



The Quality Link

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The Newsletter of the Improving Educational Quality Project

Number 6



Table of Contents

A Snapshot of IEQ	1
Goal I	5
Goal II	7
Goal III	11
Goal IV	10
Lessons Learned	18

This issue of *Quality Link* features the overall accomplishments by individual goal, within which the highlights of the IEQ "story" in each participating country appear.

A Snapshot of IEQ

A. The Context of IEQ

1. The Purpose

The Improving Educational Quality (IEQ) Project is about three things: learning about the school and classroom experiences of educators and pupils, working in partnerships with host country colleagues (some of which cross traditional boundaries), and gathering and sharing information which reflects the educational priorities of each country. We move from the traditional mode of technical assistance toward a more collaborative mode. This shift substantively influences the nature of IEQ.

2. The Goals

IEQ's goals developed out of a focus on generating knowledge about IEQ country innovations, sustaining the research process in educational reform efforts, transferring research knowledge into practice, and developing and disseminating the lessons learned. With the identification of the potential outcomes and utility of IEQ's research, the following goals evolved :

- ◆ understand how and why each country's classroom-based interventions influence pupil performance;

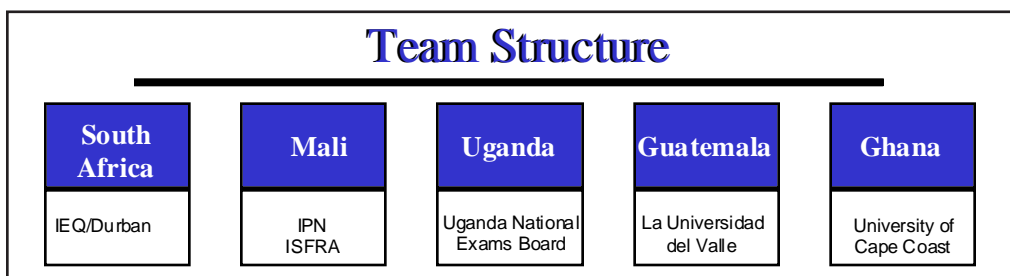
- ◆ demonstrate a process whereby findings from classroom research on improving educational quality are utilized by the educational system;
- ◆ create opportunities for dialogue and partnerships among researchers and educators who are seeking to improve educational quality at the local, regional, national and international levels; and
- ◆ maintain a history of the project to document the rationales for choices made, opportunities and constraints encountered, and lessons learned.

3. The Structure

IEQ infrastructure is centered around in-country teams, sometimes within host country institutions. This is a new way for many host country and donor participants to do business. In some situations, IEQ has helped to form new units and new relationships. For example, people accustomed to working individually formed teams (university faculty and researchers) focused on the research. The nature of our collaborative effort

(continued on page 2)

Team Structure



which results in a collective product required some “operational principles.” For example, involved parties can disagree constructively. There are no winners or losers. Reciprocity characterizes the relationship.

4. The Process

The IEQ process is dynamic and flexible. We work from a central core of values and principles which permit opportunities for redefining and reshaping an unfolding effort. Systems are not static. Because new findings or demands change in the midst of an effort, changes in project focus may be necessary. For example, in one country we responded to a request to examine English-language learning in P2-P5 because Criterion Reference Tests in P6 revealed low mastery of English. In another country we shifted from measuring second language acquisition to creating instruments to measure indigenous languages in early primary grades.

IEQ recognizes that learning occurs in context, and it is this contextual knowledge which opens the door to understanding — findings and information gathered in one situation may not be applicable to others. What is important is what is happening in your country. For example, there may be few textbooks in many countries, but the circumstances surrounding their availability and use may vary by locale, region or nation. And perspectives of the situation may vary, depending on the source of information.

B. The Interactive Framework of IEQ

The graphic illustrates how IEQ functions in an on-going cycle:

1. Assessing the Situation

We assess instructional practice, pupil performance and the classroom environment, using a variety of qualitative and quantitative instruments. In each of the IEQ countries, the teams developed instruments to measure research questions which reflected host country priorities.

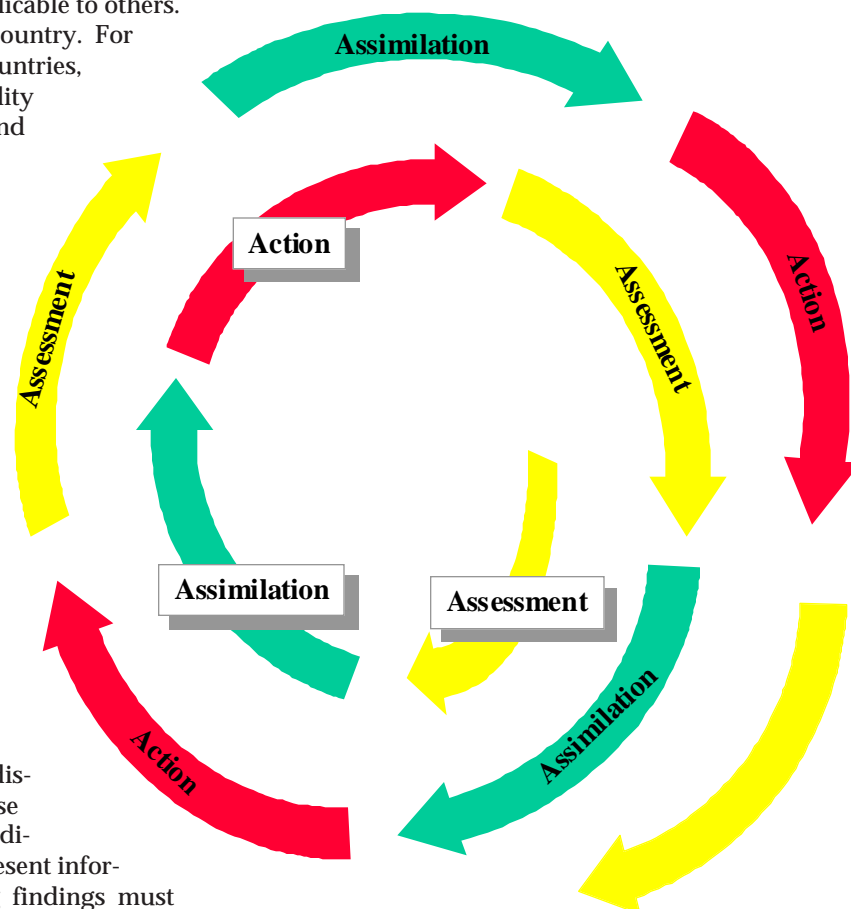
2. Assimilating the Results

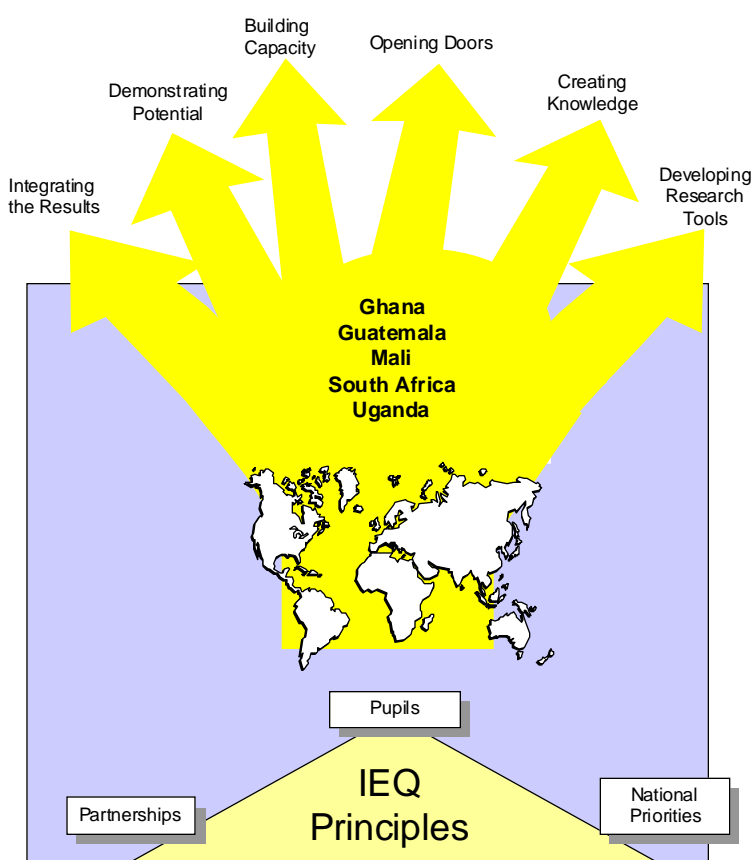
We encourage dialogue within the system, often bringing together representatives from schools, communities and regional educators to discuss findings with national policy makers. We use diverse approaches (e.g. seminars, workshops, individual meetings) to penetrate the system and present information in various user-friendly formats. Sharing findings must occur if improvement in the quality of teaching and learning is to take place.

3. Acting on the Findings

The research findings are not converted to a set of recommendations, but rather presented in useful formats so the insights gained through the information may be shared and discussed by educators at all levels within the educational system. Dialogue focuses around concrete information, for example, about how teachers do and do not teach and how pupils are and are not learning.

The data may suggest a re-examination of several initiatives (e.g. textbook distribution policy), further exploration of some surprising findings (the reduction of teacher absenteeism in some targeted intervention schools), or a more in-depth look at successes and failures such as household influences on high and low achieving girls and boys. IEQ teams are now part of the national dialogue on reform. The data which IEQ teams have gathered have resulted in the re-examination of some national initiatives.





C. Rhythm of the Reform as Informed by IEQ

1. Integrating the Results

The results from host country findings are useful in two ways. The first is within country. Sharing the results among representatives at all levels of the educational system has accelerated the implementation of the IEQ process and the usefulness of the information within national policy and local practice. The second use highlights commonalities across the IEQ countries that have potential value in reform efforts within the broader international context.

Within Country: IEQ researchers and information have moved into the national arena to offer leverage for change. For example, in Uganda, IEQ is the research arm of the national reform effort; in Mali, IEQ monitors new policies, develops nationwide tests and is a member of national committees; in Guatemala, IEQ has received a request for training support from the Minister of Education; and in Ghana IEQ has been asked to sit on the national reform

committees and participate in MOE-commissioned studies.

Across Countries: IEQ is learning more about the present realities of the school and classroom situations—not only the conditions under which children are expected to learn, but also many of the common problems of the systems. For example, materials are not grade-level appropriate, teachers don't know what to do with textbooks even when they are provided, children have difficulty writing a few words or following simple instructions (a fact of which teachers are now aware), teachers abuse the timetable and reading texts are not properly sequenced in the curriculum.

2. Demonstrating Potential

The IEQ Project has discovered the untapped potential of educators within the system. Our experience suggests that educational improvement is sparked when people become engaged in the process of reform. IEQ has debunked some myths about teacher disinterest, community turnover of education to teachers, etc., and it has shown that the infrastructure of a system may be strengthened to bring about indigenous reform. We have been paying attention to what educators and pupils do that makes a difference. Teachers recognize and appreciate being included in the process for improvement, and they value the assistance they receive to improve their own instructional practice. They come back for more and wish to participate at their own expense. Community members come to meetings about schools, while parents become involved in school management.

3. Building Capacity

Both institutional and individual capacity is strengthened through IEQ. The heart of IEQ lies in each partner country, as institutions “host” IEQ teams. The local teams carry the bulk of the workload and have added new skills to their professional repertoire, such as the use of qualitative research methods. In addition, members present findings of the research to international associations, ministers of education and regional educators. Institutional capacity has also been strengthened: post-secondary education courses may include more school-based information gathering methods; new skills in multi-methodological research designs are being implemented; and non-governmental organizations have integrated formative evaluation processes into their training programs.

In Ghana, a team of researchers examined the availability, sources and use of instructional materials in classrooms in six primary schools and found that many Ghanaian pupils could not perform at the expected level. In Guatemala, IEQ studied the implementation and impact of an innovative pilot project designed for multi-grade schools in rural areas. The IEQ Mali team conducted field research on the learning process in the first two years of primary education and then held regional training workshops to assist educators, parents and other community development practitioners with implementing five interventions. In South Africa, grantees and the IEQ team have conducted impact assessments that examine early childhood learning, teacher training, teacher support and curriculum development, adult basic education and language development. The team in Uganda works with the National Exams Board to manage a research program that enables a broad range of researchers to conduct studies linked to the reform.

4. Opening Doors

All participants are part of the learning curve. The project staff have seen that

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the key to improvement rests with recognizing one's relationship to other pieces of the system and, further, that decisions and plans must reflect the integration of the parts. When information is both shared and made public, it brings new people into the dialogue (parents, teachers, regional educators) and suggests new roles for some of them, e.g., circuit supervisors and head teachers become instructional resources, not "inspectors." Typically tertiary institutions are not involved in basic educational reform, other than to conduct their individual studies. Universities are now included in research on national educational systems, a role which may draw them into the reform in other ways. Altogether, these activities support the values of a democratic society.

5. Creating Knowledge

IEQ creates new knowledge as information flows within and across the system. The key is how the information is presented, shared and used. It must be "user friendly" and audience-specific.

The information the project gathers about the reality of teaching and learning becomes a catalyst for dialogue, e.g., upper primary pupils are unable to read passages from lower primary texts; information about instructional practices and pupil performance is now known WITHIN the primary cycle, which opens the door for improving teaching and learning while children are still enrolled in school. This differs from the end of cycle testing which is used in selecting candidates for secondary school rather than in diagnosing the system for improvement. Dialogue then becomes the forum for proposing changes: trying out new instructional strategies in the classroom, distributing textbooks (ensuring that head teachers are reimbursed for transport to the district office to pick them up), and re-examining the national initiative to support girls in school.

Measuring pupil achievement, especially at primary school departure, presents neither a complete nor an accurate picture of schooling. IEQ has gathered information about how materials such as textbooks are used or not used by both pupils and teachers (more not used), the scarcity of resources available to teachers, the substandard physical conditions of schools, the lack of observance of the timetable that results in a reduced level of time on task, and the relationships among factors in schools (e.g. teacher qualifications, head teacher absenteeism) which affects pupil performance.

6. Developing Research Tools

IEQ host-country research teams have used qualitative and quantitative methods to capture what is happening in the classroom. They have developed a variety of techniques for assessment: achievement measures in numeracy and literacy; interview protocols for parents, pupils, local and regional supervisors, and community members; classroom observation forms which describe interactions among pupils and between teachers and pupils; instructional materials; and information on the learning environment (depicted through drawings of the classroom and school grounds).

Improving the quality of teaching and learning is a work in progress in all countries. The IEQ legacy is a process for dialogue based on classroom realities. And the process must include all of those who are interested in educational improvement.

Jane Schubert

Project Summary: Ghana

In Ghana IEQ formed a partnership with the University of Cape Coast's Centre for Research on Improving the Quality of Primary Education in Ghana (CRIQPEG), USAID/Ghana, and the Ghana Ministry of Education to conduct innovative classroom-based research to improve pupil learning. The first phase of IEQ research examined the availability, sources and use of instructional materials in classrooms in six primary schools in the Central Region of Ghana. Classroom observations suggested that pupils were not meeting expectations in mastering English. Children were generally not interacting with the teacher, classmates or written materials in ways that would promote English language fluency and literacy.

In a subsequent phase, CRIQPEG developed, pilot tested, and administered curriculum based assessment instruments measuring pupil skills in oral language (listening and speaking), reading and writing. Over 1000 pupils in 14 primary schools from two regions of Ghana were individually assessed. Individual, classroom, and school profiles of pupil performance were developed.

CRIQPEG team members shared the results of the research findings with local educators and together they identified and implemented strategies (or interventions) for improving English-language learning. Classroom interventions in Ghana focused on increasing pupil exposure to print, encouraging practice with oral English, and adjusting instructional practice so that all pupils are successful learners. Circuit Supervisors, head teachers, teachers and CRIQPEG team members collaborated to promote these improvements in seven of the fourteen participating schools.

During the summer of 1996, CRIQPEG researchers collected additional information to enhance the longitudinal data set and to answer questions posed by earlier findings. Follow-up pupil performance data, household education and English information, teacher ratings, and attendance information were gathered on level 6 pupils. Teacher and Circuit Supervisor interviews provided insight into questions about the interventions and instructional decision making. Available textbooks were counted again. Case studies (profiles) of pupils targeted 3 years ago for follow-up observations and interviews were prepared and the children and their parents were interviewed one final time.

CRIQPEG's research initiatives have led to the integration of CRIQPEG within the University of Cape Coast budget as CRIQPEG anticipates its continued involvement in the process of educational reform.

Goal I

Understand How and Why Each Country's Classroom-Based Interventions Influence Pupil Performance

IEQ Ghana

Fostering English Language Learning

Improving educational quality in Ghana followed the IEQ cyclical path: assessment => assimilation => action. Initial research efforts focused on the classroom availability and usage of instructional materials (see *Quality Links #1 & #2*). New cycles emerged from this work which focused on fostering English-language learning.

Assessment: To better understand factors affecting language learning, IEQ researchers visited schools to observe in classrooms and talk with educators, parents and pupils. Oral language, reading, and writing skills of over 1000 pupils in the fourteen participating schools were assessed. Results indicated that primary-level children were not mastering even the basics of language and literacy and that available materials were likely to be too difficult for all but a few of the children (see *Quality Links #3 & #5*). Classroom observations indicated that lessons were characterized by rote recital, repetition and copying of a few words written on the chalkboard with few other opportunities for children to speak, read or write.

Assimilation: Researchers shared their findings with local educators in seven of the participating schools, and together they discussed ways of intervening. International consultants and UCC faculty provided information on knowledge and lessons learned from other countries about language learning. Three intervention goals were identified: (1) frequent practice with oral language/English, (2) constant exposure to print and (3) using instructional strategies to make every pupil a successful learner. Circuit supervisors and head teachers were instrumental in devising strategies and activities for supporting the three identified goals and for encouraging teachers to implement newly learned strategies in their classrooms.

Action: Collaboration didn't end with the workshops. Circuit supervisors, headteachers, and CRIQPEG researchers

continued visiting classrooms and discussing with teachers strategies for improving learning. Together they refined the instructional process. In periodic feedback sessions, difficulties and professional development needs were identified. Local educators and IEQ international consultants responded.

Assessment: To follow-up on the impact of the interventions, CRIQPEG reassessed pupil performance 18 months and 29 months after baseline achievement testing. Results were remarkable: although there were few significant differences between the seven intensive intervention schools and the seven non-intensive intervention schools in the initial assessment (with some differences favoring the non-intensive schools), differences at 18 and 29 months were significant and consistently indicated that pupils in the intensive schools performed equally to or better than pupils in the non-intensive schools. Figures A & B illustrate differences observed at 18 months in reading performance (based on composite scores from each student reading multiple passages). By 29 months, patterns that had begun to emerge at 18 months were firmly established. For example, the level-six pupils in intensive schools performed significantly better than non-intensive school pupils on functional language tasks and oral expression, they were able to write significantly more words and performed better on dictation tasks, and they were able to read (on average) approximately eleven words more per minute (50 vs 39) and to read passages from their textbooks with ten percent greater accuracy (82% vs 71%). NOTE: These differences persisted despite the fact that there are, on average, significantly more readers and writers of English in the households of non-intensive school pupils than in the households of intensive school pupils.

Assimilation and Action: Throughout Ghana, educators of all levels are taking part in the cycles of improvement. Recently there was an attempt by educational leaders and policy makers attempted to include CRIQPEG as a line item in the national budget: Instruments developed for monitoring pupil achievement are being reviewed for broader use. A proposal has been submitted by the Advisory Board to implement the interventions and IEQ approach in other districts and regions. CRIQPEG is being proposed as the research arm of national initiatives to reform education. All of these developments demonstrate the power of collaboration and the assessment=>assimilation=>action cycle in bringing about improved educational quality.

IEQ Guatemala

Making Progress: Introducing Student Performance Assessment

Longitudinally, the IEQ research found that the greatest impact of the

Reading Comprehension -- Average Number of Questions Answered Correctly

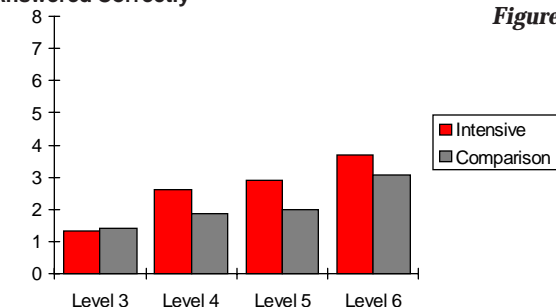


Figure A

Reading Decoding -- Average Percentage of Words Read Correctly

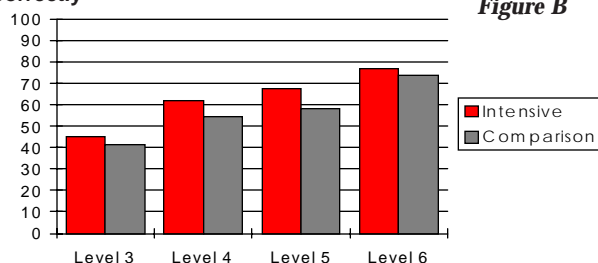


Figure B

Goal I...

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NEU active-learning program was in increasing the number of children staying in school and making yearly progress toward primary school completion. Over the three years that dropout was measured, dropout rates were consistently lower in NEU schools than in comparison schools. In 1994 and 1995, the difference in dropout rates was significant, as NEU schools averaged about twelve percent fewer dropouts than comparison schools.

The percentage of children who advanced a grade each year was twice as high in NEU as in the comparison group. As Figure A indicates, significantly more children in both first and second grade had advanced to fourth grade and fifth grade, respectively, in 1996. The percentages were similar for both boys and girls and the differences were significant in all cases.

The IEQ research showed that greater numbers of children advancing through the primary grades displayed a broader range of abilities in NEU schools than in the comparison schools, where only the best students remained in school. However, on the average, the NEU students performed as well as the comparison children in both mathematics and reading. Thus, the NEU program maintained quality, as measured on achievement tests, while improving efficiency.

The success of the Nueva Escuela Unitaria program was attributable, in part, to decentralizing the learning experience of children by creating small-group learning contexts. In NEU schools, between 40% and 50% of students' interactions took place in such contexts. This percentage compares to between three and ten percent in traditional schools. Such small-group participation contributed to significant socio-emotional development in terms of participatory behaviors such as taking turns, guiding other students in their academic work and expressing opinions in class. The NEU program promoted the participation of children of different sexes and ethnicity. Boys and girls in the NEU program in the indigenous region and in the *ladino* region exhibited these

behaviors with significantly greater frequency than children in comparison schools during all three years of the study. The opportunity to participate actively was related to staying in school, as non-dropouts consistently exhibited more participatory behaviors than dropouts.

The results of the IEQ investigation show that academic achievement tests must be used in combination with other measures of quality and effectiveness in making decisions about programmatic outcomes. Simply comparing mean differences on the achievement measures, without examining the numbers of children successfully advancing toward primary school completion and the socio-emotional behaviors that they are developing, could lead to the erroneous conclusion that the two groups were performing similarly.

IEQ Mali

New Pedagogy Sparks Active Participation

(The following is an account of a real classroom observation of an instructional intervention. The setting is a first-grade folktale class in the village of Mansala.)

After telling the tale of "The Two Cats, the Butter and the Monkey," the teacher asked the pupils to form working groups to discuss the theme of the tale. Spontaneously, those who appeared to be the most active in the class freely divided themselves in three groups. One pupil automatically took the leadership of the group, and distributed roles to his classmates; however, the observers noticed that all the pupils did not join in the exercise. Some of them were inactive. After the teacher gave the signal, each group's spokesperson—different from the leader—went forward to report on their work. After each report, the whole class applauded and cheered the spokesperson and the group.

During the next exercise called non-verbal dramatization, the groups again freely formed. But this time, those pupils who were ignored by the 'smart' ones the first time spontaneously constituted their own separate group. The majority were girls. The oldest was designated to lead the group, and she distributed roles to the others. After the groups' performances, the teacher commended this group and the whole class cheered.

To the observer's eye, somewhere within the dynamics of the pedagogy of groups, some previously inactive pupils experienced a positive transformation and became active. More instances of such behavior across IEQ schools would be evidence of a classroom-based intervention influencing pupils' performance.

Children Making Normal Progress through School by Program

	First Grade		Second Grade	
	NEU	Traditional	NEU	Traditional
Sample in 1993	147	211	94	104
Number Advancing four grades	44	21	51	27
Percentage Making Normal Progress	30% *	10%	54% *	26%

* p .05

Goal II

Demonstrate a Process Whereby Findings From Classroom Research on Improving Educational Quality are Utilized by the Educational System

IEQ Ghana

Textbooks: From the Cupboard to the Child

Initially CRIQPEG research focused on instructional materials, their availability and use. When researchers observed in classrooms and talked with teachers, they noted that recently supplied textbooks were not being used. The books rarely left the cupboard and never left the schools. When asked about this, teachers expressed fear that they would be held accountable for textbook spoilage or loss, saying, *“This is government policy!”* Consequently, many teachers copied lessons from one textbook onto the chalkboard or allocated a handful of textbooks for shared classroom use in order to safely set aside most of the textbooks in locked cupboards.

CRIQPEG followed up by sharing this information with policy makers and seeking clarification of the policy from the Ministry and the Ghana Education Service. Within months, schools received a directive from the MOE supporting hands-on use of the books by children and reassuring teachers that they would not be penalized for normal usage.

Subsequent classroom observations and interviews revealed a dramatic shift in textbook use. Classroom observations documented that children had access to textbooks during English lessons about 45% of the observed time (up from 18%) and children used the textbooks during instruction about 30% (35% in intensive schools and 25% in non-intensive schools) of the observed time (up from 15%). Interviews indicated that teachers had begun incorporating hands-on use of textbooks into daily lessons. When researchers visited schools they found that teachers valued the books and had identified strategies for extending the life of the books by covering them with paper and adding locally available starch to the binding.

In response to national interest, CRIQPEG recently returned to the question of what happens to the textbook. Two years following the policy shift, ultimate responsibility for textbook care has shifted from the teacher to the child and the child’s family. If books are lost, the child’s family is pressured to pay. Although the teachers have elaborate strategies for textbook tracking, they no longer seem

overly concerned that they will be held accountable. Instead, their efforts to safeguard the books reflect a valuing of the contribution of textbooks to the learning process and a worry that lost or damaged books will not be replaced.

A critical factor in textbook use is the ratio of books to children. When books are plentiful, they are assigned to individual children, and they are more likely to be in the hands (and homes) of the children. When books are scarce, teachers are protective of them. They describe criteria for rationing the books, *“I only give them to children I know will take care of them and whose parents are willing to take charge.”* (Head teacher) Or: *“As the books are not enough, promising pupils are given the books...those who do not have the skills are often exempted from the supply.”* (Level 5/6 teacher) They hold a few books aside in case they are not replaced in the schools.

Pupil facility with the textbooks also makes a difference. In urban schools, upper primary children are able to read passages from the English textbooks with moderate success and, during the course of the school year, teachers are able to cover most of the units in the English texts. In rural schools, passages in the English books are too difficult for the children and teachers complete between one-third to one-half of the units.

Last July, preliminary findings from this investigation were shared with local educational leaders. They recognized the value of the information in guiding policies and decisions about allocation of resources for instructional materials, as well as for rethinking the unique needs of teachers and pupils in urban versus rural schools.

As these and other IEQ findings are disseminated, CRIQPEG is poised to continue conducting research that serves the educational community and improves schooling for children in Ghana.

IEQ Guatemala

Selma’s Question

One of the fundamental aspects of the NEU methodology is the use of small groups to encourage collaborative student learning. In second through sixth grade, self-instructional guides facilitate student learning activities without the teacher or with intermittent teacher supervision. Student use of the guides encourages exploration and group problem solving and allows the teacher to circulate among the different grades, offering assistance as needed. There is an assumption, however, that students can use the guides effectively.

During 1993, the first year of the IEQ study, when the sample was made up of children who were beginning first and second grade, a significant correlation was found between academic achievement and the use of small, teacher-directed groups. However, in subsequent years, as children began to work alone in small groups using the self-instructional guides, no significant relationship was found between achievement and small group work. Classroom observations were used to examine possible reasons for the lack of effectiveness of the small groups. Results showed that a number of the second-grade students and some third-grade students were having difficulty reading the guides. The following example of Selma illustrates the findings.

(continued on page 8)

Project Summary: Guatemala

In Guatemala, IEQ is working with the Ministry of Education (MINEDUC) and two Regional Education Offices to study the implementation and impact of *Nueva Escuela Unitaria (NEU)*, an innovative pilot project designed for multigrade schools in rural areas. NEU is based on active learning principles that stress collaborative learning, peer teaching, the use of self-instructional guides, participatory student government, and involvement of the community in the learning process.

During the 1993 school year, which corresponded to the first full year of the development of the NEU program, IEQ used a multi-method approach including tests, measures of socio-emotional development, in-depth observation of children, and interviews with teachers and parents to study a representative sample of first- and second-grade children participating in the NEU program, as well as a similar group of comparison children. Sample schools were located in two regions, one with a predominantly indigenous population and the other with a non-indigenous or *ladino* population. Results showed achievement gains and positive changes in socio-emotional behavior related to active participation in the classroom activities and increased creativity by children of both genders.

In 1994 and 1995, the same children were studied for further behavioral change in relation to academic achievement and primary school completion. In the third year of the project, IEQ researchers also examined the experience of children in "complete" schools (those having all six primary grades). After each year's data analysis, seminars were held with supervisors and teachers to examine the results of the study and make decisions about fine-tuning the pilot program. Longitudinal results show that the NEU program has had a significant impact on reducing dropout and promoting yearly grade advancement. This greater efficiency has been achieved with no decline in achievement and with an enhancement of pro-social behaviors among students.

During the final year of the project, IEQ became part of the Institute for Educational Research at the Universidad del Valle. Team members worked with university personnel and an advisory committee to sponsor a Latin American conference on Educational Quality and to develop other strategies for dissemination and utilization of the research results and instruments.

Goal II...

continued from page 7

Selma, a student at NEU Carmelo school, writes while three of her classmates talk to the teacher. They return, and Selma shows them a page in the guide and says, "*¿Qué es lo que hay que hacer? Vamos a preguntarle al maestro*" ("What are we supposed to do? Let's go ask the teacher"), but they do not go. Selma tries to read the guide softly. Then one of her classmates asks her, "*¿Qué hacemos? Preguntémosle al profesor*" ("What should we do? Let's ask the teacher.") Selma takes the guide and approaches the group with whom the teacher is working. She asks him what they should do. The teacher, who is working with the first grade, turns around to answer the girl's question.

This example demonstrates that the children in the group are not able to follow the guide's instructions and must seek the teacher's help. In multi-grade level classrooms in unitary rural schools, the teacher spends a large portion of instructional time with first graders and must allow the other grades to work alone. Therefore, if students cannot understand what they are supposed to do, they must wait a long time to get help from the teacher, wasting learning time.

The IEQ research team shared the findings with teachers and program implementers and it was agreed that a rapid reading comprehension assessment instrument for teachers to use in the classroom would be developed by IEQ. The subsequent instrument consisted of twenty items on laminated cards, ten of which measure reading comprehension and ten, the ability to follow written instructions. The items were based on the vocabulary and format of the self-instructional guides.

The test was piloted and items reformulated based on the pilot results. The instrument was then re-piloted in NEU schools and found to be reliable, given the small number of items ($=.70$), and significantly correlated with the standardized test of reading comprehension used by IEQ. Test packages are being prepared to be distributed to teachers during local teachers' circle meetings prior to the start of the 1997 school year.



IEQ Mali

New Pedagogical Approach Yields Lasting Returns

Because of the very high repetition rate, children not reaching curriculum goals and not able to function in the French language after so many years of schooling, with no indication of the source of trouble, IEQ explored through research-action, techniques that would result in better learning, lower repeti-



tion and dropout rates, and better scores.

Research carried out by the IEQ Mali teams at the *Institut Pédagogique National* (IPN) and the *Institut Supérieur de Formation et de Recherches Appliquées* (ISFRA) in classrooms and the community pointed out pedagogic, socio-economic, and cultural factors that impeded the acquisition of French, and therefore learning. The cultural factors impeding learning included the training of teachers, the teaching methods employed, the size of the class, the educational level of parents, the language of communication at home, the availability of light at home, the school-community rapport and didactic materials. For example, although only 15% of the children interviewed used French outside the school, Malian children had still studied other disciplines—such as math, geography and history—in French since their first day of school.

In April of 1994, IEQ/Mali sponsored a national seminar to share with the country's educational stakeholders research findings which revealed factors that influence children's language learning in the first two grades of primary school in Mali. The panel recommended a number of interventions, out of which one extra-curricular and four pedagogic innovations were eventually crafted and introduced in IEQ pilot schools. They were the pedagogy of large groups, the pedagogy of folktales and legends, the use of didactic materials, the strategic use of the maternal language [in the learning of French] and the introduction of community study centers.

After the colloquium, IEQ staged participatory training workshops throughout the regions where the project was being implemented, thus bringing together parents, community-development specialists, teachers, headmasters and supervisors to share in and appropriate the design and teaching strategies. During the workshops, participants discussed ways of implementing these new pedagogies, with a view to effecting a shift in classroom focus from the teacher to the learner, in contrast to the previously prevalent "pédagogie frontale" (teacher in front of the classroom) teaching methodology. This approach earned praise from all participants. In closing remarks at the end of the Sikasso workshop, the representative of the trainees commented,

"PAQE [IEQ/Mali] should be commended for its new pedagogical approach centered on the learner and the involvement of field actors in the elaboration of teaching and learning strategies."

Later on, as educators and communities showed their enthusiasm and great interest in attendance and participation in school work, the Malian basic education authority strongly supported a supplemental funding (buy-in) contract to IEQ/Mali from the local USAID Mission. IEQ/Mali was asked to develop testing instruments in national languages and to carry out qualitative research on learning in these languages in order to strengthen the country's new basic education reform. Moreover, the Ministry of Basic Education is considering a country-wide expansion and generalization of

the IEQ training approach.

IEQ South Africa

A Reflection on Personal Practice

It was in Vanderbijlpark, Guateng where thirteen teacher-trainers from different NGOs came to attend an IEQ workshop on monitoring and evaluation. There were high expectations and a lot of excitement because the work of these trainers entailed monitoring, and most of them expressed an interest in gaining practical skills to evaluate their programs.

The IEQ team started off by letting the participants talk about the goals of their training programs, and the expected outcomes on teachers, learners and the classroom environment. The fun came when participants were asked about the many terms that they casually used: What do you mean by "child-centered teaching"? How do you know if "child-centered teaching" is taking place? There ensued an intensive discussion as participants developed indicators and argued over definitions, then decided they needed operational definitions for their evaluative study. The mealtimes did not interrupt the discussions. Everything taught at the workshop seemed to be consolidated there as people joked: "What do you mean by that?" "What methodology are you using: qualitative or quantitative?" In one session, a participant who had been actively involved suddenly became silent, and when she was asked why she was so quiet, she replied:

I am reflecting about my own practice in schools. My work involves observing teachers and providing classroom support. All this time I have been doing it there has been no structure. Now I know....it starts with being clear about the goals of the program, then having observable practices defined, or indicators well spelled out. Then I know exactly what it is I need to observe when I go into a classroom!

These sentiments were echoed by many at the workshop. Participants acknowledged the benefits of monitoring and evaluating their own training programs. The greatest benefit was being able to conduct formative assessment, which could help to improve and strengthen their training programs. Participants said the steps involved in monitoring and evaluating had been made so clear that it would be easy to teach them to the other staff members in their organizations.

(continued on page 10)

Goal II...

continued from page 9

IEQ Uganda

IEQ Findings Focus Reform in Uganda

First-cycle research findings confirm that schools are deficient in all areas that contribute to school effectiveness including adequate curriculum standards, instructional supervision and material and financial resources. The consequence of such a school environment is that pupils' learning depends heavily upon individual teacher initiatives. Teacher motivation and training have therefore been identified as key to Uganda's primary educational reform.

In examining school infrastructure, researchers confirmed the view of many headteachers that the inadequate and unsafe classrooms and schools severely constrained progress toward a productive learning environment. Extremely poor sanitation and a shortage of latrines is exacerbated by the lack of separate facilities for girls. From the sample of 24 schools, for every 301 girls, there was an average of one female latrine post. Sixty-seven percent of the sampled schools had no latrine posts exclusively for girls and in all regions, girls rated the lack of adequate hygiene facilities as the schools' most pressing problem. Boys on the other hand, ranked latrine accommodations as one of the lowest priority problems.

In addition to the lack of latrines, eighty-six percent of the schools do not have seats for all pupils, and thirty-three percent of the schools do not have a source of water on the school grounds. While many of the sampled schools received textbooks in 1995 for use in P5, P6 and P7 levels, books were not distributed; often they were locked in headteachers' offices. Books were distributed and used in only five of the twenty-four schools. Many of the schools had little or no access to instructional materials.

Schools further lack managerial support. They are rarely inspected (some schools had not been inspected for three years), and teachers have insufficient salaries and often go without payment for months at a time. Teachers spend little time on their professional development, and they may try to compensate for the lack of funds by providing manual labor or even, in some cases, selling school materials to survive.

Leadership of the headteachers and the professional qualities of the teachers were also found to be major factors related to a school's effectiveness and pupil performance. In addition, researchers discovered that students performed markedly better at level P6 because the best teachers were often assigned to the P6 level to prepare pupils for the PLE exam.

These findings should help inform the primary educational reform effort and the stakeholders should take note of their implications. Based on the first-phase results, Phase II of the IEQ/Uganda project is now focusing specifically on

the potential impact of the reform on the conditions and effectiveness of teachers' work. The initial findings of this phase are anticipated in January of 1997.



Project Summary: Mali

IEQ began in Mali in the spring of 1993 to support USAID's Basic Education Expansion Project (BEEP). Phase I of the IEQ/Mali project involved the two collaborating research institutions, the *Institut Pédagogique National* (IPN) and the *Institut Supérieur de Formation et de Recherches Appliquées* (ISFRA), conducting field research on the learning process in the first two years of primary education, contributing to a better understanding of the link between classroom practices and pupil performance. IEQ/Mali held a national seminar in April 1994 to discuss the findings from the Phase I research. The seminar brought together parents, local, sub-regional, regional and central educational actors, decision-makers and partners to discuss issues specifically pertaining to language learning in Mali. The seminar was organized to conclude the project's first phase and begin plans for Phase II.

IEQ Mali launched Phase II activities with the organization of regional training workshops held in Ségou (August of '94) and Kayes, Mopti, and Sikasso (November of '94). During these workshops, teachers, headmasters, pedagogical advisors, parents and other community-development practitioners were trained for their new role as research partners and implementors of five IEQ interventions: the pedagogy of large groups, the pedagogy of folktales and legends, the creation and manipulation of didactic materials, the strategic use of maternal languages in classrooms, and the introduction of community study centers where students can continue learning activities after school.

In February of '95, the team revisited the regions to observe how the classroom interventions introduced in November were being implemented and held feedback meetings with first- and second- grade teachers of the pilot classes. In June the HCRT went back to the field to observe classroom interactions and collect student-performance data in language learning. In January of '96 USAID/Mali signed a buy-in contract to IEQ/Mali to develop testing instruments in Malian national languages to support the government's new basic education reform *La Nouvelle Ecole Fondamentale* (NEF).

In February of '96, the HCRT went into the field and collected samples of actual tests used by teachers, and in March two of their representatives traveled to the University of Pittsburgh where they teamed up with two language specialists from Boston University and the University of Pittsburgh to construct a literacy-assessment metric in Bambara and Fulfulde. Meanwhile their colleagues in Mali went back to the field to monitor the implementation of IEQ interventions and their impact in the schools and the community a year later. In May of '96 the HCRT revisited the field to evaluate and collect baseline data on students' performance in maternal languages and French in the first two years of primary school. IEQ/Mali activities terminated at the end of September, 1996.

Goal III

Create Opportunities for Dialogue and Partnerships Among Researchers and Educators Who Are Seeking to Improve Educational Quality at the Local, Regional and National Levels

IEQ Ghana

Creating Dialogue and Partnerships in Ghana

A parent, the president of the western region's parent-teacher association, is addressing participants of the IEQ annual conference at the University of Cape Coast. He concludes his remarks by saying, "I want to thank the Project for what you have done for my child. She goes to a CRIQPEG school, and I can see a real difference between her and her brother, who is not in a CRIQPEG school. She is learning so much more! I'm so proud of what she has accomplished. I think the other schools should be included in the project so that my son and the other children can also benefit from what CRIQPEG is doing."

The Chairperson of the CRIQPEG Advisory Board, the UCC Vice Chancellor, is moderating the discussion of a board member's suggestion that the utilization of the IEQ Project's assessment instruments and instructional interventions be expanded on a pilot basis. There is an animated discussion about how to proceed with the expansion, how to get the Ministry or a school district to fund it, and how this is to be managed. The group has reached a consensus: wherever the site might finally be and whoever will be funding and managing the proposed expansion, the most important thing is to make sure that a good thing does not suddenly stop just because external funding of the project ceases!

These vignettes are just two of many instances in which appreciation for and confidence in the IEQ process and interventions have been expressed by the people who matter: the stakeholders. This we can take as unmistakable evidence that, not only has the project elicited a lot of interest and support from among the community, education leaders and researchers, but more importantly, it has established two major forums for effectively bringing about this dynamic exchange and dialogue at the national level: the annual conferences and the Advisory Board meetings. These forums have added immensely to the visibility of the IEQ Project in the country and to increasing recognition of the technical expertise and leadership potential of CRIQPEG. This is clearly manifested in the fact that CRIQPEG has been invited to be the research arm of the Ministry's educational reform initiatives. At the local



level, the circuit supervisors and principals have assumed the responsibility for continuing the cycle of assessment, feedback sessions, and training on appropriate interventions for the classrooms—a cycle of classroom

research and utilization modeled by the CRIQPEG researchers during the first three years of the project.

The IEQ experience in Ghana has also offered diverse opportunities for collaboration and dialogue with researchers and the educators from other countries in Western Africa and the sub-Saharan region—e.g., observation and study tours to Ghana by colleagues from Uganda, Swaziland and South Africa, and a short-term consultancy by the CRIQPEG Coordinator in Swaziland to assist there in related research activities. Dialogue with American and other international colleagues has been maintained through the Comparative International Education Society's (CIES) conferences and the IEQ international exchanges. Each year, since the inception of the project, CRIQPEG researchers have been invited to present papers and participate in panel discussions on the Ghanaian experience—highlighting its contribution to the international education community.

A final note on the two-way dialogue that has characterized relationships between CRIQPEG researchers and their U.S.-based colleagues: Technical expertise shared with Ghanaian colleagues by U.S. technical-assistance providers has come full circle in a unique way. An American university student spent the summer in Cape Coast as part of her doctoral internship. Under the direction of UCC faculty, she worked with handicapped youngsters in the University's clinic. She also worked side-by-side with the CRIQPEG researchers as they collected follow-up data and collaborated to write the case studies of targeted pupils.

IEQ Guatemala

Understanding Common Goals: Latin American Educators Commit to Principle

The IEQ program in Guatemala engaged in a number of activities which created the opportunity for dialogue among educators and researchers concerned with improving educational quality. These efforts included: workshops with more than 100 teachers and 30 regional supervisors to discuss the practical applications of the IEQ research findings; workshops on the IEQ methodologies and instruments for 20 Latin American researchers and 120 educators at conferences in Puerto Rico and the Dominican

(continued on page 12)

Goal III...

continued from page 11

Republic, respectively; a workshop on research utilization for 30 Latin American educators and members of the donor community at a conference on Building Partnerships for Education Revitalization in the Americas (PERA), in Washington, D.C.; and presentations of the IEQ findings at conferences in the U.S. and Canada. However, one activity brought together local, regional, national and international experience on educational quality in Latin America in one forum. This was the Conference on Educational Quality in Latin America held in Guatemala.

This conference, co-sponsored by IEQ and the Universidad del Valle, had the following objectives: 1) share experience among Guatemalan and Latin American researchers about the utilization of classroom and school-level research to improve educational practice and policy; 2) acquaint researchers from Latin American and Caribbean countries in order to take better advantage of resources and to begin building regional coalitions dedicated to improving educational quality; and 3) share different methodological approaches to studying educational quality at the classroom and school levels.

The conference involved Guatemalan teachers, supervisors, and Ministry of Education administrators, as well as researchers and administrators from Guatemalan universities, members of the private sector, and local representatives of international donor organizations. In addition, international researchers and educators from Brazil, Colombia, the Dominican Republic, Ecuador, Honduras and Puerto Rico participated. The conference took place over three days in April of 1996. It was structured in a series of panels, workshops, and

group discussions to encourage participation by all attendees. Panels made up of Guatemalan and international specialists focused on the following topics: classroom-level research, decentralization, achieving educational quality, the private sector as a partner in the educational process, and utilization of educational research findings. The two workshops dealt with observational research techniques and possible solutions to students' problems in reading and writing. Members of the IEQ advisory board served as moderators for the panels. Approximately 90 people attended the conference each day.

Over the course of the conference, a series of issues that were common across countries and relevant to the Guatemalan reality was developed. These themes included: educational quality as the responsibility of a nation, not just of the educational community; commitment by all actors in the educational process to providing the human resources for integrated development of the country; the search for solutions, rather than merely a focus on problems; and the initiation of educational research in the classroom in order to reflect the realities of the school situation and the dynamics of the teaching-learning process. Another issue concerned the fact that teachers are highly committed to their work, despite being disparaged by the public in general. Finally, it seems that there is a need for content to be integrated in a manner that reflects the student's environment.

The conference ended by registering a consensus on the importance of Latin American cooperation in the search for solutions to common educational problems. Participants agreed to continue encouraging interchanges among researchers and involving professionals at all levels of the educational system in such meetings. The focus of these exchanges can best be summarized by one participant who stated in the final open discussion:

"The idea that educational quality begins and ends in the classroom should be a principle for all educators."

IEQ Mali

Institutional Collaboration Heralded as a History Landmark

During phase I, IEQ/Mali teams at the *Institut Pédagogique National* (IPN) and the *Institut Supérieur de Formation et de Recherches Appliquées* (ISFRA) carried out research in classrooms and the community to shed light on the BEEP (Basic Education Expansion Project) findings. ISFRA studied characteristics that children bring to primary school, such as nutrition and basic health conditions, and motor, social, and cognitive skills. Their goal was to look at the extra-scholastic characteristics that in one way or another affect Malian children's ability to learn, read, write and understand French. IPN conducted classroom observations of French teaching and learning in order to describe what actually took place in the classroom during the language class.

At the end of the research, IEQ convened a national seminar to discuss its research findings. The colloquium was dubbed 'of restitution and validation of research findings' because it gathered a vast range of educational stakeholders in Mali whom the IEQ Mali research team regard as rightful "owners" of school results. The colloquium brought together decision-makers, researchers, national and regional educators, parents, community leaders, teachers, pedagogic advisors, headmasters, supervisors, and representatives of international donor agencies. It was heralded as a landmark in the history of institutional collaboration in Mali.

The colloquium was opened by the Minister of Secondary, Higher Education and Scientific Research and concluded by the Minister of Basic Education. Observers said this was the first time that two research institutions from two different ministries in Mali successfully collaborated on a project. As Freda White-Henry [then HRDO at USAID/Mali] commented:



IEQ has made a tremendous difference [in Mali]. It may not be the kind of difference the project was designed to address, but nonetheless it remains a substantial achievement in terms of institution-building fundamental in Mali's context.

For three days, the eighty-some participants discussed the findings and made recommendations for future interventions. The four classroom-based pedagogic techniques and one extracurricular innovation known as "IEQ interventions" (namely, the pedagogy of large groups, the pedagogy of folktales and legends, the use of didactic materials, the strategic use of the maternal language [in the learning of French], and the initiation of community study centers) were indeed crafted after the recommendations of this national colloquium. One parent's commentary at the end of the colloquium was:

This project is no longer your project: it's our project—all of us—because we have reflected together. We have together identified what is good for the learning of our children...



IEQ South Africa

Capacity Building in Program Evaluation: "I've Learned A Lot From Planning and Conducting Evaluations."

As a program coordinator, I've learned a lot from planning and conducting an evaluation of our teacher training program with evaluation specialists. When they've questioned me about what we're trying to achieve, I've been pushed to reflect on what differences we expect to see at the classroom level, in terms of teaching and learning, as a result of teachers participating in our training program. Now I ask myself not "What did you do?" but "What was the impact?" It's a sobering question. (Program Coordinator, Inservice Training Non-governmental Organization)

These comments reflect feelings of in-service teacher-training program coordinators about the value of collaboration with the IEQ Project in conducting program evaluations. They reflect a dramatic shift away from the traditional approach to evaluation and an opportunity to think in new and creative ways about intended program outcomes and the use of evaluation as a tool under their control. For the coordinators involved in this project, it is the first time they were involved as participants in planning with an evaluation specialist, rather than being subjected to evaluative scrutiny. For the IEQ, evaluation studies and building the capacity of others to use evaluations were important to the success of the project.

Outcomes showed that ongoing communication and collaboration throughout the assessment process played a critical role in promoting successful integration of the process into the everyday life of the organization. In such a way, evaluation findings were actually used—both to assist individual program improvement efforts and, collectively, to inform policy formation in a number of ways:

Staff of in-service training organizations

- ◆ used the classroom-observation instruments in their daily work with teachers
- ◆ developed additional instruments to monitor and evaluate intended program outcomes

- ◆ collected and analyzed their own data to monitor progress

Provincial and National Departments of Education

- ◆ examined results of the evaluation studies of in-service teacher-training programs
- ◆ discussed the implications of the findings for educational policy

Only in place since the newly-elected democratic government replaced the apartheid regime, these provincial and national departments of education have indicated an urgent need for the types of monitoring and evaluation capacities that have been cultivated among the staff of non-governmental organizations through their work with the IEQ Project.

Quality Assurance through Monitoring and Evaluation

"We need a national Indaba on monitoring and evaluation of reform efforts." This was the concluding sentiment of the IEQ Exchange on Quality Assurance through Monitoring and Evaluation, expressed by a member of the new National Department of Education Office of Quality Assurance. In Zulu, an *Indaba* is a representative meeting on a matter of utmost importance.

IEQ South Africa recently hosted an Exchange on assuring quality in education through monitoring and evaluation of education reform efforts. Attended by representatives of the national and provincial depart-

(continued on page 14)

Goal III...

continued from page 13

ments of education, colleges of education, policy research units, funders, and non-governmental teacher training organizations (NGOs), the Exchange created opportunities for dialogue among these various stakeholder groups.

As planned change efforts by the new democratic South African Government of National Unity are implemented at the national and provincial levels, the idea of using evaluation as a tool to assess progress and outcomes is gaining momentum in South Africa. Dr. Blade Nzimande, chair of the Portfolio Committee on Education in the Parliament and the keynote speaker, addressed a number of issues relating to quality assurance through monitoring and evaluation, emphasizing the joint national objectives of quality and equity of access for all South Africans. IEQ and an NGO representative presented highlights of collaborative evaluations of NGO teacher training programs and how these results are being used to improve training programs and practices and influence policy. Subsequently, examples of monitoring and evaluation efforts in South African organizations were presented by a variety of participants, and small group discussions by sectors—government, NGOs, colleges of education and funders—provided opportunities to discuss issues and suggest next steps.

The discussions surrounding assessment and the need for using assessment throughout the change process, not only at the end, revealed the concerns among South Africans for “making reform work.” Under the auspices of the National Department of Education, the dialogue will continue—with potential long-term benefits for creating and sustaining quality education and access to all citizens of South Africa.

IEQ Uganda

Ugandan Education Stakeholders Establish Research Agenda

IEQ Uganda is marked by a deliberate effort to encourage dialogue and partnership from the national level down to the school level. At its inception, IEQ’s first phase identified its research agenda through the Uganda IEQ Project Launching Forum in January, 1995. Representing a wide stakeholder base, participants included the Minister and Permanent Secretary of Education and Sports, and researchers from the Uganda National Examinations Board (UNEB) and Makerere University, among others. In his keynote address, Prof. Andrew Setsabi of the Support for Uganda Primary Education Reform (SUPER) initiative led a group of primary school teachers in a song about the principles of IEQ and how what they learned could be used to improve the education system. Later, participants collaboratively identified priority issues related to school effectiveness as the basis for IEQ Uganda’s research objectives.

In February of 1996, IEQ Uganda researchers shared their baseline research findings with stakeholders at a workshop. Participants learned about and discussed the research process and findings and concluded the workshop by establishing a Research Advisory Committee to further examine and provide feedback to the research process.

Through a series of workshops, IEQ Uganda researchers are able not only to share their research findings with the stakeholders at the local, regional and national levels, but also to build capacity by training researchers in the collection and analyses of data. Internationally, IEQ Uganda researchers participate in conferences where they present findings and discuss the potential impact of reform initiatives while establishing professional linkages with other researchers.

Project Summary: South Africa

During the apartheid era in South Africa, educational reform initiatives were supported through the funding of non-governmental organizations (NGOs). The IEQ Project worked with USAID-funded NGOs whose focus was on improving the quality of basic education for disadvantaged majority students in four key areas: school administration, curriculum development, teacher training and the provision of materials and technology.

The IEQ Project has worked in collaboration with NGO grantees to assess the impact of training at the classroom level, in terms of teachers’ instructional practices and active participation by learners in classroom activities. By collaboratively designing studies, developing data collection instruments, and gathering and analyzing classroom data, capacity has been built among NGOs to monitor systematically outcomes of their programs.

With the election of the new democratic government in South Africa, opportunities and challenges abound to implement reform initiatives through the legitimate government. The IEQ team has met with representatives of provincial and national departments of education to share findings of the impact-assessment studies and the methods used in assessing the quality of classroom practices. All expressed a keen interest in the work of the IEQ and an enhanced awareness of the importance of on-going monitoring and evaluation of the impact of new educational policies and programs at the classroom level.

In December of 1996 the IEQ project initiated a national exchange with representatives of provincial and national departments of education, colleges of education, in-service teacher-training NGOs, research institutes and funders on “Quality Assurance through Monitoring and Evaluation.” This exchange highlighted the need to assure educational quality through the systematic use of monitoring and evaluation as tools to guide and inform decision-making. As reforms move forward in South Africa, it will be important to gauge the extent to which national policies and goals are making a difference at the classroom level for the intended beneficiaries—the learners.

Goal IV

Maintain a History of the Project to Document the Rationales for Choices Made, Opportunities and Constraints Encountered and Lessons Learned

IEQ Ghana

Guiding Program Decisions with the Aid of Documentation in Ghana

As in the other countries, documentation for the IEQ initiative in Ghana has taken various forms: quarterly and annual reports; trip reports by consultants, technical advisers, and CRIQPEG researchers; minutes of Advisory Board meetings and annual conferences; and records and minutes of staff meetings. Research reports and other forms of documentation have been generated by curriculum-based assessment, on-site observations, interviews, feedback sessions and training activities at the schools; records, notes, and compilations of materials used in professional development seminars; videotapes; still pictures; compilations of critical incidents reported by researchers, faculty, and supervisors of participating schools; case studies and pupil profiles.

Data generated by these documentation activities have guided decisions regarding the design and context of subsequent research, assessment, and interventions introduced to improve the quality of instruction in the participating schools. Phase 1 findings, for instance, indicated that the research problem should focus on proficiency in the English language, both oral and written. Specific problems observed in the schools, and expressed by teachers during interviews and on-site feedback sessions, became the basis for clearly focused planning and implementation of a series of professional development seminars to help the teachers acquire specific competencies and instructional skills designed to overcome these deficiencies, thereby directly addressing the teachers' training needs. Qualitative research techniques, such as case studies and pupil profiles, are used to provide descriptions that enrich and enliven quantitative reports, as exemplified by the following excerpts:

Julianna attends a rural primary school in a tropical forest area accessible only by foot--about 3 miles from a passable road. Inhabitants in the area are mostly migrant farmers from the Eastern Region however there are also Ewes and

Fantis--leading to a complex ethnic and language mix in the community and school. When CRIQPEG researchers first visited Julianna's school in 1993, children were not permitted to use available textbooks. Teachers copied a few words onto the chalkboard, then put the book aside. When Julianna was in level 4 (1994) she was identified by her teacher and her performance as a high performing child in her class. At that point, she could copy letters but she could not write her name or read more than two or three words from English textbooks for levels 2-4. Classroom observations indicated that she did not have an exercise book or paper to write on. The following year when she was in level 5, she was observed to have an exercise book (which she used 18% of the observed time). She was able to write her name and 22 other words. She was able to read about half of the words in passages from her textbooks but she was unable to answer any of the comprehension questions. Julianna was tested again shortly before the end of the primary cycle (level 6). She could decode and pronounce about 80% of the words in reading passages taken from textbooks for levels 2-6 but her comprehension was still very low, specially for the upper level passages. While being interviewed, Julianna pulled out a book from the school library and proudly read to the interviewer as she pointed to each word. However, when Julianna was asked about her English lessons, she reported that the class spent most of the time working on Unit 1. With only a few weeks left in the school year, the class was still working on Unit 4 (out of 30 units). Julianna's English textbook was badly water damaged but still usable. As she described her strategies for learning, it was clear that she used the book both at home and school. Julianna reported that she is helped to learn English by her parents and older siblings which was confirmed in an interview with her father. He said that they made extra assignments for her to do at home.



Cara Cahalan

Naomi attends an urban school in the Western region. She is one of the highest achievers in her class. Naomi's father died in 1992, and after school she is required to work at her mother's cafe. She is still allowed time for homework because her mother believes all girls should be educated. In 1994, when Naomi was in level 4, she was able to write her name and 11 other words. She responded well to questions assessing her functional English and her listening comprehension (e.g., point to the girl), but, like her classmates, she had difficulty with oral expression. She was able to read (decode) passages from her textbooks with about 90% accuracy but she responded correctly to only 1/4 of the reading comprehension questions. Naomi was tested again in levels 5 (1995) and 6 (1996). During that time she made steady improvement and by the end of the primary cycle she was leaving school with good oral language skills (by her choice, the final interview was conducted mostly in English), she read all the textbook passages with 100% accuracy and responded correctly to 95% of the reading comprehension questions. A review of 8 of her 12 exercise books confirms that they are used frequently. When asked to describe how she was learning English, Naomi pointed out that she is expected to speak and write English all the time she is in school except during Ghanaian language classes. She added that

(continued on page 16)

Goal IV...

continued from page 15

her teacher's approach depends on, "the aspect of English we are doing...with compositions or essays she leads us through questioning to first draw the outline...she takes each aspect of the outline and through questioning leads us this time to develop it...she leaves the developed essay too [on the chalkboard] for the sake of the slow learners."



Cara Cahalan

Pupil Profiles developed by Cara Cahalan, Eric Wolmot, and Alexander Asamoah under the direction of Abigail Harris and Beatrice Okyere.

IEQ University of Pittsburgh

Documenting the Process of Research

As subcontractor to the IEQ project, the University of Pittsburgh faculty (Don Adams, Mark Ginsburg and Leo Kopfler) and graduate students (Thomas Clayton, Martha Mantilla, Michel Rakotamana, Judy Sylvester, Yidan Wang and Katherine Yasin) assumed primary responsibility for "knowledge building" and documenting the links between research and policy/practice. However, these efforts depended heavily on the contributions of members of Host Country Research Teams (HCRTs) in Ghana, Guatemala and Mali, and the U.S. consultants who collaborated with them.

Initially, knowledge-building activity focused on reviewing literature. This led to a 1993 IEQ publication, *Defining Educational Quality*, which identified the following approaches to defining educational quality: 1) outputs (e.g., cognitive or non-cognitive measures of student achievement), 2) outcomes (e.g., post-school employment or citizenship involvement), 3) inputs, 4) processes, 5) content, 6) added value and 7) reputation. The review of research literature on how teaching and learning in different subject areas could be improved was organized into a database (see the 1992 IEQ publication, *Guide to Information Sources: A Description of Work In Progress*) and facilitated efforts to identify relevant resources requested by HCRTs.

Energies were then focused on clarifying choices available for conceptualizing studies, conducting research, and linking the findings to changes in educational policy and practices—choices that can be viewed as related to different paradigms of disciplined inquiry: positivist, interpretive and critical, e.g., see Ginsburg et al., 1996, *Choices in Conducting*

Classroom-Anchored Research to Improve Educational Quality in 'Developing' Countries, *Research Papers in Education* 11 (3): 239-54. Additionally, a series of papers was developed on linking research to policy and practice and implementing plans to improve educational quality.

Finally, the Pitt IEQ team sought to document the processes of conducting research and linking them to educational policy and practice in the three core countries. Given funding limitations, the documentation was carried out without direct fieldwork. Instead, a) documents (trip reports, research reports, etc., produced by U.S. consultants and HCRT members) and b) interviews (both face-to-face and via e-mail and telephone) served as the main data sources. The results of the research are available in a monograph entitled *Policy-Practice-Research-Dissemination/Dialogue Spirals in Improving Educational Quality*.

Uganda: Project Summary

In Uganda, IEQ is collaborating with the Uganda National Examinations Board (UNEBC), to assist the Government of Uganda's long-term effort to rehabilitate primary education. This effort is called the Support for Primary Education Reform (SUPER) project. The reform aims to improve students' mastery of literacy, numeracy and other basic skills; improve school administrators, management and accountability; and reduce inequalities among different groups of children. The IEQ/Uganda effort began in October 1994, and involves UNEBC managing a research program that enables a broad range of researchers with diverse backgrounds (such as biochemistry, psychology, gender studies, and education policy) to conduct studies linked to the reform. In February 1996, IEQ Uganda embarked on its second phase by presenting its phase I findings to policy level stakeholders. Based on these findings, the teacher's role in the school and classroom is a key element of the reform effort. An analysis of the impact of the education reform effort will be completed by early 1997.

by Jane Schubert

It is common practice at the conclusion of a major USAID project to offer some reflections upon the activities completed. The term typically applied to this exercise is “lessons learned.” The implication is that a “lesson,” as defined by the American Heritage Dictionary, offers instruction through which some knowledge or wisdom is gained. The “learning” implies the dimension of comprehension joined with experience. The hope is that documenting the lessons learned provides “warnings” of what not do, in order to prevent future errors, as well as to accelerate startup time for new efforts.

The “lessons learned” offered in the following pages focus on characteristics of the Improving Educational Quality (IEQ) Project, which embodies the principles enumerated in the lead article for this issue of *Quality Link*. But they do not constitute “warnings.” Rather it is our hope that the present description of these characteristics will represent a positive contribution for the design and implementation of other similar efforts.

As the first five-year contract of the IEQ Project (IEQ1) draws to a close, we join others in providing reflective insights which we hope will advance subsequent activities. This retrospective view treats the “lessons” as stepping stones upon which future activities may be constructed. Many of these ideas have been discussed at conferences and in other venues during the course of implementing the IEQ project. This brief article presents them as starting points for others, particularly our colleagues in the IEQ partner countries, whose wisdom and experience have enriched us.

1. Learning lessons is an ongoing process which must be integrated into the implementation of the project.

Questions linked to lessons learned are typically reserved for end-of-project events. This sequence suggests (although I think few would admit to believing this) that the reflections occur after all is said and done. IEQ1 has been implemented as a work in progress*, an ongoing and continual learning process for all participants. It is important to articulate what is being learned in time to use the knowledge either to build on successes, or to alter that which is already in place. This model accepts trial and error as essential for change and improvement.

During the implementation of IEQ, we built in several modes of self-assessment (internal feedback). One was to document country-by-country progress (intermediate accomplishments) toward results within each of the four major goals. Another was to dedicate time during each of the country visits for “reflection” with the team. This period was not always possible to schedule, but the more often it took place, the more we believed it was critical. A third technique was to hold biweekly telephone conference calls with the Technical Review Panel to keep in touch with the country-by-country activities, hear problems and concerns, brainstorm options and plan together.

*A work in progress implies that there is an environment which facilitates ongoing change.

2. Shifting from a relationship based on technical support to partnership with host-country colleagues, and ultimately to “ownership,” requires “letting go” and “taking on.”

The story of IEQ reveals a paradigm shift away from technical support and towards ownership. It requires a shared recognition of classroom realities and cultivates a system which accepts responsibility for its own improvement.

We were surprised at the cautious response of our host-country educators to the notion of their status as partners in IEQ. Perhaps our mutual expectations were not explicit from the outset, or perhaps they were not examined frequently enough as the project unfolded. But it is clear that the collaborative process of our work required the equal attention and commitment of all. It was important and necessary for the US-based IEQ participants to demonstrate our own faith in the project by “letting go”; in turn, the host-country participants had to “take on” aspects of our work. From the outset, IEQ assumed this was a *modus operandi*: however, many host-country nationals wanted to be instructed “what do to” as we began. (This request revealed much about the donor/host-country relationships.)

In short, it became critical to set a tone of reciprocity among colleagues, but it was often challenging to maintain this balance. Moving toward ownership also required focusing on national priorities for the in-country efforts and engaging educators throughout the system in dialogue about the expected results of the IEQ project and its implications for action.

An element not “built into” the process was the amount of effort and time required to work together and to develop trust in the relationships. Moreover, it was necessary to recognize that mistakes do happen and that they can be transformed into learning experiences: this is an acceptable way of conducting business. It’s often easier and more efficient to tell people what to do and how to perform correctly, than to allow them to find out for themselves. But this is not development. And it’s not IEQ.

3. Research is supported by “non-researchers” in a system when it is experienced as a tool for educational improvement.

In IEQ, one measure of success is the way information is utilized. The demonstration of research as a tool occurs in several ways. It begins by focusing on national priorities in-country and by reflecting the concrete problems or concerns which the educational system is trying to address. It continues by engaging educators, e.g., teachers, assessment experts, teacher trainers, and others within the educational system, in a discussion of the results of the research in order to gain insight into and understanding of the problems being examined. Materials summarizing the research findings are prepared in appropriate format and size to communicate meaning and stimulate discussion. Context and engagement are key ingredients. And hearing about others’ experiences or reviewing the relevant professional literature can provide a framework for action and reform in a specific environment.

4. Dialogue about the reality of classroom experience, and its effect on both teachers and pupils, is a catalyst for those INSIDE the system to improve the quality of education.

There are two important factors here. The first is *who* is doing the talking. There should be a sharing of information across hierarchical lines within the system which moves toward a “democratic” process. IEQ has broken through barriers which traditionally isolate educators (often the “disenfranchised”) by inviting them “to the table” through conferences, workshops, or seminars. An example is the inclusion of teachers in discussions of the findings about what pupils could and could not do in their classrooms (follow simple instructions, write their names, read from a “below grade” text). The discussions focused on how the teachers could improve their teaching by pinpointing learning needs and suggesting methods to address those needs. Many teachers requested additional help, and they shared what they learned with their school colleagues. They became more engaged with their teaching and, for some, the absentee rate declined.

The second is *what* is being discussed. The focus should be on the REALITY of teaching and learning in the classroom—for example, the use (or lack of use) by teachers of instructional resources, or the level of reading or writing by pupils in the primary cycle. The amount of dialogue about instructional resources, the extent of discourse between teachers and students, the classroom environment and other realities of classroom practice—all of these conditions can reveal specific needs of educators throughout the system. As a result of discussion about these needs, teachers can gain a clearer understanding of their own pupils’ ability to perform; trainers can determine how to revise in-service and pre-service courses; and policy-makers can gain perspective on the national implications of, say, testing or textbook production and distribution.

Thus can the “experience of learning” about the classroom by both the policy makers and the practitioners provide the stepping stones to improving the quality of education.

5. Providing the connections between host-country colleagues and the broader professional community builds confidence and contributes to empowerment and participation within the country.

This outcome has been one of the most exciting for IEQ. Opportunities to travel outside the country, actively participate in international conferences, represent their own work and build their own networks are typically limited to the same small group of people in developing countries. Such limited exposure restricts their own vision of themselves and their work. They often don’t know how good they are and how

much they have to contribute to an international forum.

One goal of IEQ has been to foster such linkages, *not only* at major conferences *but also* within the IEQ project, so that country representatives travel to member countries for specific technical agendas, e.g., development and use of curriculum-based testing. From the beginning, IEQ colleagues from host countries have presented the IEQ work in-country at the Comparative and International Education Society (CIES) meetings. It has been interesting and very revealing to listen to the response of donors and other contractor organizations to this participation: Recognition of the importance of such participation is mingled with surprise!

Outreach and participation within the broader educational system have also occurred within country. Members of IEQ teams have moved beyond their immediate professional circles, e.g., the university, to become engaged in basic education at both local and national levels. This has occurred at regional and national conferences attended by the educational stakeholders within the system where focused discussion on the implications of the findings takes place. Members of local research teams have been invited into the broader reform arena, usually at the national level, because of the methodology and focus of the IEQ process.

6. Establishing an institutional home within country is a solid beginning for sustainability.

Notice I didn’t say sustainability of the project! Housing IEQ within a local institution builds not only new individual



Letter from the Editor

professional skills, but it also strengthens the institution. IEQ does not measure its success by continuation of the “repeated events,” but rather by a commitment to the process of assessment and “continuous reflection and adjustment.” We view the skills, experiences and knowledge gained during the IEQ1 years as building blocks for this ongoing work.

IEQ residence in an institutional home facilitates the spread of the ideas it fosters and the methods it applies within the organization. But it also gives them currency for broader acceptance. What is sustained through IEQ team members is the organization’s methodology in a widely respected and active educational institution. In two countries, the institution will assume operational support for IEQ. In a third country, a local office will relocate to an academic institution. In a fourth country, the IEQ team resides within the government, which has been continually absorbing IEQ technical principles and methods. In a fifth country, collaboration on the development of technical products has resulted in site-by-site adaptation of appropriate methods and procedures. The project supported by the IEQ1 five-year contract does not have to be sustained to be successful. Its success can be measured by the continuing utility of the methodological process through strengthened individual and institutional capacity.

Perhaps such reflections about IEQ1 may proliferate in other venues. IEQ1 has been blessed with participants who have an abundance of talent and energy. Each could offer a unique perspective of “lessons learned”; they are welcomed. Indeed, as I reflect on my own experience of the past five years as Director of the IEQ Project, I am struck by the untapped potential for educational improvement which exists at all levels.

I believe that the principles and the process which IEQ has developed offer a promise for change that at once systematically determines and integrates the REALITY of the classroom. This approach moves abstract notions to concrete information about what is and is not happening within the school and how it affects a pupil’s capacity to develop intellectually and physically. After all, the bottom line for determining if educational quality has improved should be whether pupils learn.

In order to achieve this end, IEQ obliges educators to consider first the CONTEXT of their national educational systems and to identify opportunities for and agents of change. To be sure, we’ve been privy to some hallmarks of change: teachers’ increased interest in their own teaching; circuit supervisors’ response to opportunities to be instructional leaders, the revelations and questions which arise from new knowledge about learning within the primary school before end-of-cycle testing; the growing commitment of university faculty to improving basic education.

The energy of and the interaction among IEQ1 participants anticipates educational improvement. We must never forget that the experience of working with this anticipation brings its own rewards and results. It is upon these that we build together.

We are grateful to the many who have contributed to the growth and well-being of the Improving Educational Quality Project and express special recognition and appreciation to the host country research team members and institutions in Ghana, Guatemala, Mali, South Africa, and Uganda with whom we have learned and shared much.

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