be on task. Children continued to develop side stories about the pictures, when the teacher asked a girl to read the story. After the girl read a section, the teacher asked a boy to read the next section. The boy tried, but struggled. The teacher worked with the boy, encouraging him to use his finger underneath the word he was reading. Next, the teacher asked the large group more comprehension questions about the story, then asked why students like autumn (there was an autumnal scene in the book story).

One girl raised her hand and says she does not like autumn because it gives her a headache. A boy liked autumn because leaves fell and chestnuts came out. A girl reported that she liked rain. This girl-boy-girl-boy pattern continued for some time, when the teacher finally told the children she likes autumn because all the fruits ripen (the picture in the book is about a fruit vendor). The teacher then directed children back to look at the story and said, "We have been saying 'I'. Who can write 'I' on the chalkboard?" (In Azerbaijani, 'I' is a three-letter word.) A girl then came to the chalkboard and wrote 'I'. Afterward, the teacher explained how certain words like "Mala" can be divided into parts (syllables), but other words like "mən" (which is the Azerbaijani word for 'I') cannot.

The teacher then asked children to read in the book independently. At this point in the lesson, several children went off task, looking around and talking. The teacher went to one boy who tried to read but stumbled, and said, "You cannot read well." As the teacher moved from student to student, all but two students were watching the teacher correct mistakes. Two girls were reading independently.

After the independent reading time, the teacher called students to the chalkboard (first girl, then boy, then girl, etc.) to work on the word "alma." The bell rang and the teacher quickly reminded students of the words they learned that day.

Village School #6, Gabala (Grade 5 English; 15 girls and 8 boys)

Objective: To identify names of structures in English (e.g., apartment, building, house).

Classroom map: Children were seated in groups of four with desks pushed together. There was one all-boy table and three all-girl tables. One table had three girls and one boy and the other three boys and one girl.

This lesson followed the same format throughout. The teacher used a book to have students try speaking and identifying English words, then would correct or coach them as they made attempts. The first question the teacher asked was, "Where would you rather live, a house or a flat?" Students answered one by one (girl-boy-girl, etc.). As children answered in English, the teacher provided real-time coaching on how to pronounce words or missing vocabulary.

Next, a boy read descriptions of building types in English. The teacher stopped the student part-way through to explain (in Azerbaijani language) how ordinal numbers work in English. Next, a girl tried to read aloud, but struggled. Other students helped the girl with the correct words as she was reading. The teacher told the student to sit down. A boy read the next English sentence and was asked to translate it into Azerbaijani. A girl then read and translated her statement into Azerbaijani. Another girl read another section and then translated it into Azerbaijani. A third girl in a row read in English (pronouncing words relatively correctly) but could not translate. A boy raised his hand and translated.

Throughout this entire process, the teacher stopped students to notice certain aspects of English in the text (e.g., ordinal numbers, capital letter for 'I', how plurals are formed). The teacher explained each of these in Azerbaijani.

Urban School #7, Guba (Grade 1 Azerbaijani; 11 girls and 13 boys)

Objective: To identify syllables in Azerbaijani words.

Classroom map: Children were seated in groups of five or six at a table. There was one all-boy table, the rest were mixed.

The teacher in this lesson had a very high volume level to her voice. She almost sounded as if she was shouting to students – not in an angry way, but she was very loud. The lesson started with the teacher asking students about how to spell certain words in Azerbaijani. She then had three students come to the chalkboard and asked two of the students to draw boxes for letters for a word she said (e.g., the word "dog" would have three boxes next to each other – one for each letter). The teacher asked the third student to create a box for the syllables (2) for the word she said. After, she filled in the boxes with words and children read them chorally. At this point about 60% of the room was responding. One girl sat silently, another boy was yawning in the back, and a third boy looked very confused in the back. Other children were partially engaged, but not really responding during choral reading.

The teacher then read a tongue-twister in the book to the children to demonstrate the 'b' sound. She asked students to participate by saying the tongue twister. At this point, about 80% of the children were participating. One girl in the back raised her hand for about a minute but was not called on and put her hand down.

The teacher wrote additional words on the chalkboard, which children read chorally. There were two lines of words, one of random words and the other with names for family members. The

teacher read words aloud and asked students to read chorally with her. At one point the teacher stopped, showed the students the word "Bilal," and asked them why the 'b' was a capital letter. A boy raised his hand and explained that it is a capital letter because "Bilal" is a name.

The teacher again had children read words aloud chorally, but stopped and asked, "Can I put [word] in this row?" A boy said, "We can't put it there." The teacher asked why and a girl answered, "Because they are not family." The teacher said, "Let's clap." After this exercise, the students took out a handwriting practice sheet and worked silently on handwriting.

Urban School #8, Guba (Grade 2 Azerbaijani; 20 girls and 7 boys)

Objective: To explain how to behave with respect to younger and older people.

Classroom map: There were five tables with five to six students sitting at each, and far more girls than boys in the classroom. There was a blackboard at the front of the room and many colorful teacher-created pictures on the walls. Number cards were clipped to the curtain. All students had textbooks and workbooks.

The teacher introduced the lesson by doing a role play in which a boy and girl came up and role played being siblings. They demonstrated how to respect each other. The teacher used much animation in guiding the children when they were stuck on what to say. She helped develop the scenario even though the words belonged to the students. After the role play, the teacher asked various open-ended questions to the class about the scenario. "What would you do differently?" or "How can we respect our younger siblings?" This idea came from the teacher rather than from the curriculum.

Students opened their textbooks to read an entry written in the form of a journal entry. The children followed along as the teacher read the text orally. Some students followed along with their fingers, while most followed along with their eyes only. The teacher asked for a summary from the children. One girl stood to give her summary. The teacher asked, "Can we justify the father's rudeness?" Then she went on to ask about the rights that children have. Some students answered "right to education" and "right to health." The teacher read more of the text, which was a continuation of the story from a different journal entry. She asked, "Should we respect only those who are younger than us?" Students concluded that they should also respect their elders. Then, students completed some exercises from their textbook and wrote their own journal entry in the copybook. This included what time they woke up and what has happened during their day.

Most of the students talking were those who volunteered to answer. There were many children who did not volunteer. It seemed that the highest ability students were getting the most attention in this lesson. Only the students in the front were called upon.

Urban School #8, Guba (Grade 3 Azerbaijani; 10 boys and 6 girls)

Objective: To identify words that are pronounced and written differently.

Classroom map: There were six tables in the classroom. One table was not occupied by students. One had one girl. Two had three students, one had four, and one had five. It is not clear why they were distributed in this way. There was a 100s chart on the wall, as well as large permanent wall displays. These included a picture of body parts, maps, and other content. They were not geared to a third grade level.

The teacher began the lesson by asking three questions: "How many letters are in the Azeri language? Which letters are pronounced in two ways? How many vowels and consonants are there in Azeri?" These were the same questions asked in a lesson observed at a different school and were taken directly from the curriculum suggestions.

The students opened their textbooks and followed along as the teacher wrote on the board. She explained that some words are spelled differently than they sound. Then she distributed a different paper to each of four groups. One representative from each group came to the front of the room to present their work. It seemed that the highest-ability level student was selected from each group. The students presented their work, which was followed by a teacher explanation. Students at the tables were not engaged in this process, but were attentive.

The students opened their workbooks, and the teacher gave them an assignment. They worked quietly while the teacher walked around the room, but mostly stayed at one table. She asked some students to read from their work and write the answer on the board. They first wrote the incorrect spelling, followed by the correct spelling. She asked the students to continue working in their workbooks while the individual students were writing on the board.

Capital School #9, Baku (Grade 1 Math; 15 boys and 14 girls)

Objective: To develop a conceptual understanding for the number 6 and practice writing the number.

Classroom map: The room was organized in three rows of two-seater tables. There were five tables in each row. The room contained about 30 books on shelves, as well as binders and cubbies for each student. There were alphabet cards hanging on the wall with colorful clothespins and a bulletin board with student artwork. Shelves contained games and a globe. The teacher's desk included a computer and printer. There was a SmartBoard and white board at the front of the classroom.

The teacher showed pictures on the SmartBoard and asked students to count them. "How many do you see?" The students respond orally. "What number is before 6?" The students again responded orally and in unison. The pictures on the slide were very elaborate. They contained a colorful picture with a fence, sunflowers, sheep, and a padlock that looked like the number 6. The teacher recited a poem using the number 6.

The next slide on the SmartBoard was a picnic basket with several fruits that had a variety of numbers on them. One student at a time came up and moved the fruit in order from 1-6 into the basket. Then students counted orally to six. Another slide included several math problems in bubbles and answers on umbrellas. The students moved the correct math problem over the correct answer. One student at a time came up to the board to complete this activity. Next, students wrote the math problems related to the pictures on the screen. Then there were number houses in which the students had to fill in the missing number. The slides continued over the course of more than 20 minutes.

The teacher primarily taught from the front of the room using the SmartBoard as the primary teaching tool. She appeared comfortable and smiled with the students. However, her teaching method only allowed one student at a time to come to the front of the room and participate. The only time she engaged the whole class during the SmartBoard activities was to ask if the class agreed with the answer given. For the most part, students were attentive, but there did not seem to be consistency between the slides. They were all focused on math and the number six, but the exact objective was unclear.

The students opened their copybooks and wrote the date. The teacher displayed another slide on the SmartBoard with the number six. She showed how to write the number six, while the whole class did air drawing. All students were engaged in this task and practiced together. She gave verbal directions for guiding their air drawing. Then students practiced the number six in their copybooks. Meanwhile, the teacher walked around checking individual student work.

Capital School #9, Baku (Grade 4 Azerbaijani; 30 students)

Objective: To distinguish complex words.

Classroom map: The room was organized in three rows of two-seater tables. There were five tables in each row. There were many examples of student work displayed in the room on the walls. There was a computer, SmartBoard, and overhead projector in the room.

Students worked in five groups of about six students each. Most were engaged in the task. Each group had a different activity, including a Venn Diagram, Concept Map, and Input-Output function model. The teacher walked around the room to offer assistance. Each of the groups had a representative come to the front of the room to present their work. In some cases, the student completed tasks on the SmartBoard that complemented their presentation. For example, one student moved words to the correct place on the board as a way of checking answers.

The teacher assessed each of the groups by completing the assessment chart hanging at the front of the room. There were five groups and five criteria, including cooperation, orderliness, originality, presentation, and accuracy. Students received a plus or minus for their group work, as well as a total score up to 100. One group had low cooperation, and one group had low accuracy. Otherwise every group received plusses.

There were many students volunteering in this class. The teacher only called on those students with hands raised. This classroom was teacher-guided, but not teacher-centered. She asked a lot of questions rather than giving a lot of answers. She appeared comfortable with the students and the students appeared comfortable with her.

Capital School #10, Baku (Grade 3 Russian; 9 girls and 13 boys)

Objective: To identify prefixes and suffixes in Russian words.

Classroom map: Students were sitting two to a table. There were seven "girl-boy" tables, two "girl-girl" tables, and three "boy-boy tables.

The teacher asked the class, "What is a prefix?" Students then came to the front of class and underlined prefixes on a PowerPoint slide projected on a white board. The teacher then explained that a single root can create multiple words: "For example, footballers play football in football season." One boy jumped out of his seat to add to the conversation, saying "ooh." The teacher said, "I don't understand Chinese" and asked the student to sit down. The teacher used this strategy frequently to remind students to stay in their seats. She then called on other children who were sitting.

A conversation then ensued:
Girl: "The root is the main part of the word"
Teacher: "Which part of the root changes?"
Boy: "Suffix."
Teacher: "A suffix connects to the ending of a word."
Girl: "A suffix is the changeable part that changes a word."

The teacher brought up a PowerPoint slide with definitions of root and suffix. Children read the definitions on the slide and teacher stated again, "All these words have the same root."

The teacher then said, "Look at these words; they all have the same root (go out, go across, come in)." The teacher then walked out the door and came back in. "All words have the same root but different suffixes. This shows they are the same word in each root. A small change to the beginning and you make a new word." The teacher then asked for children to discuss out loud, which they did, and then she said, "You told me the rules of the lesson." Another conversation ensued:

Teacher: "The root of the word in 'walk' is the word on the white board."
Children: Read slides aloud chorally.

Teacher: "Now mark the prefix, root, and suffix in your exercise book."

The children wrote in their exercise books and delineated prefix, suffix, and root. One girl could not find a suffix in the last words. The teacher explained that suffixes are at the end of words but that students would learn this more in fourth grade. A boy raised his hand to say what a prefix, suffix, and root are. The boy stumbled a bit, but the teacher coached him through until he had definitions correct. The teacher then asked the entire class to recite definitions "as adults, not kindergartners" – this was referring to the expected level of self-control of the students during the recitation of words.

The teacher then called on a boy on the right side of the room, said "You are sleeping over there," and asked the boy to read to her. The boy came to the board and highlighted the root of the word. Four boys consecutively added information about roots. The teacher reviewed the main concept again and the boy identified the subject.

The teacher then told a girl she was too silent and brought her to the board. The teacher asked the girl to identify the subject. A boy corrected her and told her how suffixes are formed. The girl fixed her work at the board.

The teacher reviewed four words at the board. She created a root word and explained the difference between "ending and suffix." She showed children how to identify a suffix. She then gathered attention and explained suffix. First a girl, then another girl, then a boy recited definitions. The teacher gave praise.

Capital School #10, Baku (Grade 5 History; 9 girls and 19 boys)

Objective: To identify events and rationale for the Azerbaijan independence movement.

Classroom map: Children were seated in groups of five or six at a table. There was one all-boy table and the rest were mixed.

This lesson was very conversational. The teacher presented information on PowerPoint slides and frequently asked for input. The class started with the teacher placing images of independence fighters on PowerPoint. One boy student described the movement, and the teacher added to it, asking the student about the difference between the village rebellions and the independence movement. A girl raised her hand and commented that the village rebellion was against taxes, but not necessarily for independence.

A conversation ensued regarding the independence movement. The conversation's main theme was that the village rebellions were against taxes, while the independence movement involved everyone. Rich people, scholars, and common people were involved in the independence movement. The teacher called on five boys in a row during this conversation.

The conversation turned to modern Azerbaijan, when one girl added that some lands are under occupation. The teacher stated, "Now we are trying to get our land back through peaceful means. We want to strengthen the economy. We can win the war, but we don't want to shed blood. There have already been martyrs in Azerbaijan." A boy asked her what benefit is it to reclaim land. The teacher said, "Economy, language, and same religion."

The remainder of class was very conversational. The teacher continued to ask questions which students answered. The ratio of boys to girls answering was approximately 7:1. At the end of the conversation, the teacher distributed a worksheet to students asking them to comment on independence and further explore some of the reasons for the independence movement. Pupils worked in groups to complete the assignment.