USAID/Zambia Education Program Evaluation

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Acronyms

AIR American Institutes of Research
AED Academy for Educational Development
CA Continuous Assessment
CBO Community Based Organization
CDC Curriculum Development Center
CHANGES2 Community Health and Nutrition, Gender and Education Support 2
COE College of Education
CS Community School
CST Community School Teacher (volunteer)
DEBS District Education Board Secretary
DESO District Education Standards Officer
DODE Directorate of Open and Distance Education
DRC District Resource Centre
DRCC District Resource Centre Coordinator
ECZ Examination Council of Zambia
EDC Education Development Center
EFA Education for All
EMIS Educational Management and Information Systems
ESO Education Standards Officer
EQUIP2 Educational Quality Improvement Program
FHT Family Health Trust (Zambian NGO)
FNDP Fifth National Development Plan
FTI Fast Track Initiative (USAID)
HIV/AIDS Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome
HRIS Human Resources Information System
GRZ Government of Zambia
ICT Information Communication Technology
IGA Income Generating Activity
IM Institutional Management
IRI Interactive Radio Instruction
LTM Learning at Taonga Market
MOE Ministry of Education
M&E Monitoring and Evaluation
NISTICOL National In-Service Training College
NGO Non-Governmental Organization
ODL Open and Distance Learning
OVC Orphans and Vulnerable Children
PCSC Parent Community Schools Committee
PEO Provincial Education Officer
PEPFAR President's Emergency Plan for AIDS Relief
PESO Provincial Education Standards Officer
POC Provincial Outreach Coordinator
PRC Provincial Research Centre
PRCC Provincial Research Centre Coordinators
QUESTT Quality Education Services Through Technology
SCP School-Community Partnership
SEO Senior Education Officer

SESO	Senior Education Standards Officer
SHN	School, Health and Nutrition
SIC	School In-service Coordinator
SO	Strategic Objective
SPRINT	School Program of In-service for the Term
TA	Technical Adviser
TED	Teacher Education Development
TESS	Teacher Education and Specialized Services
VCT	Voluntary Counseling and Treatment
USAID	United States Agency for International Development
USG	United States Government
ZATEC	Zambia Teacher Education Course
ZCSS	Zambia Community Schools Secretariat
ZIC	Zonal In-service Coordinator
ZNBC	Zambia National Broadcasting Corporation

Acknowledgements

The evaluation team wishes to thank a number of organizations whose individuals helped us during the conduct of this evaluation. The leadership and rank-and-file personnel of the three USAID-funded programs were unfailingly gracious and supportive in supplying us with documents and information, answering our questions, helping arrange visits to the field and to their program sites, and explaining the background and various elements of their work. The schools, teachers, head teachers, pupils, parents/guardians and other concerned citizens of the various rural and urban communities we visited gave us much valuable time and information. They allowed us to interrupt their busy days to tell us of their devotion to and specific involvement in the education of children and adults in their villages and neighborhoods.

Ministry of Education personnel, beginning with the Permanent Secretary, at all levels were cordial and collaborative, sharing with us their views on education and how they felt one, two or all three of the USAID-assisted programs were working. MOE personnel at the zonal, district and provincial levels especially described for us the effects of the programs on their geographical areas and the teachers, head teachers and other MOE employees working therein. Personnel in USAID/Zambia were interested and helpful with this evaluation, and mindful how the information gathered and analyzed might inform their education programming and investments for the coming years.

Preface

As a brief point of introduction, this USAID/Zambia Education Program Evaluation report focuses on the overall impact of the USAID education program on the Zambian education sector. Currently, the majority of USAID funding in this sector goes to three projects: (1) the Education Quality Improvement Program 2 (EQUIP2); (2) the Quality Education Services through Technology (QUESTT) Project; and (3) the Community Health and Nutrition, Gender and Education Support 2 (CHANGES2) Program. As such, the evaluation team spent much of their time meeting with staff and stakeholders related to these three projects. A large part of this report focuses on the findings of these meetings and site visits.

This report does not contain a traditional Executive Summary *per se*. Rather, the first section serves to summarize the overall impact of USAID education funding, and can be read as an overall summary of the evaluation team's findings in the field.

1. Summary of USAID/Zambia Education Program Evaluation

The purpose of this study is to conduct an independent assessment of the impact of USAID/Zambia's education program between 2003 and 2009, and to make recommendations for USAID's new educational strategy, programming options and investments for the coming five years. In order to develop a "big picture" evaluation that moves beyond an assessment of discreet programs, the evaluation team conducted both (1) a summative evaluation of the three largest USAID-funded education programs, an end-of-project assessment, as two programs are scheduled to end in late September, 2009 and a third in September, 2010, and (2) a sectoral evaluation that assesses the synergies among projects for affecting overall program sub-sectors such as teacher training and information management systems. Thus, the findings conclusions and recommendations can inform and hopefully be useful to USAID and the Ministry of Education (MOE) as they decide how to continue education assistance to Zambia. Especially weighed are the merit, relevance, and cost effectiveness of USAID education programs and to what extent they have promoted educational quality, equity and access. Also, suggestions will be offered to USAID/Zambia as it prepares to update its Country Strategic Plan (CSP).

The three-person team spent six weeks in Zambia utilizing six complementary, inter-related forms of gathering information: (1) review of pertinent documents throughout the evaluation process; (2) individual and group interviews; (3) a select few focus group discussions; (4) visits to schools, classroom observations and conversations with local citizens; (5) meetings with MOE personnel at the zonal, district, provincial and central levels, grantees' offices, non-governmental Organizations (NGOs), among others; and (6) the administration of anonymous questionnaires to individuals and groups of people involved in and knowledgeable of one or more of the program activities.

Overview of USAID/Zambia Program

The Government of Zambia (GRZ) and the MOE have recognized the vital role that education plays in the development of the country's youth, and ultimately in poverty alleviation and economic growth. The Government has taken a number of steps to increase access to education in the past decade. In 2002, the GRZ abolished school fees for basic education, which dramatically improved access for many Zambian children. Also, the Fifth National Development Plan 2006-2010 (FNDP) recognized education as a priority sector for the country. An additional development has been the increase in support for the over 3,000 community schools (CSs) in the country. NGOs, community-based organizations (CBOs), and the GRZ have each increased their support to CSs, which has provided an additional access point for education opportunities.

Despite these advances, the education system in Zambia remains constrained by funding issues; the devastating impact of the HIV/AIDS epidemic on teachers, administrators, parents and family support networks; and challenges of meeting the increased demand of free primary education. Though access to education has increased, the quality of basic education has not followed suit. Education statistics show high repetition and low completion rates. Particularly at risk are orphans and vulnerable children (OVC), who remain disadvantaged and often excluded from educational opportunities.

It is in this context that USAID/Zambia has been focusing on collaboration with the Zambian MOE to support the Government's efforts to both increase access and the quality of the learning environment. USAID education programs have focused on ultimately enabling the MOE to promote their basic education sector agenda while supporting policy reforms, capacity building efforts, and improving the quality of teaching and learning.

The USAID/Zambia education program has evolved dramatically, from a relatively small program eight years ago working on small pilot interventions to a large program working across multiple areas including HIV/AIDS and community schools with funding in the range of $16-20 million per year. The three largest programs in the USAID/Zambia education portfolio are: (1) the Education Quality Improvement Program 2 (EQUIP2); (2) the Quality Education Services through Technology (QUESTT) Project; and (3) the Community Health and Nutrition, Gender and Education Support 2 (CHANGES2) Program. Each program is a cooperative agreement, a type of grant. EQUIP2 and QUESTT began in 2004 and CHANGES2 in 2005, and the total US Government (USG) investment in these three programs is approximately $70 million dollars over a period of five years. These three programs are examined in more detail in *Section 5. Programs* of this report. The USAID education program also provides budget support to the Ministry of Education through a non-project assistance mechanism upon the attainment of agreed performance milestone. This assistance mechanism is valued at $6.4 million over a period of six years.

Overview of USAID Impact on Zambian Education Sector

As discussed above, all USAID education programs and activities have notable achievements for the 2004/5 to 2009 period, and the three main projects have competent, professional personnel, who are working with underserved, disadvantaged populations of children and adults in rural districts and communities. Some of the significant accomplishments and immediate impacts of USAID support include:

Enhanced teaching and learning in classrooms and non-formal settings (such as community listening groups). The team noted the high regard for the value and quality of teacher and head teacher training provided by USAID programs. Currently the issue of teacher supply reverberates throughout the system – the need for more and higher quality teachers, better human resource systems for teacher records, teacher retention, improved teacher certification pre-service programs, leadership training for head teachers, in-service programs for veteran teachers. Several efforts are underway to address the issues from a variety of directions, but the need remains for a comprehensive plan to reach the levels of teacher supply envisioned by the year 2015.

Non-formal settings also provide unique and productive learning opportunities. There are currently about 900 adult listening groups in Zambia, many of which are exposed to challenging topics about life skills and community support of OVCs.

Dozens of high-quality teachers' manuals and supplementary learning materials developed, distributed and used by different audiences. Zambian schools have acutely lacked adequate materials for students and teachers: desks, books, instructional materials. CSs have few to no materials, and many government schools have little more. Most do not have access to the adopted curriculum guides and syllabi. Less than five percent of basic schools reported having a library in 2008 and no report is given on available textbooks. Children cannot learn to read if they have nothing to read, nor can

teachers follow the curriculum if they have no materials. The quality educational materials developed by QUESTT and CHANGES2 and provided to schools and colleges are valued and widely requested.

Major educational quality and enrollment gains due to community schools and inter-active radio instruction (IRI). The immense amount of community collaboration and support for community schools (CS) is extraordinary. Over 100,000 children – in remote settings, poor, vulnerable, orphaned, half of them girls – have access to education as a result of the work of communities, project support, IRI via radio and iPods, and MOE recognition that CSs should be formally transitioned into the Zambian education system. Many factors must be considered in the transition, which has not been given formal acceptance yet. In the interim these schools and communities need continued support to maintain their level of commitment and hope for a future for their children.

Strengthened management and administration of schools and MOE offices at all levels. The Ministry of Education's (MOE's) structural capacity and role in articulating educational needs have been strengthened dramatically since 2004. Data collection has become more universal and streamlined, reporting mechanisms more useful and timely, and CSs are included in the data collection. ICT infrastructure provides new communication capacity within the MOE and is now being extended to provinces. Colleges have received equipment and networking assistance. Working within the MOE structure, EQUIP2 has been able to guide planning, budgeting, and policy development in a variety of areas – health, HIV/AIDS, community schools. More and more divisions of MOE are requesting and benefiting from their services.

Heightened parent, guardian and community participation in educational services. The involvement of parents, guardians, and community members in the education system provides added value to the learning environment and a student's ability to grow. Community schools are just one example of how USAID support has provided support to a child's entire support network.

Vital support for thousands of orphans and other vulnerable children (OVCs). The team was struck by the need and success of the modest scholarship and support program given to 20,000 orphans and vulnerable children (OVCs) in secondary schools, most single or double orphans living below the poverty line, and demand far exceeded supply. Scholarships made it possible for these OVCs to attend and remain in school, and directly contribute to educational access, equity, human rights and humanitarian goals.

Providing support to school health and nutrition (SHN), further improving the learning environment for young students. Time and again the team heard, read about and witnessed the critical importance of USAID-supported efforts in school health and nutrition (SHN), including de-worming, vitamin A supplements, bilharzia treatment, and HIV/AIDS prevention. The importance of school health and nutrition is obvious. Sick and hungry children do not learn, and often do not attend school.

The USAID/Zambia education program has also succeeded in supporting an impressive range of quantifiable results. Table 1 below summarizes some of the outputs coming from USAID programs:

Table 1. Selected USAID/Zambia Education Program Results

Indicator	Results
Pre-service teachers trained	8,823
In-service teachers trained	5,095
Pupils reportedly benefiting from improved teaching	1,753,404
No. of trainers of teachers trained in 31 districts	4,347
No. of CSs assisted in six provinces	1,832
No. of community school teachers (CSTs) trained	1,919
Total number of small grants provided (QUESTT and CHANGES2)	902

USAID support has put systems and programs in place that can also continue to have valuable long-term impact in the future. These impacts may ultimately be better appreciated over time, but with some addition support to maintain momentum, these activities could continue to have positive impact for some time. Examples include:

IRI and small grants for community schools. IRI has already shown great success in Zambia in contributing to educational quality, access and equity, and as a valuable teaching aid for both GRZ schools and CSs. It often serves as the interim educational avenue open to tens of thousands of poor Zambian youth and adults until such time as community schools receive government support and are supplied with certified teachers. At the same time, small grants to communities have been well-administered and used. They frequently boost formal education in poor areas, provide cost-effective school construction, are a community action and strengthening medium, and are positive non-formal education activities. Both IRI and small grants will continue to have long-term impacts in the Zambia education sector.

School Program of In-service for the Term (SPRINT) training and manuals for targeted areas. The School Program of In-service for the Term (SPRINT) training and manuals, including the popular SPRINT Teacher's Guide, have proven to be well-received and successfully utilized at the basic and community schools levels. Their continued utilization and roll out to new areas will provide additional positive impact. In addition, it would be useful to develop a version designed specifically for secondary school teachers.

Increased availability of data for the MOE at the administrative and political level. Much time and effort has been put into improving the ability of the MOE to collect, manage, and utilize data for decision making. Key advances have been made, but with additional improvements, access to accurate data can have further, lasting impact. The development of a functioning human resources record-keeping system within the MOE will positively affect the employment status of all Ministry personnel, from headquarters all the way down to the schools. In addition, initial training efforts in evidence-based decision making could be further scaled up to additional districts, and empower district personnel to understand and assist schools, rather than "monitor" and use checklists to serve headquarters requirements. The creation of such systems, and developing them in

such a way that they are lasting and functional, will be invaluable in the long term to the MOE and its schools.

Moving Forward

As with any development effort, there are concerns about the long-term sustainability of the programs and the impacts that they leave behind. Like most countries, there are political considerations that can impact what types of activities receive government funding and which will not. A new President or Minister of Education can target new priorities, while leaving past priorities neglected. Nevertheless, deeply embedded activities are more likely to be sustained even if the political will is not present.

As referenced above, there have been numerous positive developments resulting from USAID's support in the education sector in Zambia. Many excellent materials have been developed, and their continued use will be sustainable for a long period of time, particularly if they are reproduced in quantities that allow them to be distributed more broadly than currently possible. Sustainability of USAID-funded efforts to support community schools ultimately will depend on the transition of the GRZ being able to assume full responsibility for these community schools. Until that point, continued support for the volunteer efforts that keep these schools functioning is necessary to sustain the momentum of communities who may be beginning to show signs of fatigue.

In combination, five of the current USAID-funded activities have the potential to contribute to a sustainable educational structure that will improve teacher recruitment and quality, and ultimately, quality learning:
1. A MOE human resources information system (HRIS);
2. Education Leadership and Management Training course for heads of schools;
3. Workshops supporting districts in the use of data for decision making;
4. Support for COEs with technology development; and
5. Integration of continuous assessment into the education system.

These points are discussed in more detail below in *Section 7. Sustainability*.

2. Evaluation Methodology

As graphically outlined in *Figure 1*, the evaluation team assessed programs independently and across education sub-sectors receiving program investment. This approach yielded two sets of conclusions. The first set is ***program-specific*** and assessed the coverage, impact and degree of local participation in each program. The second set is ***sub-sector specific*** and considered the pattern in program areas investments, and in combination with interviews and observations, identified sectors that have received funding support and their contribution Zambia's education sector.

The team spent six weeks in Zambia utilizing six inter-related, complementary forms of gathering information: (1) review of relevant documents throughout the evaluation process; (2) individual and group interviews; (3) a select few focus group discussions, such as with adults in the OVC support radio listening groups; (4) visits to schools, including classroom observations and conversations with local citizens; (5) meetings with MOE offices and personnel at the zonal, district, provincial and headquarters levels, grantees' offices, NGOs,
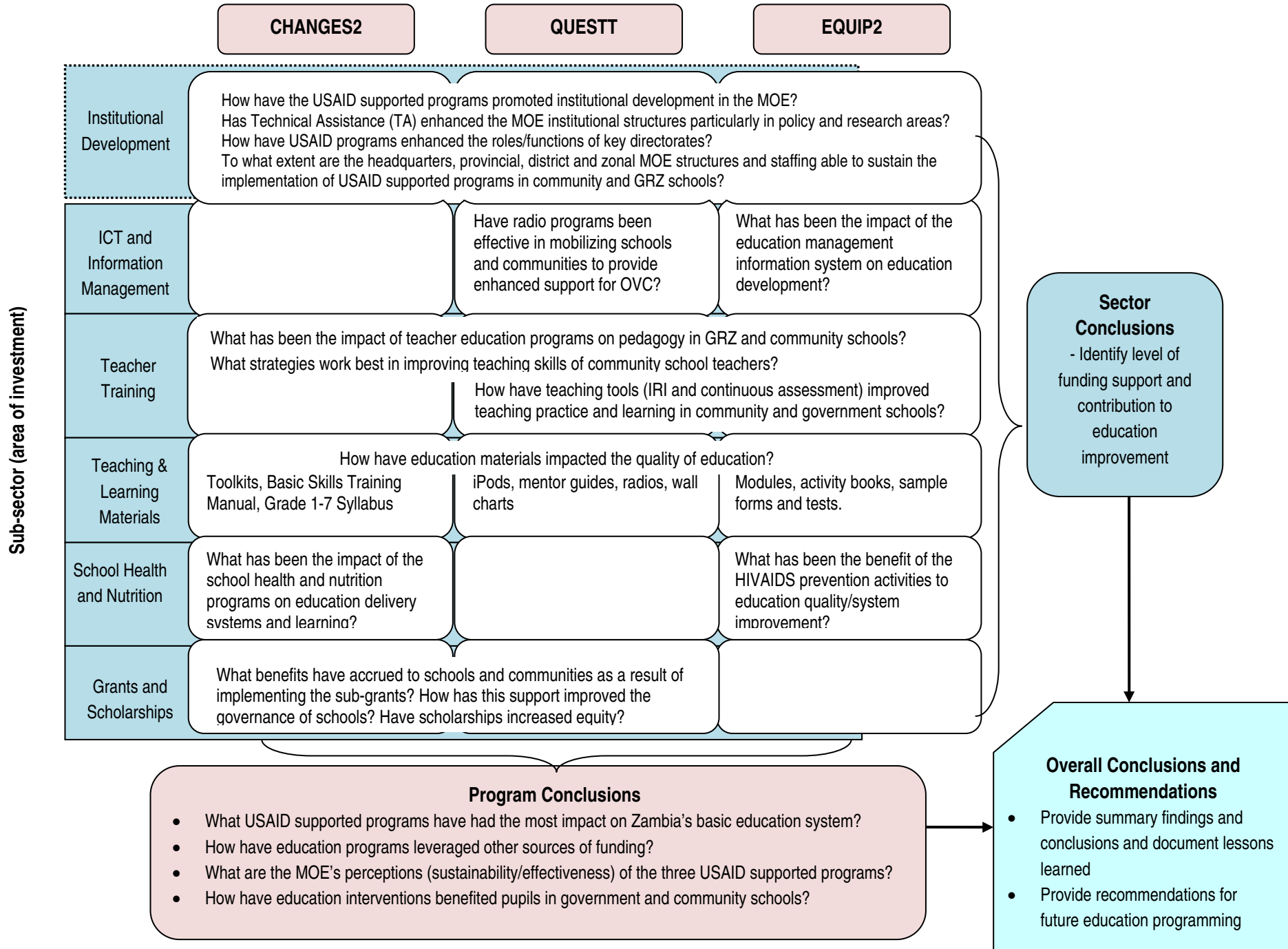
etc.; and (6) the administration of anonymous questionnaires to individuals and groups of people involved in and knowledgeable of one or more of the programs and its/their activities. Annex C includes copies of the classroom observation form and anonymous questionnaires.

The team spent eight days visiting 29 schools of all types, six District Education Board Secretary (DEBS) and three Provincial Education Officer (PEO) offices, district, zonal and provincial resource centers, three community radio stations and two teacher training colleges in Lusaka, Eastern and Southern provinces. Time constraints and resource limitations obviated visits to the other provinces in which these programs function.

The formulation and administration of anonymous questionnaires and classroom observation forms helped the evaluation team gather useful qualitative and quantifiable information and are included in Annex C. The results are reported in Annex D by sub-groups of respondents with similar response patterns. No further breakdown by respondent group is presented in order to retain the intended anonymity of the questionnaires. Because time was scarce – both for the busy Zambians we met and for evaluation team members – the anonymous questionnaires offered a convenient, confidential, honed and efficient means to register judgments on the principal components of each project, plus a few open-ended questions at the end so respondents could comment on any topics they wished.

The team used classroom observation forms to record what was happening in classrooms and to discover what USAID-funded activities were evident in the schools. The forms were adapted for Zambia from a more elaborate form developed by the Northwest Regional Educational Laboratory in Portland, Oregon and completed by four different people, with the results collated. The forms included information about the setting and available resources, as well as a rating scale for components of organization and the learning process. In most instances LTM classes were observed only during the broadcast time, but in a few instances there was an opportunity to observe the pre-session. During the lessons, notes and observations were records concerning the activities and resources. Then the notes were used as a reference to rate the level of occurrences of a variety of processes as well as record the percent of time devoted to lecture, interaction with students, and other classroom activities. The observers looked for items such as radios, iPods, posters, teachers' guides, teacher or student made materials, curriculum materials and toolkits. Since most observations were of *Learning at Taonga Market* (LTM) lessons, the results provide a picture of the process delivered via the packaged programs.

Figure 1: Evaluation Framework for Program and Sector Assessments

Sub-sector (area of investment)

	CHANGES2	QUESTT	EQUIP2
Institutional Development	How have the USAID supported programs promoted institutional development in the MOE? Has Technical Assistance (TA) enhanced the MOE institutional structures particularly in policy and research areas? How have USAID programs enhanced the roles/functions of key directorates? To what extent are the headquarters, provincial, district and zonal MOE structures and staffing able to sustain the implementation of USAID supported programs in community and GRZ schools?		
ICT and Information Management		Have radio programs been effective in mobilizing schools and communities to provide enhanced support for OVC?	What has been the impact of the education management information system on education development?
Teacher Training	What has been the impact of teacher education programs on pedagogy in GRZ and community schools? What strategies work best in improving teaching skills of community school teachers?	How have teaching tools (IRI and continuous assessment) improved teaching practice and learning in community and government schools?	
Teaching & Learning Materials	How have education materials impacted the quality of education? Toolkits, Basic Skills Training Manual, Grade 1-7 Syllabus	iPods, mentor guides, radios, wall charts	Modules, activity books, sample forms and tests.
School Health and Nutrition	What has been the impact of the school health and nutrition programs on education delivery systems and learning?		What has been the benefit of the HIVAIDS prevention activities to education quality/system improvement?
Grants and Scholarships	What benefits have accrued to schools and communities as a result of implementing the sub-grants? How has this support improved the governance of schools? Have scholarships increased equity?		

Sector Conclusions
- Identify level of funding support and contribution to education improvement

Program Conclusions
- What USAID supported programs have had the most impact on Zambia's basic education system?
- How have education programs leveraged other sources of funding?
- What are the MOE's perceptions (sustainability/effectiveness) of the three USAID supported programs?
- How have education interventions benefited pupils in government and community schools?

Overall Conclusions and Recommendations
- Provide summary findings and conclusions and document lessons learned
- Provide recommendations for future education programming

3. Limitations of the Study

The team spent eight days in the field to observe classroom teaching and learning, visit program sites and meet with relevant personnel who have been involved and are knowledgeable of the three programs. Field visits were carried out in Lusaka, Eastern and Southern Provinces. Major program activities occurred with CHANGES2 in Central and Copperbelt Provinces, and in all provinces with QUESTT and EQUIP2 but other provinces were not included in the field visits due to time restraints. Some 34 U.S. Peace Corps Volunteers work in education in Zambia – including with QUESTT and CHANGES2 – though time did not allow the team to meet with them individually or in groups.

Also, each of these three programs has many components and multiple activities, and two and frequently all three are involved with various aspects of the same activities. For instance, CHANGES2, QUESTT and EQUIP2 all work – to varying degrees – in the areas of teacher training and professional development, school health and nutrition, HIV/AIDS, community schools, school management, capacity building and institutional strengthening, and other areas. At times, it is difficult to attribute credit when things go well and constructive criticism when results are occasionally disappointing.

The programs themselves differ in their visibility and approaches. QUESTT and CHANGES2 carry out most of their activities at the community, school, district and provincial levels, with participation of citizens, teachers, MOE officials and others. Their work can be photographed and documented clearly, certificates and awards are often given after training courses and other events, many publications are jointly produced, distributed and used, and people in Zambia know these two programs and their decentralized personnel by name. EQUIP2, however, is a program advocating and promoting policies, processes and procedures, and its staff are integrated with MOE mainly at the headquarters level. Its work and effects are designed to filter down to the provincial, district, community and school levels. Its labors do not, for the most part, produce good photo opportunities. As two EQUIP2 staff and one of their documents noted, "Our outputs are largely invisible, besides it would be impossible to separate our accomplishments from those of the MOE."

4. School Visits and Classroom Observations

The heart of education does not reside in the Ministry of Education or the provincial and district offices or in the quality of the publications and statistical reports. It resides in the classrooms with the teachers and the pupils. So the evaluation team went to the schools and the classrooms to see if the work of the USAID-funded activities had reached into the classrooms of Zambia.

The team visited 29 schools of all types in Eastern, Southern, and Lusaka Provinces – community, basic, girls high schools, boys high schools, orphanages, grant-assisted, private schools, basic school recently transitioned from a community school, some urban, some extremely rural. Community members spontaneously gathered to talk with the team and show us the results of their efforts to support education for their children. In one instance, 75 adults gathered in a school building with three classrooms, but no furniture, windows, or doors – and they all sat on the floor like the pupils do. A small grant from QUESTT allowed them to complete the roof, but they made their own bricks and mortar from local materials,

had completed three toilets and were working on a fourth one, and had rows of bricks laid out drying for constructing teachers' housing. Other communities shared similar stories, some showing off sewing and knitting machines and school uniforms made on those machines. Others were generating a small amount of income to help support the classrooms and the mentors. In one community they did not have enough money to complete the roof but the walls were up.

Most community schools were extremely poor with a high percent of orphans. Some had dirt floors, most had no materials or books, perhaps a poster and a teacher made alphabet, or a set of numbers or a diagram of the digestive system on the wall. Chalkboards and chalk were the only materials common across the classrooms, and in one CS the blackboard was flattened scrap metal. Children sat on the floor, the dirt, bricks, wobbly benches, and crowded around tables.

When possible, team members did classroom observations – not to evaluate teachers but to look at the learning processes (see form in Annex C). A total of 18 lessons were observed, with about 500 students present, in all grades from 1 to 7, in very different circumstances and including a special education classroom. The visit to the special education classroom, and subsequent inquiries informed the team that USAID-funded student materials had not been adapted for those special education students who require a different learning modality. Zambia has made an effort to include special education students in the educational system and to train teachers for those students. The 2008 Education Statistical Bulletin reports 168,866 special needs students in their schools, nearly 5% of the total enrollment.

Fourteen of the classrooms were in community schools, and 13 of those classrooms used *Learning at Taonga Market* (LTM) with radios or IPods. The other classrooms were in basic schools, but all had been impacted by the USAID funded education programs with training sessions from QUESTT, CHANGES2, or both, and all had been included in the EMIS reporting.

The approximate percentage of time spent on various activities was recorded (see results in Annex D). The design of LTM lessons assures that little lecturing takes place and that a great deal of interaction occurs, so it is no surprise the observations indicate that in LTM classrooms almost three-fourths of the time is devoted to interaction with the pupils and assessing what they are learning. In the non-LTM classrooms less time is devoted to those interactions, but there is more time for reflection and for pupils to explore and be involved in their own learning. In most instances, with the guidance of the interactive LTM programs, the observations credit the mentors with conducting the learning process in a professional manner. The problem of the fast pacing of the directions was observed, but if the pre-session had been conducted, the pupils and teacher were familiar with what might come next so the fast pace was not as inconvenient.

Overall, it was obvious that most of the students were eager for the lessons to begin and were engaged, the mentors interacted with pupils, and the lessons were well done. It is remarkable that in such stark settings, with so little resources or time in school, the students are learning.
Obviously, the work of the USAID-funded programs has filtered to the classrooms. Certainly the mentors and teachers were on their best behavior for visitors, but nearly all of them showed us that they can teach children. The mentors could not be doing this work without

the LTM instructional tools supported and delivered through the programs. The teachers in the basic schools had all been affected by training and/or materials prepared by both QUESTT and CHANGES2. Most of the classes we observed would have been meeting under trees without the assistance of the program grants, and community schools would not have the reached the current level of recognition if their existence had not been accounted for and reported at central government levels via the assistance of EQUIP2 and the development of guidelines for CSs.

5. Programs

CHANGES2

Background:
CHANGES2 began June 20, 2005 and will conclude September 30, 2009. The original cooperative agreement (grant) between USAID and the American Institutes of Research (AIR), the principal consulting firm implementing the program was for an estimated amount of $17.5 million for the 51 month period. New, additional requests and funds from the U.S. Government (USG) channeled through USAID increased the total life-of-project funding to $28.45 million.

CHANGES2 is a follow-on to the USAID-financed CHANGES program, which functioned from late 2000 to early 2005, concentrating on School, Health and Nutrition (SHN) needs in Eastern Province and three districts of Southern Province. An evaluation of CHANGES carried out in February-April, 2005 found solid evidence that SHN had positive effects on the cognitive development of students, and that teachers can be trained to be full participants in the administration of drugs and improvement of the health and nutrition in their schools. Community Sensitization and Mobilization (CSMC), focusing on issues of gender and HIV/AIDS, spread to all 11 districts of Southern Province and was credited with changing deeply rooted cultural beliefs and behaviors. A third program component was a small grants mechanism, which drew plaudits in the report.

The main program areas of CHANGES2 are: (1) Teacher Education; (2) School Health and Nutrition (SHN); (3) HIV/AIDS; (4) Small Grants; (5) School-Community Partnerships; and (6) Scholarships for Orphans and Vulnerable Children (OVCs). The program aims to strengthen basic education teachers' professional skills, with a special focus on HIV/AIDS prevention and mitigation. Also, it supports the MOE's SHN activities to new programmatic and geographical areas, with the goal of empowering pupils, teachers and community members to improve education, gender equity and health in schools and communities.

The central office is in Lusaka, and the program assists the Government of Zambia (GRZ) in delivering strengthened basic education in a decentralized manner in four provinces: Southern; Lusaka; Central; and Copperbelt. Provincial program offices are in Livingston, Lusaka, Kabwe and Ndola to coordinate district and zonal education activities. CHANGES2 also delivers, with the assistance of a Zambian NGO, scholarship support services for needy secondary student OVCs in the same four provinces, plus Eastern and North Western Provinces. At its apex, CHANGES2 had 56 employees, many of them deployed at the district, zonal and provincial levels.

Implementation and Results:

CHANGES2 is a multi-faceted program with many inter-related components or elements, all contributing to one or more of the six core program areas. Much like QUESTT and EQUIP2, it has added tasks and activities both due to conditions on the ground in Zambia and through new or heightened emphases from the USG and USAID. All three programs have had to cope with fluctuating exchange rates in Zambia, which have presented problems for planning, financial forecasting, budgeting and procurement. Lastly, all three have had to report on different sources or "streams" of USG funding. The original goal was for CHANGES2 to work in 400 new basic schools annually, for a four-year total of 1,600 schools. As the program ends, it has worked in 1,673 schools.

Collaborating with the MOE at various levels, CHANGES2 has concentrated on improving curricula and teaching methods in basic schools and teacher training colleges through training courses and the development, testing and use of textbooks, teachers' manuals and guides, supplementary materials, posters for students, community committees and others. The principal activity in pre-service teacher education has been *Teaching in the Window of Hope* (TWH), which concentrates on HIV/AIDS education and prevention. In-service teacher education has emphasized development of a SPRINT (School Program of In-service for a Term) Teacher's Guide, training of teachers and MOE institutional strengthening at the provincial, district and zonal levels.

Table 2. Selected Program Results for CHANGES2

Indicator	Results
Pre-service teachers trained	8,823
In-service teachers trained	5,095
Pupils reportedly benefiting from improved teaching	1,753,404
Students participating in SHN interventions	911,897
No. of COE tutors receiving TWH pilot-testing (2008)	279
No. of student teachers in TWH pilot testing (2008)	5,398
No. of trainers of teachers trained in 31 districts	4,347
No. of student teachers trained, mainly in SPRINT	6,600

Evaluation team members found when visiting program sites in the provinces that CHANGES2 helped build increased capacity in zonal, district and provincial resource centers, the delivery of valued library books, and capacity building in SHN, HIV/AIDS, SPRINT and other areas. District Resource Centre (DRC) and Provincial Research Centre (PRC) staff were particularly praiseful and enthusiastic about the process of capacity building and the products themselves.

The SHN sub-sector represents a plethora of activities. Building on the efforts of CHANGES, GRZ health workers collaborate fully with basic schoolteachers, continuing the collaboration of the Ministries of Health and Education, working closely together at the local school and community levels. Besides addressing USAID/Zambia's education SO and indicators, CHANGES2 contributes to USAID's Health SO, especially through improved child health, adolescent reproductive health, and malaria prevention. The Health Promoting Schools Initiative covers de-worming and micronutrients, water and sanitation, and classroom instruction. 3,155 teachers/head teachers and 523 health workers have been trained in SHN, while 676,010 students have been de-wormed, nearly 100,000 were given vitamin A supplements, and a large number was treated for bilharzia. CHANGES2, teaming with

Africare, has worked with 200 schools in sustainable school gardens. From what the evaluation team could discern, it appears that these gardens have had only mixed success, much like school gardens and "production units" noted in the 2005 evaluation of CHANGES.

School-community partnerships involve community mobilization, capacity building and training, as well as opening up dialogue between education personnel and local leaders and citizens, all geared to enhance the quality of education. They aim to contribute to the MOE's capacity building and decentralization initiatives, and USAID's emphases in civil society strengthening, democratization, and a stronger role for communities in the management of education. Theater and drama in schools and communities are part of this effort. A review of documents and conversations with Zambians in and outside the MOE reveal differences of opinion regarding the centrality of SCPs.

CHANGES2's sub-grants or small grants activities seem to have contributed to several ends, including SCPs, capacity building, access to and quality of education, and OVC support and HIV/AIDS prevention. Capacity building includes Sub-grant Management Committees being training and supported in 31 districts across the four focus provinces, 183 grant management committees – involving schools and Community Based Organizations (CBOs) – trained and supported, and ties with and strengthening of four local partner NGOs. OVC support and HIV/AIDS prevention-related grants have aided 183 schools and CBOs, 12 resource centers, one College of Education (COE), and a reported 122,732 children. CHANGES2 has produced and distributed various practical, high-quality publications in the small grants area. One such document is "Infrastructure Improvement Grants for Community Schools: Operational Guidelines." It would be highly useful to any GRZ ministry, particularly one with decentralized services dealing with citizens and communities, as well as NGOs and CBOs throughout the country.

The high school scholarships for OVCs relate to USAID's humanitarian and human rights goals as well as to the MOE and USAID objectives of access to and equity of education. Six high schools with this program were visited, two of them unannounced. This is a highly popular program area with the GRZ, MOE, secondary schools and the Zambian public. To date, 20,654 girls and boys – most of whom could not otherwise attend school due to poverty and lack of support – have benefited. A modest sum to cover tuition, examination fees, boarding and spending money is given each recipient. Importantly, given to each girl is a comfort kit, which includes three pairs of underpants, five pads, a plastic bag and a bar of soap for her to use during her menses.

The evaluation team met with a group of OVC girl scholarship recipients. One pupil said, "My mother passed away when I was eight months old. My dad passed away when I was five. I want to go to the university to study economics and help other people." Another girl OVC told us, "I am a double orphan and, with the help of people in my neighborhood, was only able to come to school this year. I want to study journalism and bring information to people."

AIR and CHANGES2 partnered with the Shoprite supermarket chain to provide the soap, while the Johnson & Johnson firm supplied some funds. In 2009, the program is supporting 8,000 scholarships, 5,600 of whom are girls, and 1,720 of these secondary students are working as HIV/AIDS peer educators. Data collected by CHANGES2 and Family Health Trust, a Zambian NGO and sub-grantee, reveal that the attendance, school performance, and progression of scholarship recipients were better than the national average.

Psychosocial support (PSS) to the OVCs is another facet of the scholarship activity. CHANGES2 and the MOE developed a PSS model for children traumatized by HIV/AIDS, and trained 239 teachers and community members at 142 schools so that more than 2,000 children received PSS.

What became, in effect, a seventh program area – while reinforcing several of the previous six – is CHANGES2's multi-pronged support of community schools. The main program areas for this have been training of teachers and head teachers, MOE capacity building, provision of quality materials, and infrastructure improvement grants, all geared to quality education in CSs. All 1,832 CSs in CHANGES2's four focus provinces were included, plus Luapula and Eastern Provinces.

Table 3. Results for CHANGES2 support to community schools (2006-2009)

Type of Support	Result
No. of CSs assisted in six provinces (all CSs)	1,832
No. of CSTs trained (approximately one per school)	1,919
Tool Kits of teaching-learning materials provided (one per school)	1,832
No. of COE (ZATEC) student teachers supported in 135 CSs	230

Another notable activity that evaluation team members heard about concerned CS head teachers. CHANGES2 and the MOE designed a five-day school management course for CS head teachers, and trained 1,807 of them in personnel management and support, record keeping and working with the community. CHANGES2 provided sub-grants for infrastructure improvement to 235 CSs, and strengthened 235 Parent Community School Committees (PCSCs). Related activities directly concerned MOE capacity building. CHANGES2 gave technical assistance for policy development and system strengthening regarding CSs. These included Operational Guidelines for Community Schools, a much-used MOE publication developed with EQUIP2's assistance, in both full and abridged versions that was utilized in CS Teacher (CST) training, training of district officers in five provinces in effective support to CSTs, and two MOE support visits to each of 1,832 CSs. Finally, overall program field-level monitoring and reporting were carried out by MOE, CHANGES2 and partner personnel to core schools, CSs and high schools.

Overall CHANGES2 Findings:

Evaluation team members heard universal high praise for CHANGES2, its personnel and work in the 10 districts of Eastern, Southern and Lusaka provinces that were visited, as well as from MOE officials at headquarters. About the only complaint, or shortcoming (if one can label it as such), was that CHANGES2 should be operating in more provinces and districts so that they also could benefit from the program. Teachers, head teachers and community leaders and activists are particularly appreciative of collaboration with CHANGES2. On the anonymous questionnaires, these respondents rated CHANGES2 very high in all 13 listed categories of activities – higher than 4.0 on a 1 to 5 scale with 5 being the highest rating. The SPRINT program and value of the small grants to communities to support their schools were rated exceptionally highly at 4.9. It should be noted that district, provincial and zonal MOE personnel also ranked CHANGES2 very highly in all categories, with the average for only one question below 4.0 – at 3.9. For overall results see Annex D.

Teachers, head teachers, and district, zonal and provincial personnel throughout the areas visited – and presumably throughout the remainder of Zambia as well – are in great need of quality teaching texts, guides and manuals, and supplementary materials for pupils at each grade level. These respondents indicated that CHANGES2 delivered these, trained them in their use, and its personnel have followed up with them to monitor their use and answer questions. Especially appreciated are the SPRINT methodology and materials, many SHN-related booklets and materials, TWH by COE personnel, practical publications on community schools, and useful, well-written documents and guidelines on the implementation of infrastructure improvements grants by communities. As the Senior Planning Officer in the PEO Southern Province remarked, "All of our 11 districts have worked with CHANGES2, and there has been much beneficial training with the District Resource Centre Coordinators (DRCCs) and Provincial Research Centre Coordinators (PRCCs). Teachers and schools appreciate their work. CSTs have particularly benefited, such as with head teacher training and being able to manage their schools more easily. CHANGES2 has helped us complete dozens of small grant projects, some of them for income generating activities (IGAs)."

CHANGES2 and its local NGO partner, Family Health Trust (FHT), received accolades for establishing uniform, clear and equitable criteria for selection, working with secondary school personnel, and then helping administer the scholarship program for OVCs. Evaluation team members visited six secondary schools – including two unannounced visits – where the program operates and found it to be functioning smoothly, with many of the scholarship recipients serving as HIV/AIDS peer educators. In all sites visited, school personnel administering the program and the students said that these modest scholarships are the reason they can enroll and stay in school. The comfort kits given to the girl scholarship recipients are much appreciated and of considerable physical and psychological benefit. The main laments cited were that there were not many more such scholarships available (in the schools visited, demand outstrips supply by roughly 250%), and these OVCs foresee little or no possible manner in which they can proceed to post-secondary education.

MOE personnel, largely in the field, gave a rating of 4.0 on the question of to what degree the MOE is stronger now because of CHANGES2 in-service training and services for teachers. In addition, a number of district and provincial MOE officials, including Senior Education Standards Officers (SESOs), remarked very positively about the manner in which CHANGES2 staff have worked collaboratively with them and their colleagues, and of the lasting achievements and institutional strengthening the program has left behind. They told evaluation team members about the cascading nature in which CHANGES2 frequently worked to develop materials and training courses, involving and integrating MOE personnel from the school, zonal, district, provincial and headquarters levels in the development of, for example, SPRINT, and in the field testing, deployment and use of the materials, as well as the M & E that followed.

When respondents rank ordered the importance and value of nine aspects of CHANGES2's work, teacher education and professional development was by far the highest ranked. Next most valuable in their experiences and opinions was training courses for teachers and head teachers, closely followed by school health and nutrition. Among other factors, this reveals how concerned district and provincial officials – in addition to teachers themselves – are about the quality of the teaching/learning process, and how much better teachers can function with quality training, follow-up support and good, readily available manuals, guides and other materials.

QUESTT

Background:

As Andrea Bosch writes in a World Bank publication, "Learners retain approximately 10 percent of what they read, 26 percent of what they hear, 50 percent of what they see and hear, but 90 percent of what they say and do." It is no wonder that interactive radio instruction (IRI) – a methodology developed to turn a typically one-way technology into a tool for active learning inside and outside the classroom – not only continues to be popular 33 years after its invention, but also is growing in popularity, particularly in developing countries.

Newer than the Internet, IRI is the use of interactive lessons in which an audio component delivered by an "audio teacher" through a radio, audio cassette, IPod or MP3 player and classroom activities carried out by the learners are carefully integrated. Bosch goes on to say:

> "IRI is distinct from most other forms of distance education because its primary goal has been the improvement of educational quality. Unlike many distant learning efforts designed to address issues of access, IRI began as a classroom tool to counteract low levels of teacher training, poor achievement among learners, and limited resources. While IRI has demonstrated that it can be used to expand access and increase equity in both formal and non-formal educational settings, it retains an emphasis on quality improvement through a development strategy and methodology that require active learning, attention to pedagogy, and formative evaluation to be included in the design."

IRI began in Zambia in 1999/2000, when the MOE and Educational Broadcasting Service asked EDC, with USAID funding, to help develop and deliver IRI programs for grades 1-5 for out-of-school children in Zambia. Many of the most disadvantaged, poor, difficult-to-reach children in Zambia were targeted. The programs lasted merely 30 minutes and were assisted by volunteer mentors from the communities. The sites were rustic, frequently under a tree, or in roofless walled structures, or an open-air space with a crude roof. Several assessments of student learning show that IRI learners achieve as well as and sometimes better than students in GRZ schools. This first phase of IRI lasted until 2004, with enrollment reaching 38,513 children.

USAID/Zambia selected EDC under USAID's dot.EDU mechanism covering the period October, 2004 to September, 2009. QUESTT now provides technical assistance to support teacher training, IRI program development for grades 1-7, and capacity development of the MOE's Directorate of Distance Education (DODE). It also provides support to local communities through partnerships with NGOs and community radio stations, assists OVCs and trains CSTs. The overall goal was improved quality of basic education delivery systems. Included aims were: (1) IRI adoption in GRZ schools; (2) in-service and pre-service teacher training strengthened; (3) math and science learning outcomes improved; and (4) access to good quality basic education offered to more out-of-school children. Under the general goal of mitigating the impact of HIV/AIDS, community care, community radio stations, and advocacy and support networks were also included as components. The five-year USAID grant of $7,879,816 was eventually increased to $16,598,522, due principally to the success of the project and to additional, new requests being made to EDC/QUESTT by the USG and

USAID. PEPFAR and USAID's Fast Track Initiative (FTI) represented sizable portions of this additional funding.

Implementation and Results:

A priority of QUESTT was to complete *Learning at Taonga Market* (LTM) for grades 1-7. Other aims were to enhance the quality of services offered in IRI centers, strengthen the capacity of the DODE, improve the broadcasting signal, help increase community and private sector support, and monitor the quality of learning. For lower basic schools in 2004, 150 IRI programs for grades 1-3 were revised, and grade 4 was revised in 2006. At the middle basic school level, grades 6 and 7 were developed, field-tested and made operational in 2006 and 2007, respectively. Grade 5's 150 IRI programs were created in 2003. The Director of Teacher Education and Specialized Services (TESS) in 2005 gave approval to utilize IRI in GRZ schools which, over the last four years, has led to approximately 3,000 of the 4,000 GRZ basic schools using IRI to one degree or another.

EDC and DODE have kept records on the costs of their IRI programs over the years. Even with broadcast expenses increasing in later years, the most recent data show that the broadcast expense to supply IRI programs to children is US 11 cents annually per child, or currently about K550. If costs for radios, teachers' guides, and program schedules for schools are included the total recurrent costs per child is 32.5 cents. This is in sharp contrast to the current MOE statistic of US $27.00 yearly to support one child in a GRZ basic school.

Most research comparing student performance in GRZ schools or CSs using IRI against control GRZ and community schools without it show that students with IRI outperform the students having no IRI. For example, in grade 2 testing in 2006, IRI students in GRZ schools outperformed their peers in non-IRI schools in English (10.2 vs. 8.1) and mathematics (7.1 vs. 5.6). Grade 4 assessments conducted in 2007 by QUESTT showed increased learning by students having IRI programs, though it was less than in 2003 when EDC's antecedent IRI project had assessments carried out by external evaluators. IRI in Zambia has had the greatest impact on student learning in local language literacy and mathematics, but less so in social studies. QUESTT and EDC training for GRZ teachers and supplying them with teachers' guides and radios were much appreciated, according to documents reviewed and persons contacted.

QUESTT's Work with Communities:

Other activities fortified QUESTT's outreach and boost to communities and their schools. Ten Provincial Outreach Coordinators (POCs) were hired and deployed to the provinces. Working with PEO's offices, their main tasks have been community sensitization, face-to-face training and radio training, mobilizing NGOs and supporting CBOs, monitoring, data collection, and managing grants. The effective work of these POCs, coordinated by an experienced former educator and MOE official (ex-DEBS), account for much of the success of QUESTT's decentralized approach. Conversations with many PEO and DEBS employees reveal they have a keen interest in and monitor the QUESTT/IRI program.

Important also is QUESTT's work with nine community radio stations, three of which were visited. QUESTT provided equipment and training for producers and station managers, expanded the stations' coverage, helped them rebroadcast IRI lessons, and enabled them to present "Education for All" programs, which include dramas, public service announcements and interviews of local interest. Six of these local radio stations (in Eastern, Southern,

Northern, Western and Luapula Provinces) have QUESTT assistance for producing and airing the OVC Life Skills Program titled *Our Family,* which foster life skills development of OVCs and aid communities to support OVCs. The three weekly radio programs are a 15 minute soap-opera-like drama, a 15 minute topic reinforcement IRI program for children, and a third program involving 30 minutes of feedback from the community. At present, there are approximately 900 adult listening groups in Zambia. Evaluation team members met in focus group discussions with representatives of 10 of these listening groups.

Challenges and Limitations:

Various limitations, challenges and problems have affected IRI and QUESTT during the 2004-09 period. The Zambia National Broadcasting Corporation (ZNBC) solicits high fees to air the IRI broadcasts, now totaling about K 320,000,000 annually or approximately 90% of DODE's low budget (0.02% of the total MOE budget). Radio reception is poor in many rural areas, and the ZNBC signal is increasingly weaker in numerous zones. A key Thursday morning nationwide time slot for IRI was eliminated in 2008, as well as the Grade 1 Tuesday morning broadcast. DODE officials attest that staffing levels are quite low; the 10 POCs added were a much appreciated, partial remedy. DODE suffers from a great lack of funds for printing and distributing mentor guides when these are needed, which is often. Moreover, supplementary materials for the IRI pupils and adults are almost totally lacking.

The retention of voluntary mentors is also a big challenge. These community members, many of them talented and dedicated, must sooner or later seek jobs where they make money, rather than receive at times a modest allotment of food from the community or other small in-kind contribution. The high turnover and attrition rate are one of the principal problems for the CSs and IRI, the evaluators learned. The need for more radios and the repair and replacement of radios are big problems. The windup radios, produced and sold by the FreePlay Foundation, include solar panels as an optional power source.

The biggest challenge to IRI and CSs is the lack of policy, organizational, legal and financial recognition and support from the MOE. The bill to provide legal status for CSs is part of a larger and more complex education-restructuring bill that is currently being debated. The team was informed that various high-level MOE officials maintain that because IRI cannot be "time-tabled" (or treated as a separate, distinct subject) it does not belong in the curriculum or deserve to be broadcast. As one long-time educator said:

> "The attitude in the MOE was that IRI could never compete with non-IRI schools, and that community schools could never come up with qualified teachers. But they have. There are many CSTs who are qualified to be regular teachers, but cannot afford the costs. There are easily over 2,000 of these qualified teachers. They have practical experience, commitment and enthusiasm. There is no reason why they should not be smoothly incorporated into the MOE and regular teaching profession."

Overall QUESTT Findings:

Visits and meetings with PEO and DEBS offices, schools of all types (and varying from low-performing to high-performing), PRCs and DRCs, NGOs and parents, guardians and local citizens in Eastern, Southern and Lusaka provinces offered ample data and opinions

concerning IRI and QUESTT. Evaluation team members were impressed by how much head teachers, teachers, volunteer mentors, district and provincial MOE officials and parents knew about IRI and QUESTT and how strongly they support IRI and its various program components. They praise IRI for providing structure for lessons and students, good learning practices such as introductory and follow up activities, practice in careful listening, components that are fun and active, and an important aid and support to teachers. Children throughout Zambia hear and learn a common, correct form of English. Evaluation team members witnessed these benefits when we carefully observed IRI classes at various grade levels in numerous community and GRZ schools.

Time and again the evaluation team witnessed the value of IRI and QUESTT in poor rural and urban neighborhoods where IRI was the principal and sometimes only means of education. That children in these conditions are performing as well or better in school than their peers in more comparatively advantaged areas and schools is remarkable. For example, the team visited an orphanage in the poorest urban neighborhood in Lusaka where IRI was the only educational tool available to the pupils. These orphan children were learning in every IRI class at different grade levels we observed. The volunteer teachers had no texts or manuals, and the pupils had no texts or even supplementary materials of any kind. Yet, last year on the national examination to enter 8th grade, 46 out of 48 pupils from this orphanage/neighborhood taking the examination passed, the highest pass rate team members heard recounted during the evaluation.

Zonal, district and provincial MOE personnel praised the IRI mentors' guides, though many schools lacked guides for most of the grade levels, although guides had been promised by MOE and had not been received. Evaluation team members noted how well the lessons integrated awareness and knowledge across subject areas, such as social studies and mathematics. We further saw how many SHN concepts – such as proper hygiene, importance of healthy drinking water, preventing malaria, and the proper disposal of waste – were effectively woven into the IRI lessons at various grade levels.

The principal challenges and shortcomings of IRI and various QUESTT elements have nearly all been mentioned above, and are largely beyond their control. Inability to receive a radio signal or a reliable radio signal was a common problem. Enough radios and keeping them functioning well were noted. The acute lack of mentors' guides and student materials were frequently stated as problems, threatening the very existence of IRI in many locales. Teachers, head teachers, district and provincial MOE officials and others lamented the fact that the MOE does not give sufficient attention and policy, administrative and financial support to IRI.

Anonymous questionnaires provided valuable information, with more than half of the respondents to the questions about QUESTT being district, zonal and provincial MOE officials (see table of results in Annex D). Respondents gave the highest ratings (4.4 out of 5) to IRI and QUESTT for providing increased access to education for children in Zambia, and the usefulness of the small grants to support IRI programs. Next most valued are the extent to which QUESTT has helped strengthen DODE and the quality and expertise of QUESTT's technical staff, and the usefulness of the community sensitization workshops carried out by the POCs. The district, zonal and provincial MOE personnel and the CSTs all rated these workshops highly. To a person, they praised the professionalism, energy, dedication, and practical assistance demonstrated by these three POCs. Also receiving

strong, high ratings (at 4.0) are respondents' opinions of the quality of QUESTT's IRI programs, and the value of IRI programs for OVCs.

The lowest collective ranking (2.8) was given to the question concerning the level of effectiveness the MOE and QUESTT had in mobilizing communities to support volunteer teachers. Discussions before and after questionnaires were completed revealed that most respondents blame the MOE and GRZ for not helping communities to recruit, train and pay for teachers for their local schools. The usefulness of *Fastele! Fastele!,* the series of 15-minute radio programs implemented by QUESTT for teachers and volunteer teachers received a ranking of 3.0. However, teacher training college personnel gave it a much higher ranking. Written comments on the questionnaires and later discussions showed that many potential listeners could not receive the program due to inadequate radio signals, and others because it was aired during an inconvenient time slot.

EQUIP2

Background:

EQUIP2 works with the MOE to define policies, establish processes and procedures, deploy tools and data systems, and build capacity to improve the MOE's ability to deliver quality education. EQUIP2 began March 11, 2004 and will conclude September 30, 2010. The original grant from USAID for these six and one-half years was estimated at $13,973,991 and was then revised to $26,473,991 in 2007. The program has received $ 20.5 million in funding thus far, including $3.3 million from PEPFAR. EQUIP2 evolved from a previous USAID-financed project titled Ed*Assist and EMIS; AED and USAID have been working with the MOE's EMIS since 2000. AED is the prime grantee for EQUIP2; sub-grantees include AIR, Comprehensive HIV/AIDS Management Programme (CHAMP), Society for Family Health (SFH), and the Research Triangle Institute (RTI). AIR, a sub-grantee to AED on EQUIP2, carries out the Continuous Assessment (CA) component. Approximately $4.8 million of USAID funds have gone to CA in the last four years, according to EQUIP2 figures.

The program focuses on providing high quality technical expertise in a wide range of areas, adapting to the changing priorities of the MOE. Between 2004 and 2006 the project continued work on the existing EMIS and expanded to include policy research, institutional management, continuous assessment, and integrated information management. In addition, an HIV/AIDS workplace program was added, using PEPFAR funding. Moreover, in 2007 the project began work on an institutional response to the Community Schools. Even more responsibilities were added in 2008 with school health and nutrition, budgets, and a human resources information system.

The current work focuses on the following components: (1) Policy and Research; (2) Monitoring and Evaluation; (3) Integrated Information Management; (4) ICT Infrastructure and Network; (5) Continuous Assessment; (6) School Management and Leadership Training: (7) HIV/AIDS Work Place Program; (8) School Health and Nutrition; (9) Institutional Management and Development (financial management); (10) Provincial Component Activities; and (11) Project Administration and Management.

The project is physically located within the Planning Directorate of the Ministry of Education in order to maximize its capacity building role. As such, its work and contributions are likely

to be identified by schools as MOE, rather than EQUIP2 efforts. Much of the work involves internal policy, procedures, guidelines, and infrastructure to support the MOE. However, EQUIP2 also works on the Human Resources Information System (HRIS), Community School Guidelines, IT development and networks, and on HIV/AIDS and SHN issues, extending its impact to people beyond schools and MOE headquarters. The successes of EQUIP2 are successes of MOE, and in fact their work with data collection and training of provincial and district personnel affects nine provinces, 72 districts, nearly 9,000 schools, and some 78,000 teachers and administrative personnel.

EQUIP2 currently has a staff of 22 who work within the MOE structure. Twelve were added in the last eight months to respond to MOE requests for Technical Assistance (TA) to fill identified gaps as it moves forward in several key areas, some of which included M&E, budgeting, and school leadership training. To reach out from headquarters and build capacity at district and provincial levels, four Provincial Education Advisors (PEA), each with driver and vehicle, were assigned to Western, Eastern, Northern, and North Western Provinces. EQUIP2 works in a political environment and cannot move forward independently on its own timeframe but must respect the speed and direction of the MOE. That direction is often subject to external and uncontrolled factors, such as governmental financing, high level position appointments, and passage of bills that affect education. Although EQUIP2 began in a context that was not welcoming to projects, trust has been built over the years as EQUIP2 supported endeavors increased the prestige and credibility of the MOE, and their assistance is now requested in many areas. When processes are understood and implemented at MOE headquarters level, budgeting and using technology for communication for instance, those benefits filter down through the MOE structures at provincial and district levels.

The EQUIP2 personnel are highly qualified for the broad range of tasks they have been requested to provide. They have deepened the institutional capacity of MOE's central office with timely data, strategies for development of more sound administrative practices, and procedures and policy development. EQUIP2 has been able to adapt relatively quickly to MOE priorities, and assist with their day-to-day issues. It is very clear that its personnel are valued by MOE officials for their expertise and competence in responding to the need for development of Ministry policies for HIV/AIDS in the workplace, guidelines for Community Schools, improving the quality of the EMIS data, providing critical and timely information to the Ministry management, and upgrading the Education Statistical Profiles. They have used the updated information and expertise to assist the MOE with budgeting and planning, developing schemes for M&E, expanding the information technology infrastructure throughout the MOE, working to provide ICT to the Ministry components in the provinces, and moving toward evidence based decision-making across the system.

Overall EQUIP2 Findings:

EQUIP2 responsibilities are complex and its tendrils reach into multiple corners of the MOE. Some of the components are related to components in other USAID-funded projects, and although the activities may not overlap, they benefit from coordination of efforts to maximize the dissemination of the work, such as with HIV/AIDS, SHN, and Community School Guidelines. The work of EQUIP2, by its very nature, requires collaboration and working with a broad variety of partners that extend beyond the MOE and other USAID programs.

The EQUIP2 work plans note that the shortage of MOE human resources may be problematic and that EQUIP2 would respond with short-term TA and collaboration with provincial and district personnel to give them more responsibility and freedom to implement the activities. Their stated goals for 2009 indicate they will focus on providing some of the same capacity building to schools, districts, and provinces as they have provided at the Ministry level, but many of the activities with districts and provinces are not recognized as separate from MOE initiatives.

Information management and IT infrastructure:

Because of the improvements in data collection, the MOE can now respond quickly to many political demands due to more timely reporting procedures for the EMIS system. The EMIS system has been evolving for years and consists mainly of the data gathered on the school census forms, with some changing components over the years. It is now collected from nearly all schools and has assisted with understanding the magnitude of the CS issues. The data are input at the provincial level and compiled at the national level for the annual Educational Statistical Bulletin. More important than the bulletins themselves is the timely availability of data to advise MOE decisions. The improved flow of information back and forth provides more timely data than in the past and allows for quick responses from MOE. High level decisions about where to deploy teachers and where to build schools were guided by MOE data, instead of past practices which were arbitrary and subject to personal preferences. The transparency of published data provides rationale for those who make decisions, and oversight by citizens who know what was supposed to take place in their regions. In addition, MOE can document progress toward their goals because of the data, and external organizations are accessing the data for their own use.

The activities of EQUIP2 are not as visible in the field as the work of QUESTT and CHANGES2, so fewer anonymous questionnaires about their activities were distributed on field visits. Only people who indicated they were familiar with some of the components completed the forms, and they were asked to leave items blank if the topic was unfamiliar. The majority of the respondents were MOE personnel at headquarters, province, and district levels. EQUIP2 activities were ranked highest in the areas of information management and information technology infrastructure. Their assistance with EMIS is recognized by many and identified by the respondents as having a high level of quality and usefulness. The next highest was the area of IT equipment and training. The category that ranked the lowest was the extent to which the MOE can sustain the valued EQUIP2 programs of assistance. When asked which areas of assistance were most important, information management and IT infrastructure were again ranked at the top (see Appendix D).

Written comments on the anonymous questionnaires and interviews with personnel at the MOE, provincial, and district levels indicated a concern that capacity and sustainability for EQUIP2 services are not being built – either in the Ministry or in the field. The most prevalent responses expressed concern that the support and capacity building are confined to headquarters, but several at headquarters voiced concerns that the role of EQUIP2 often appeared to be leadership rather than TA. The respondents recognized the need for high level technical support and EQUIP2 expertise, particularly in the area of IT infrastructure, but indicated they want to have capacity built with Ministry employees, not just structures, in order to carry out and sustain the work. Provincial and district personnel also want more involvement, more input, and more training in information and IT management.

The desire for more training and involvement in leadership roles may arise from a variety of factors, but the fact that MOE staff want to obtain more skills and responsibility is not necessarily a negative perspective on the work of EQUIP2 nor is the type of training required within their purview. Several EQUIP2 staff who were interviewed by the evaluation team are highly skilled, many with technical expertise that few possess. Some of those skills are acquired over a long period of time, not through short training courses.

Training is and has taken place in several instances. Recognition of the need to build M&E capacity in the MOE was addressed with TA from EQUIP2 and training for 14 MOE staff at the University of Zambia. This area continues to develop and will expand their training by working with provincial offices to acquire M&E skills.

Policies, procedures, and guidelines:

EQUIP2 has provided guidance and TA in the development of policies, guidelines and procedures in a variety of areas. They assisted with the development of the "Community School Guidelines" which provide enabling policies for communities, and a framework for the development of legislation to extend legal status to CSs. Support was provided to institutionalize MOE management teams that provide forums for planning and to move the national education plan forward. Committees that include cooperating partners and other ministries have been established to help coordinate activities.

On the anonymous questionnaires, the EQUIP2 work with HIV/AIDS workplace policy and implementation is rated as the third most valuable assistance. The guidelines and processes that were developed for HIV/AIDS in the workplace and SHN brought together a variety of organizations to coordinate and expand the work. The HIV/AIDS Workplace program provided Voluntary Counseling and Treatment (VCT) services and HIV awareness for teachers at schools, union events and Teachers' Health Days. MOE reports that 35,105 staff and family members accessed VCT and nearly 41,000 have been sensitized. Working with partners, SHN policies have been updated and will continue to be expanded to improve the health and sanitation environment.

District and school level capacity building:

EQUIP2 is guiding three important and far-reaching efforts that will build capacity at school and district levels.

Human Resources Information System (HRIS): Efforts are currently underway to bring organization to the Human Resources records for teachers and all MOE staff and connect to functional systems that currently exist. Simply meeting with staff in the human resource offices highlighted the need – stacks of thick files were scattered throughout. It will require time, continued technical assistance, and a good deal of patience to develop a streamlined data system and ministry expertise to capture and manage the information from those paper files which require multiple approvals, signatures, and movement from office to office.

This is not a speedy process. Existing practices, procedures, and inter-connections must first be identified, systematized, and implemented before an electronic system is put in place. Otherwise the system will merely reflect the current chaos. Presently, files are easily lost,

misplaced, decisions delayed, pieces missing or altered, with teachers leaving school to come to Lusaka in an attempt to straighten out their files. Personnel get to carry their own files. Successful implementation of the HRIS system will build institutional structures at the MOE and be felt throughout the system, all the way down to the schools.

School Management and Leadership Training: EQUIP2 became involved in school management training when the MOE recognized a need for enhanced records management and data use at the school level. In the process, a design for a new approach to training school leaders took shape. No systematic training was in place in Zambia at the time. Working with several directorates and a variety of political factors, a broader approach to training school managers was designed that involved other entities from prior school management training. There was a desire to assure that this new training program included educational leadership, recognizing that research on effective schools indicates that a strong educational leader is a key contributor to high levels of student achievement in a school. Although some modules are still being designed, one of the five is identified as Instructional Leadership. This approach indicates a major shift from past practices. Even the title of the course now places Leadership first – *School Leadership and Management Course*.

The program has been launched and applications are being solicited for training to begin in the fall of 2009. It is expected that 1,200 school principals will be trained in the coming months and that the program will eventually be extended so that in the future, all school leaders will be required to have training. Officers from DEBS offices will be included in the training. This effort may need additional financial support to get underway, but once established, can provide a tremendous vehicle for increasing student achievement.

Evidence-based Decision Making: One member of the evaluation team was privileged to be involved in the final day of a five day EQUIP2/MOE Evidence-based Decision Making workshop. Four districts from two provinces were chosen to attend, based on identified characteristics of the districts – one struggling to achieve targets, the other performing well. Another week-long session will involve another set of four districts. From six to eight District Officers attended from each district and were given the EMIS data from their districts. They worked as a team to identify indicators, use software to design district profiles, do secondary analyses, and understand how the information can inform policy formation and implementation. They were given follow up assignments to complete upon return to their districts.

Each team presented some findings, possible reasons for concerns, and ideas for addressing the findings. Those presentations were informed, energized, and well done. They exchanged ideas and strategies with each other. When some participants were asked privately how they felt about the workshop and information they had received, they were thoughtful, and then responded with "empowered." They further indicated they felt some ownership of the data and a sense of direction. They dialogued with each other in a manner in which they may not have communicated in district offices while fulfilling their separate duties. Moving responsibility and capacity to district level and closer to schools positions them to also be the primary channels for in-service training and new methodologies, like continuous assessment.

Continuous Assessment:

The continuous assessment (CA) component of the EQUIP2 program, sub-contracted to AIR, has two objectives: (1) provide support for classroom instruction; and (2) make better high stakes testing decisions, particularly at the national level. The first objective has tremendous potential for improving the quality of instruction in Zambian schools. The stated purpose for CA is commendable: "to improve the teacher's capacity to identify what learners know and can do, to improve instructional practices, provide feedback to stakeholders, and reduce stress associated with examinations." CA is further defined as an on-going, diagnostic, classroom-based process that uses a variety of assessment tools to measure learner performance. CA is a formative evaluation tool utilized during the teaching and learning process with the aim of influencing and informing the overall instructional process. The second potential is fraught with pitfalls – chaos, high costs, abuse, and loss of potential benefits from the first objective.

The Examinations Council of Zambia (ECZ) was given the responsibility for the EQUIP2 Continuous Assessment initiative, and piloted it on behalf of the MOE. The Council is not a policy or advocacy council, but operates as a quasi-independent agency that implements the decisions of an advisory steering committee composed of key people from several agencies. For the Continuous Assessment project, direction was also provided by an implementation committee that included technical support from AIR, piloted under EQUIP2 on behalf of the Ministry. The ECZ oversees the formal assessments in Zambia public education - the national exams (at the end of grades 7, 9 and 12), as well as for teacher training and vocational education. It also directs the National Assessment which was administered to a random sample of grade 5 students in 1999, 2001, 2003, and 2006 to measure literacy and numeracy skills.

The IOB Impact Evaluation of 2008 and the Review of the Ministry of Education Sector Plan in 2007 both address the need for improved assessment practices, and mention CA. "Educating Our Future", the document that sets out a national policy for Zambian education, addressed the issue of continuous assessment in 1996:

> "The Ministry will introduce procedures that will enable teachers to standardize their assessment methods, thereby ensuring both transparency and the availability of properly validated information on pupil achievement…school-based assessment would perform the evaluative and diagnostic functions currently associated with the Grade 7 composite examination. Each school would have a comprehensive system for the evaluation of individual pupils....and grade 7 examinations would play a progressively reduced role in the education system and eventually would be abolished. (p. 12)"

In meetings with the members of the ECZ, it was clear that they conscientiously addressed this responsibility, approaching the work cautiously and professionally. It was also clear that they recognize the value of CA as an instructional strategy that will provide valid assessments to improve student learning, but without the specter of high stakes selection. They even developed a customized teachers' manual and trained 180 CSTs in CA.

The pilot began with grade 5 in 2006, grade 6 was added in 2007, and grade 7 in 2008. The teachers were trained to give assessments throughout the year and to keep records. The

current structure directs teachers to assess their students throughout the year in six subject areas using a variety of assessment tasks – 33 at the end of the first and second terms, and 34 in the third month. Common tests will be used throughout a school and administered to all classes of the same grade at the same time. Committees will be formed at either the school or zonal level, coordinated by the district to prepare the end of term tests. Validity and reliability will be maintained by formulated questions from the prescribed syllabus, having a uniform marking scheme, and moderating the marks of all pupils. Standard record cards will be used, and retained at the school level, but end of year averages for grades 5, 6, and 7 will be sent to ECZ, DEBS and PEO. The score of the 7th grade national assessment will count as 50 percent and the average of the reported scores for grades 5, 6, and 7 will count as 50 percent for Grade 7 final certification and selection.

A study by the ECZ, "Continuous Assessment Phase 1 Assessment Report 2009," indicated no statistically significant differences between CA pilot schools and control schools on scores in any of the five subject areas in the grade 7 national examination. The report states:

> "It is difficult to explain why no differences were observed between the two groups on the national examinations. More information needs to be collected about the test quality indicators (e.g., discrimination, reliability, etc.) of the examinations. However, it is widely accepted that the malpractices (e.g., student cheating on the test, teachers provide answers to the students, etc.) on the final examination is one of the serious threats to fair testing in Zambia. This could have led to simular [sic] scores between pilot and control schools."

Clearly that statement should raise red flags about the potential for more serious abuses with a plan that requires scores to be collected and records for all students in grades 5, 6, and 7 maintained by schools, averaged and sent up to three different governmental levels, based on tests administered at thousands of schools, designed at district/zonal levels over a period of years, moderated at some level with some unknown process, and then combined with the grade 7 national exam. It should also anticipate that such a process will require a major data structure, another bureaucratic layer and staffing to manage and maintain the system, and continuous training of all staff who will be designing high stakes examinations in every school and district.

An earlier study in 2007 found a strong correlation between the results of the continuous assessment and the final assessment scores, which is not an unexpected result. Students who did well on the tests throughout the year did well on the final exam. That illustrates the significance of CA as defined in the first objective of this initiative: its value as an instructional tool. When the teacher is regularly assessing what she is teaching and what students are expected to learn, the students will know how they are doing and they are much more likely to be able to do well on the final exam.

In visits with teachers involved in the CA pilot project, there was clear evidence that their work with CA has transformed their teaching. They see it as something they do during the teaching process to determine if their students are learning. They described it as diagnostic – both of the pupil's performance and their own teaching. They have learned to use a variety of methods to measure learner performance and unique learning styles. These teachers say they work harder because they have to keep on track and ahead of their students, and

students attendance is much better because they know they will held accountable for learning.

Even more interesting was the discovery in visits to the Eastern Province that two basic schools, not part of the pilot project, understood CA as a valuable instructional tool practiced by all teachers in those schools. They were able to define it, give examples, and elaborate on it. When asked how they adopted the practice, they indicated it was part of the Primary Reading Program and it had spread throughout their schools because it worked. Through teacher meetings, discussions, and head teacher commitments, many schools in that area also practice CA as part of what teachers do.

All the interviewed teachers who use continuous assessment as a regular part of their teaching can describe the changes in themselves, their students, and in the learning that is taking place. Integrating an understanding of CA as an instructional strategy into both pre-service and post-service training for teachers and head teachers could transform learning. But that momentum and potential are likely to be abandoned or buried in controversy and costs if it continues to be seen as a high stakes test replacement.

The respondents to the questionnaires gave their highest ratings to the quality of EQUIP2's work with EMIS and IT equipment and training, and also ranked those two categories as the most important of eight strategic areas. The work with continuous assessment was in the middle in both the quality and importance ratings. The most consistent written comment was that work in all the strategic areas should be retained. Some concerns were evident, however. The lowest rating (3.0 out of 5.0) was given to the extent to which MOE could sustain the valued EQUIP2 programs. The open-ended questions indicated common concerns about the EQUIP2 support being concentrated at the MOE headquarters level, and about the importance of the EQUIP2 TA becoming more focused on capacity building of MOE staff at all levels, rather than on doing the work themselves. See Annex D for a table of the results of the questionnaire.

6. Sector Analysis

In addition to assessing the overall work of each of the three USAID-funded education programs, the team also assessed work in six sectors (areas of investment) that, in many instances, involved all three programs (see Figure 1 in Evaluation Methodology). This approach allowed the Evaluation Team to assess the synergies among USAID-funded interventions and understand the overall impact of USAID/Zambia Education Program on Zambia's education sector. To do this, the Evaluation Team answered key questions about interventions in the following targeted sub-sectors.

Institutional Development

How have the USAID supported programs promoted institutional development in the MOE?

The MOE has responsibilities for some degree of oversight or relationship with nearly 9,000 schools (including CSs), colleges of education, universities, and other boards or councils that have duties in the chain of education delivery. Its functions are delivered and distributed in layers of bureaucratic structures at provincial, district, and zone levels.

Some components of institutional management and change must be top down, but some can bubble up through the system. When chaos exists at the MOE headquarters level in administrative and management functions, like the process for personnel records, it cascades down through the system. Improvement in the process will cascade in the same fashion. Other improvements in institutional functions – like training for district officers to provide support and assistance (rather than checklists and monitoring) for schools, teachers, and instruction, can successfully be strategized at headquarters but built from the bottom up. EQUIP2 has contributed to institutional development and the image of MOE by assisting from both directions.

When EQUIP2 began working to improve the EMIS school census reporting, only about 70% of schools were included and the reports took months to prepare. By 2008, the reporting had captured about 99% of the schools, including CSs which had previously been of unknown quantity. Several other improvements to the EMIS school census reporting provided MOE with a timely and credible administrative tool for budgeting, planning, analyzing, and assessing the scope of their work. The data were particularly useful in the development of initiatives related to community schools, recognition of school construction needs, and allocation of teachers to schools. Other partners have contributed to this work and some of the cost of EMIS is now a line item in MOE's budget. Approximately one-third of MOE's budget for all operating levels – headquarters, provinces, districts, schools, and colleges comes from the pooled funds of the European Union. The data credibility has led to internal and external recognition of a stronger MOE than existed a few years ago. The extension of the MOE reporting network out to the provinces has improved communications and reporting timelines. The development of consistent and written policies and procedures, such as Community School Guidelines and HIV/AIDS Workplace Policies, has improved institutional structure. Much of the work of EQUIP2 has been within the Planning Directorate, which is now seen as perhaps the strongest directorate in the ministry, but several of their efforts have reached across directorates.

A major initiative to strengthen the institutional capacity of the MOE is underway that will cascade across and down the system. EQUIP2 is assisting the Directorate of Human Resources and Administration with the development of efficient management and administrative systems for human resources. There is need to develop a comprehensive system for MOE personnel at all levels – teachers employed in the schools and civil servants throughout the system. Many functions need to be included or interface with that system: teacher recruitment and placement, accreditation records for providers of courses and certificates, teachers currently employed, teacher upgrades, housing requirements, students completing teaching programs, tracking vacancies, and available teacher candidates, as well as several other components. Current systems are mostly manual and rely on paper records stored and stacked through various offices at all levels. Institutional chaos results in delays, lost files, illegal requests, and incredible teacher frustration and disappointment. The planned system will be designed to clarify practices, streamline the processes, and work with existing functional systems in other ministries that involve financial reporting and payroll management.

The Education Bill to give legal status to CSs has been delayed in Parliament and contains a major administrative restructure of the governance of schools. That bill includes a proposal to move responsibilities for early childhood and basic schools from MOE and place them

under local government, and move high schools under provincial government. Those issues are now being debated, and if that shift takes place, many other educational and institutional issues will surely arise.

The teacher and community/school partnership training that was delivered by QUESTT and CHANGES2 has built community "institutional" structures. Much of that training and teacher training was provided in collaboration with district personnel, strengthening institutional capacity at the district level. EQUIP2 has begun working with teams from district offices to use data from the annual school census to identify and address school needs. The colleges have been aided by the donation of many CHANGES2 publications that update their woefully inadequate library offerings. EQUIP2 and other donors are providing some assistance for colleges to set up computers and build internal networks. USAID-funded activities working through MOE structures – provinces, districts, and colleges – build institutional capacity and credibility for those entities to work with teachers and schools to improve educational quality, although much more work is necessary in this area. Unfortunately, many of the current MOE assigned tasks for the provinces and districts are to support the MOE's headquarter administrative needs, rather than the needs of the schools and teachers.

Has Technical Assistance (TA) enhanced the MOE institutional structures particularly in policy and research areas?

USAID-funded activities appear to have built some capacity for and attention to the need for consistent policies and procedures within the MOE. The TA provided with the development of Community School Guidelines and HIV/AIDS Workplace Policies created procedures within MOE headquarters that continue to filter down to the provincial, district, and school levels, and even to other ministries. Recognition of the value of consistent practices led to the request for TA to examine the human resource record-keeping procedures and processes. MOE institutional structures will be greatly enhanced if there is successful implementation of the work currently underway to develop an HRIS system that responds to the identified needs.

The research area appears to be under-developed and presents challenges. If the intent is to institute academic research for the sake of research, the value will be questionable. The current focus on evidence-based decision making using available data has the potential to create a research environment that grows from the bottom up, and informs decision makers. As current data are examined by those who gather and use the data, issues will emerge that require greater attention, additional information, and researched answers rather than speculation.

How have USAID programs enhanced the roles/functions of key directorates?

Both DODE and the Planning Directorate have been elevated in status and position because of USAID-funded programs. DODE has benefited by the expansion of its role throughout the provinces because of popularity of IRI and *Learning at Taonga Market,* as well as *Our Family* and *Fastele! Fastele!* The average questionnaire response rating the degree to which QUESTT helped strengthen DODE was 4.2 (with 5.0 the highest), an extremely positive response. But although DODE is seen as strengthened externally, its role within the MOE appears isolated and unsupported.

The Planning Directorate has become perhaps the most influential directorate in the MOE. Information is power, and with the assistance of EQUIP2 positioned within its midst, they have timely information and policies and guidelines to support their efforts. Budgeting requests are based on hard data. That Directorate leads the others in development and dissemination of IT equipment and systems, M&E, and policy development. The confidence, expertise, and success of activities in the Planning Directorate were recognized and expanded to create regular forums for discussion among the directorates, as well as between cooperating partners. The work that is underway with the HRIS will greatly enhance the role and functions of the Directorate of Human Resources and Administration. If the School Leadership and Management Course is successfully implemented, the role of TESS may also be enhanced.

To what extent are the headquarters, provincial, district and zonal MOE structures and staffing able to sustain the implementation of USAID supported programs in community and GRZ schools?

That question was asked of personnel in district, provincial and MOE offices concerning the work of EQUIP2: *To what extent will the MOE at all levels be able to sustain and continue the more valued programs, if any, in which EQUIP2 has provided assistance.* It received an average rating of 3.0 on a scale of 1 to 5, the lowest response of the 11 listed activities. The most valued services appeared to be the work with EMIS and IT equipment and training (4.1 and 3.8 respectively). In open ended responses the only explanation for the low rating for sustainability seemed to be the need and desire for more transmission of skills and more training for MOE, provincial and district personnel. Much of the work of the EQUIP2 personnel requires high level skills which are not easily transmitted in short training courses.

The work on teacher training and support, curriculum, and materials by CHANGES2 and QUEST have been more concentrated with the districts and some with the provinces and their contributions are not as evident to the MOE headquarters. The staffing at the district levels may be able to sustain the work, but even now their budgets do not provide resources to do the administrative work, to say nothing of adding the rich dimension of sustained teacher training and follow up which requires transport costs, materials development and printing, and workshop expenses.

ICT and Information Management

Have radio programs been effective in mobilizing schools and communities to provide enhanced support for OVC?

The USAID funded radio programs have effectively reached resource poor communities where the most vulnerable reside: orphans, girls, poor, people who are ill, elderly. *Our Family*, a series of professionally designed programs radio programs, is broadcast three times weekly to approximately 900 listening groups in numerous villages. The groups listen to a drama in soap opera form, an informational broadcast reinforces the drama topic for community and children, and the third broadcast provides feedback from the discussion groups. Printed guides provide tips for expending the information, and sometimes facilitators assist discussions or dramas are presented by local groups. Listeners provided personal

testimony regarding the impact of the broadcasts and indicated the programs provide reliable information and advice to counteract "bad" information and superstition. The programs are specifically targeted to aid the most vulnerable Zambians: the OVCs and their caregivers.

The program modules include: Fostering Self-esteem, Substance Abuse, Early Marriages, Starting a Business, among many others. A local clinic director who serves 72 villages was a strong advocate for the programs, indicating that she did not have the ability to provide that information to all those villages, and communities were now able to assist with care and prevention. Another listener said she now realizes she has worth and decides what to do with her own body. Others provided testimony about how the programs have changed people and villages: making sure property is not taken from orphans, encouraging chiefs to understand why young girls should not be forced into early marriages, understanding the value of good nutrition, caring for the elderly, raising gardens to help those who need food, not going to witch doctors. In Southern Province, one lady listener said, "We learned how to write wills and retain our property, and also learned to take a copy to the court." Another man said, "These radio programs helped him and his family know where to go when they get sick. There was no other place to get this information."

The IRI instruction is a teaching methodology that provides educational access for poor and remote populations, promotes gender equity, and serves mainly vulnerable children. QUESTT reports indicated that IRI programs were being broadcast to 1,880 IRI centers and community schools with 92,569 IRI learners, but the total enrollment in those schools is 361,709. The proportion of orphans in grades 1 through 7 in those schools is nearly 30 percent compared to 18 percent in GRZ basic schools, and female students in CSs account for 49.6 percent of the enrollment. Evaluation team members heard reports from GRZ schools, CSs and orphanages that IRI children are more disciplined and are better listeners than pupils who have been in GRZ schools without IRI.

The CS access to the LTM programs is not universal. In many schools, the only teacher materials available are IRI guides for grades 1 and 2, so many grade levels are not served. Some have no materials at all. For those who can only receive community radio station transmissions, only grades 1 or grades 1 and 2 are broadcast. ZNBC no longer broadcasts *LTM* on Thursday or Grade 1 on Tuesday, and some signals are faint. Most of the IRI served schools have no other educational materials and untrained mentors. IRI provides professional educational guidance for the untrained, a common spoken English for the second language learners, and a recognition and support of the community efforts to educate their children. Over the years several assessments of student learning have shown that IRI learners achieve as well as and sometimes better than students in GRZ schools, which is a remarkable achievement considering IRI is often the only educational vehicle and the volunteer mentors are not qualified teachers.

Fastele! Fastele! radio programs are intended to provide continuous professional development of teachers and volunteer teachers on a number of teaching topics, including the teaching of literacy. It was difficult to determine how far this program reaches and its usefulness was rated as the second lowest overall of the listed components on the QUESTT questionnaires. Written comments on the questionnaires and later discussions indicated difficulties with the time slot and the reception

What has been the impact of the education management information system on education development?

The educational impact of the information management system on education development is indirect and more difficult to gauge, but the impact on the recognition of CSs is evident. Before 2005, few CSs were included in the annual school census. Now, because of focused data collection efforts, the response rate for the annual school census grew from 70% to 99% in 2008, with most of the previously non-reporting entities having been community schools. The MOE received more timely and complete information about all schools, but particularly about the magnitude of community schools – 34% of schools and 16% of enrollment in 2007, and 37% of schools and 17 percent of enrollment in 2008 (Educational Statistical Bulletin, 2007 and 2008). Because the MOE had reliable information, they could step into the void created by the demise of the Zambia Community Schools Secretariat, and with the assistance of EQUIP2, "Guidelines for Community Schools" was developed. Although CSs are still dependent on the resources of the local communities and external supporting organizations, there is now a bill before Parliament to legalize their status but it is part of a larger, more comprehension education bill that is being debated.

The existence of timely and trusted education data also provided the MOE with information to support requests for funding for targeted purposes, and strengthened its overall credibility. They now have a marker to indicate progress toward Education for All (EFA). Restricting the vision of education management information systems to the EMIS of the annual school census reports is limiting. That is a snapshot in time and a small component within a modern education information system. Work is underway building linkages between the school census reports and other data, such as pupil exam results, the teacher information via the envisioned MOE HRIS, and appropriate linkages to the payroll management system and the financial system that will provide for longitudinal, integrated information.

There are cost effective ways to assist schools to know more about their data, provide more accurate reporting, and help build capacity at the local level. Schools would know much more about their own schools, without a school data sheet or whatever school profiles might be developed, if the annual school census form would allow them to see their own data. Unfortunately, the forms schools complete, and a copy retained, are actually data input forms which provide no totals – not by grade, age, sex, boarders, refugees, orphans, boarding, bursary, nationality, dropouts – the list goes on. Even after a school has completed the form, there is no local information – just lots of boxes with numbers in them. They are dependent upon another layer of compiling records or higher levels to send something back before a picture emerges. The schools know the information on the forms is important, but that the forms are for headquarters' requirements and purposes.

Teacher Training

What has been the impact of teacher education programs on pedagogy in GRZ and community schools?

The most dramatic, measurable effect has been the use of IRI and *Learning at Taonga Market* to provide a means and a methodology for reaching thousands of students in CSs. Many mentors are able to provide quality classroom instruction to children as a result of the training and of the guided nature of the programs. CHANGES2 worked through MOE

structures at the provincial, district, and zonal levels to train thousands more pre-service, in-service, and trainers of teachers in both GRZ and CSs. Workshops for head teachers were conducted by both CHANGES2 and EQUIP2. CA training has been provided to teachers in schools in the pilot. Positive comments were heard from all who received any of the USAID-funded training. The impact is deep and wide. Teachers are eager for any opportunity for additional training. Institutional capacity to provide quality training was provided to provincial, district and zonal personnel.

The ZATEC distance teacher education program was instituted to provide mentors with a program to become qualified teachers. Although many consider it to have been unsuccessful, the lessons learned could assist with future distance education programs. The mentors in CSs were new to this type of process, as were the teachers. Little on-site support or visits took place due to lack of time and transportation. Evidently a high proportion of students failed the exam the first time, but several took the failed portions later and passed. In one instance 16 of 56 passed the exam the first time, and at a later date 16 passed. In that setting 57% passed the exam.

However, research and experience show that real changes in pedagogy do not occur without sustained support to implement and extend the training. Otherwise the workshops and courses become events and fade away. Capacity and funding are needed for the institutional structures to support the positive impact of the USAID-funded activities – and to extend the training to provinces that have been on the periphery of the training. Although teachers colleges have been reluctant to integrate some of the teacher training into their programs, they value and need current and useful references and materials. To impact the future, real changes in educational practices must happen at the pre-service level.

What strategies work best in improving teaching skills of community school teachers?

Community school teachers welcome any assistance that is provided to them. However, most CSTs are volunteers and unable to afford to leave their communities and families to upgrade their skills to become qualified teachers. Observing the mentors presenting LTM demonstrated the effectiveness of the training to use IRI, the value of the LTM teacher guides, and the ability of the structured lessons to provide the CSTs with additional teaching techniques. They benefit from delivery of training close to their communities with regular support and follow up. Although other training strategies may have improved the CST teaching skills, the evaluation did not observe activities that would show those skills.

Particularly praised was the 20-day teacher-training course for CSTs developed by CHANGES2 and Zambian colleagues. The sequencing of the course and the materials account for much of its success. The trainees attended 10 intensive days and returned to their communities to put into practice what they had learned. They returned later for 10 day follow-up to discuss and expand upon their experiences. The Handbook for Training of Community School Teachers was the manual provided for these teachers.

CSTs would be well served by efforts to upgrade their status to become diploma level teachers with distance learning courses. The CSTs are mostly place-committed and likely to remain in their villages to teach if they become qualified teachers, unlike those who might be assigned to their villages but have no commitment or desire to serve those communities.

How have teaching tools (IRI and continuous assessment) improved teaching practice and learning in community and government schools?

Both IRI and continuous assessment illustrate best practices of instructional methodologies. Given that most CSs are served by volunteer mentors, the need for guided teaching practices will be a primary consideration until such time as qualified and trained teachers are available to serve those schools. The IRI lessons, *Learning at Taonga Market*, provide that guidance and an alternative delivery method that assists distant and materials-poor schools. The lessons are designed to incorporate the curriculum learning objectives, age appropriate activities, a variety of teaching methodologies for different learning styles, clear purposes for the lesson, and structure and assistance for teachers. The pupils build strong listening skills and for those who speak a Zambian language, a daily common and clear presentation in English. At the same time pupils are learning, teachers can also be learning how to best engage students. Many of the volunteers are better prepared to become qualified teachers because of the training and practice they have with *LTM.* The results of a variety of studies comparing IRI learners with non-IRI learners confirm that IRI learners achieve nearly as well, as well, and better. But the level of achievement isn't good enough. The bar needs to be raised for all Zambian children.

Continuous assessment could help raise that bar if introduced across the system as a generally practiced instructional strategy rather than a high stakes assessment tool. The ECZ has already developed a customized teachers' manual for CSTs. Teachers who are involved in the pilot project described how CA had transformed their teaching. With no prompting they could define CA, identify the value, describe the difference it made with students, and highlight changes in their teaching. Because there is regular assessment of learning, students are more attentive and involved, and teachers are more prepared.

At a CS utilizing CA visited in Southern Province, where 106 of the 184 pupils are orphans, one of the teachers remarked, "Continuous assessment has created a healthy competition among students. Children now ask when the next assessment will be. It was once a month; now it is more often." The teacher in charge, a veteran educator, then said, "Parents and guardians come periodically for meetings on their children's performance. Also, the school has meetings with individual guardians." The teachers in this school meet with the teachers of approximately six nearby schools two or three times at year to discuss teaching and learning, professional development and related topics, including continuous assessment.

By sheer serendipity, two basic schools not involved in the CA were visited and it was discovered they were using CA across all grades. Without hesitation they also described the very same benefits for teaching and learning that were heard from teachers in the pilot project – but without the implications of direct high stakes results. The relationship to high stakes testing was that by the end of grade 7, pupils were well prepared to take the grade 7 exams. CA has the potential to improve both teaching and learning if it can be delivered across the system, through both pre-service and in-service programs, without the incredibly complex and expensive high stakes testing design that is emerging. Concerns have existed for years about the unfairness of the current grade 7 exam. That will pale by comparison to the complexity and costs of implementing CA across the system for high stakes purposes.

Teaching and Learning Materials

How have education materials impacted the quality of education:
   Toolkits, Basic Skills Training Manual, Grade 1-7 Syllabus

The materials developed by CHANGES2 are very well designed and praised by those who have been trained in the use of the materials. In several schools visited, the teachers' toolkits were used and much appreciated, particularly since the teachers had no such basic supplies from the MOE. However, the team saw very few materials in any of the CSs. Because many schools are materials poor, teachers appreciate any materials that provide some support for them and for their students, but scarcity often leads to keeping materials in secret locations so no one will take them. Most CSs had no secure locations to keep the materials – sometimes no roof. The toolkits, Basic Skills Training Manuals from the CHANGES2 20-day basic teaching skills course, and teaching materials were observed in only a few locations, and then mostly in basic schools. Many teachers indicated they had no syllabus and no other available materials.

   iPods, mentor guides, radios, wall charts;

The mentor guides and wall charts developed for LTM are necessary to appropriately teach the lessons, but many schools have guides for only a few grades and some have no guides. The demand outstripped the supply and no additional materials were printed or delivered. Although the wall charts were noticed in some schools, they were not available in most classrooms. The radios or iPods are absolute necessities for delivery of the IRI programs, but when the radios break down they don't seem to be sent for repairs. The iPods allow teachers to stop the lessons when the pace is too fast or when they want to emphasize a portion of the lesson so add flexibility to the lesson delivery. However, iPods are expensive, can malfunction and need maintenance. MP3 players and other newer technology are less expensive and hold more promise for common usage. For optimum delivery of LTM, all these items should be available in a school as a complete package.

   Modules, activity books, sample forms and tests?

The continuous assessment materials provide a teacher's guide and tasks for six subjects in three languages. Teachers in the pilot schools indicated that the model assessments do not match the learning outcomes in the guides. A review of the materials seems to reinforce that. Although the learning outcomes do seem to match the Zambia Basic Education Syllabi, in most instances the specific learning outcomes in the guides repeat exactly the same words as the performance indicators and exactly the same words as the suggested assessment tasks.

School Health and Nutrition

What has been the impact of the school health and nutrition programs on education delivery systems and learning?

Anecdotal information and common sense both indicate that healthier children are more likely to attend school and more likely to be able to learn. Materials and teacher training for the health and nutrition programs are well designed, many teachers have been trained to use them, and they are broadly disseminated. Teachers and their families have received information and assistance and are better able to assist students. But the link to learning is elusive. The connection might be made if attendance and exam information were available prior to implementation of the programs and those data linked to program data indicating which schools received de-worming or Vitamin A supplements or other focused SHN activities. Many schools indicated that school feeding programs markedly improved school attendance.

What has been the benefit of the HIVAIDS prevention activities to education quality/system improvement?

Again the link is elusive, but the prevention activities contribute to removing some of the stigma and providing a more accepting atmosphere for those who are affected directly or indirectly by HIV/AIDS.

Grants and Scholarships

What benefits have accrued to schools and communities as a result of implementing the sub-grants? How has this support improved the governance of schools?

The USAID-supported sub-grants to schools and communities for infrastructure improvement and income generating activities have had dramatic impact on those communities and may be among the most cost effective USAID-supported components of the education programs. The value of the grants was highly rated by respondents to the questionnaires – third highest at 4.2 (of 5.0) for CHANGES2 and highest at 4.4 for QUESTT.

The benefits appear to be four-fold. First, training was done with communities to develop skills to apply for, plan and utilize the grants. Nearly all grants were administered competently, with community members witnessing to the value and application of those grant management skills both personally and for the community. Second, combining a small amount of grant funding (QUESTT up to $2,000 and CHANGES up to $5,000) with local initiative and supplies, 238 QUESTT grants and 398 CHANGES2 grants resulted in the completion of partially constructed buildings by adding roofs, windows, floors, doors; or furniture, blackboards, tables; or sewing machines and tools to provide uniforms or income for schools and volunteers; or latrines, kitchens, teachers' residences, or refurbishing.

Table 4. Small Grants Under QUESTT and CHANGES2

Description	Grants
Small infrastructure grants related to education (up to $2,000) - QUESTT	238
Small infrastructure grants related to education (up to $5,000) - CHANGES2	398
Mid-level grants to COEs and resource centers (up to $10,000)	12
Special grants to NGOs in four provinces ($65,000 each province)	4
HIV/OVC support grants (up to $6,000 per school)	120
Psycho-Social Support grants (support from $500-$700)	130
Total Grants	**902**

The total number of small grants is considerably higher than 902 since there were dozens of sub-grants from the $260,000 total given to the lead NGOs in four provinces. QUESTT administered 238 of these small grants, while CHANGES2, which received much more funds for small grants, administered the remainder. The total investment in schools, communities and OVCs through these grants is $ 2,805,120.80. The average size of the QUESTT-administered grants is $ 1,355.14.

In community after community we saw the results of this partnership that brought ownership of their school to a community, a better place for education, and a cost savings for the MOE. The value of the school-community partnership was illustrated by a visit to one sullen community school that was constructed by a donor agency without local involvement and commitment to the process. The staff complained about the lack of community support, other schools recruiting their students away, no replacement of damaged desks, no feeding program, and that nobody helped them out. Of all the CSs visited by the team, that was the only one indicating a complete lack of community ownership and commitment.

A third benefit accrued to the children and the educational process itself. Education now occupies a more permanent position in the community and children had a safer and more attractive place to be, prompting better attendance. Fourth was the establishment of working relationships between community schools and district officials.

Have scholarships increased equity?

The scholarship program managed by CHANGES2 is a prime example of increased equity. For only K600,000 (US$120) per school year, 20,654 OVCs have attended high school because of these scholarships. It is unlikely that any of them would have found other means to be able to continue their education. Per term the schools receive K150,000 for tuition costs and the pupils receive a minimal amount of K50,000 (US$10) for personal expenses. Other support is also provided – the comfort kits for girls, HIV/AIDS peer educator training, and psychosocial support. Of the 8,000 scholarships supported in 2009, 70 percent are girls.

Interviews with several scholarship recipients gave voice and faces to the program. The level of appreciation was tremendous and the degree of need evident. But they expressed concerns that were shared by their teachers – that they are not prepared to be independent when they complete high school, and they aren't aware of opportunities to continue their education beyond that point. But they dream of possibilities, something that would have been impossible without a high school education. One of the many girl scholarship pupils to speak to the team said, "Once you are orphaned, there are many challenges. I want very

much to go to the university after this year, but it will be very difficult. I want to be a social worker with an NGO working in rural areas."

7. Sustainability

A new Minister of Education was appointed just as the evaluation team was leaving Zambia. When the administrative leadership of the MOE changes often, as it has in Zambia in recent years, it is difficult to predict what activities and programs will be sustained and what will not. Some of the more deeply embedded activities are more likely to be sustained even if the political will is not present.

By its nature, in-service training of teachers, or any other profession, is continuous and will always be necessary, like updating doctors, engineers, or scientists. But in-service is often an event – not sustained, not revisited, not followed up, and often not remembered or utilized. It does not substitute for the sustainability of structured in-service systems or for pre-service training where teachers are recruited and trained for the future. Lessons learned from the ZATEC training for CSTs could contribute to the development of a more sustainable method of training teachers who are committed to their villages and regions and will remain there.

Nutrition and health education are critical to the citizens of nations faced with the poverty, living conditions, corruption, and disease that impact their regions. Those who are impacted by the information obtained through these activities will have received lifetime benefits. But the basics of education – reading and writing and numeracy – are the sustainable educational benefits that are critical to rising above the poverty so that conditions can be altered by the citizens of their own countries. The teachers need to have the training necessary to teach the core educational components. They also need incentives to be attracted to being teachers who impact the future of their countries.

Many excellent materials have been developed by these three projects and their continued use will be sustainable for a long period of time, particularly if they are reproduced in quantities that allow them to be distributed more broadly than currently possible. Those valued products are identified in the Recommendations section.

Sustainability of USAID-funded efforts to support community schools depends on the GRZ assuming responsibility for CSs. Until the GRZ does this, continued support for the volunteer efforts is necessary to sustain the momentum of communities who are growing weary. The USAID-funded activities – small infrastructure or income-generating grants, teacher training, IRI and materials – provide hope that one day they will have government support. Assistance with the development of governmental implementation structures for to support community schools will promote sustainability.

In combination, five of the current USAID-funded activities have the potential to contribute to a sustainable educational structure that will improve teacher recruitment and quality, and ultimately, quality learning:

1. MOE human resources information system (HRIS);
2. Education Leadership and Management Training course for heads of schools;
3. Workshops supporting districts in the use of data for decision making;

4. Support for COEs with technology development; and
5. Integration of CA into the education system via items 2, 3, and 4.

1. HRIS: The development of a functioning human resources record-keeping system within the MOE will positively affect the employment status of all Ministry personnel, from headquarters all the way down to the schools. Supposedly more teachers graduate from colleges than enter the teaching profession. The current record keeping system is so chaotic that everything is affected: deployment, housing allowances, finances, retirement benefits, salary increases, new teacher support, even who is still employed or alive. This might deter new graduates from electing to participate in the education sector.

The sustained benefits to a structured system would include transparency (less opportunity for fraud when records are available and finances can be traced to the source), credibility (accuracy, projections, documentation of needs), and more attractive working conditions (much of the chaos eliminated). Such systems always need to be updated, but even an out-of-date system would be better than none at all.

2. Education Leadership and Management Course: The course, as envisioned, has the potential to bring a major change in school quality. Repeatedly, research on effective schools demonstrates that school administrators, trained for management and educational leadership, are a key to improved school quality and student achievement. The newly designed course introduces an educational component that has not been present in past government efforts. Even the title was changed in just the past few weeks – Education Leadership was placed before Management. It is an uphill climb, but there exists a desire to actually train educational leaders, not just mechanical managers, and the former Minister indicated that future school principals and responsible district personnel will be required to gain training.

3. Evidence-based Decision Making District Workshops: If the limited training that was done in June 2009 can be expanded to reach all districts and include educational support, it could empower district personnel to understand and assist schools, rather than "monitor" and use checklists to serve headquarters requirements. This could become a critical sustainability piece by having built district and zonal support for the isolated schools, ever changing teachers, and provide a conduit for identified needs from both directions.

4. Support for colleges of education: Colleges of education desperately need updated technology as well as current publications and instructional materials. Teacher in-service training is not a substitute for the pre-service training where teachers are trained for the future. It should serve as an update for new information or ideas. If inroads can be made in pre-service, this will be sustainable. But if the new teachers are trained in methodologies favored by the 1970s and 80s, as appears in the outline for the proposed new three-year program, there will be a perpetual need for USAID-funded in-service – for the very basics of education, not just health and nutrition.

Certainly post-secondary education is a difficult entity to influence, but the lure of technology can be an incentive along with enriching the library offerings. Because the college teachers' access to current materials – printed or electronic – is archaic, the teachers are severely restricted. Simply providing them with access to information could have a sustained and positive impact.

5. Continuous Assessment: The current CA effort is validating the benefits of CA as an instructional methodology that can improve both student and teacher performance. Some schools have integrated it into their classrooms based on prior experience with it in the primary reading initiative. As a high stakes measure, it will be non-sustainable and easily abused. If it can be integrated as an instructional methodology into items 2, 3, and 4, it could have a dramatic affect on education in Zambia.

8. Recommendations

Recommendations have been grouped according to key areas requiring support from the USAID/Zambia Education Office and ranked in order of importance to highlight and prioritize where future programming might be focused.

1. Teacher Training and Development

a. Continue and expand the training of CSTs and teachers in charge. The training which CHANGES2 and QUESTT gave these volunteer community citizens appears well-received, high quality, immediately used and something that should be constantly offered, particularly given the totally understandable frequent turnover rate of these people. Community support for education increases when local residents know the teachers are solidly prepared.

b. Continuous assessment as an instructional methodology has tremendous potential for improving the quality of education in Zambia. To retain that positive aspect and extend the potential, assist the MOE and ECZ to devolve training and management of CA to the district level, extending the classroom methodology and "report cards" across all schools and grades, maintaining district involvement in the training and management of the report cards. The grade 7 report cards could become the credential for entrance into grade 8, and the grade 7 national assessment could be phased out as envisioned in the 1996 publication "Educating our Future".

c. A distance education program for CSTs leading to qualification has potential to motivate teachers and enable the MOE to attain its goal of having all CSTs qualified by 2015. USAID should support such a program.

d. Among the 34 U.S. Peace Corps Volunteers working in education in Zambia, explore using some of the most apt and gifted for locally-based teacher training. They can be valuable source personnel for interactive teaching and learning and critical thinking skills. They can abet USAID's decentralized approach, as these PCVs live in small, largely poor rural communities, work with clusters of community and basic schools, and coordinate closely with zonal, district and DEBS personnel.

e. High-quality, relevant training is essential for all head teachers in GRZ basic and secondary schools. This training should be a combination of, first, educational and pedagogical leadership and, second, school management and administration. For the planned Education Leadership and Management Course for head teachers and MOE heads of departments and sections, the best practices and experiences of CHANGES2

and QUESTT training sessions should be examined to incorporate into the training program.

f. USAID/Zambia is well advised to begin giving increased support to secondary education. Practical, pertinent training for secondary school head teachers is a good, logical place to start, especially with the pressures in the country to both increase the quality of secondary education and better accommodate some of the burgeoning enrollment coming out of the upper basic grades.

g. The training and upgrading of teachers, both in-service and pre-service, have rightly been a focus of USAID assistance. To increase teacher training effectiveness, USAID must take into account issues related to teacher supply such as certification requirements, deployment constraints and numbers of teacher college graduates. Doing so will allow USAID to make deliberate programming decisions that will increase training efficiency and quality. MOE and other entities have a wealth of information that could be compiled and examined in order to plan and project needs into the future as to how best to coordinate the variety of activities just underway. There are many unanswered questions, but the larger one is "How many teachers will be needed by 2015 to meet the stated goals and how will Zambia get there?"

h. Progress in technology infrastructure for colleges could greatly affect the quality of pre-service training for teachers. To sustain prior teaching training efforts and affect pre-service programs, continue to support IT infrastructure for colleges of education to allow access to Internet resources that will shore up their severely outdated and inadequate library resources and entice them to be involved to cooperate with such activities. Networking advice and some equipment have been provided to colleges by EQUIP2 and several partners, but most computers sit idle at the teacher education colleges because of the lack of electrical infrastructure, technical personnel, user knowledge, and the budgets to get them up and running. Students and staff need exposure to new methodologies and updated information for content areas.

2. Teaching and Learning Materials

a. IRI is a vital educational element USAID/Zambia is currently helping fund, and contributes to educational quality, access and equity, human rights, and as a valuable teaching aid for both GRZ and CS schools. It will remain the only interim educational avenue open to tens of thousands of poor Zambian youth and adults until such time as community schools receive government support and are supplied with certified teachers. USAID, MOE, and other partners should continue to support IRI and provide access to the programs, training, and materials to those schools rely on it.

b. Many publications and materials USAID has already sponsored and paid for – especially teachers' textbooks, guides and manuals and student texts and supplementary materials – should continue to be published, distributed and used widely. The entire country at the primary and secondary school levels has a crying need for materials, the team observed. The highly-valued SPRINT manual for in-service teaching and especially the valuable SPRINT Teacher's Guide developed via CHANGES2 should be continued in basic and community schools and COEs, and a version geared for secondary school teachers

should be developed. "The Handbook for Training of Community School Teachers" is invaluable for CSTs.

The OVC life skills "Our Family Teacher's Guide" developed under QUESTT should be continued as well as LTM Mentor's Guide and Training Manual for grades 1 through 7, including supplementary training manuals. The Science Manual and DVD for grades 5 through 7 should be replicated for future programs. Many SHN materials are too valuable to have their publication, distribution and usage discontinued. The QUESTT-developed guides and attendant IRI information and methodology should continue as part of aspirant teachers' preparation in COEs.

c. Special education students often require specialized materials – Braille, recordings, large print. The educational materials sponsored by USAID would be valuable for these students if organizations that provide the specialized materials could transfer them into the required medium.

d. Materials development, field-testing, distribution, related training and M&E should continue to promote capacity building and "legacy corps" within the MOE, beginning at the district levels. CHANGES2 and QUESTT fostered broad collaboration among all vertical levels of MOE personnel on these tasks, incorporating NGOs when useful. These people and new "recruits" can maintain this spirit.

e. Augment the support for and expertise in community radio stations, and attempt to add to the nine existing such stations that air USAID-supported programs such as IRI and the OVC Life Skills programs featuring the *Our Family* series. These stations are a significant source of community discussion and debate, inter-generational education, advocacy and civil society strengthening.

f. Continue and enhance further the OVC Life Skills radio program series for communities titled *Our Family.* It is good, provocative and immediately useful and practical for the entire village of listeners with whom evaluation team members spoke.

g. Expand the focused work of CHANGES2 into the other provinces.

3. Grants and Scholarships for Community Schools

a. USAID/Zambia should considerably expand its support to CSs because they represent the only means of education for hundreds of thousands of Zambian youth, to strengthen their quality, and to help crystallize the community backing, enthusiasm, pride and spirit CSs entail. GRZ and MOE advocacy, respect and financial help should be enlisted for CSs, balanced with community participation and ownership. A stronger civil society and healthy CBOs evolve, moreover.

b. The total amount and number of small grants should be increased. Small grants to communities have been well-administered and used and are widely popular, based on what evaluation team members heard and saw. They frequently boost formal education in poor areas, provide cost-effective school construction, are a community action and strengthening medium, and are positive non-formal education activities (sewing and tailoring, carpentry, poultry-raising, etc.). The IGAs usually produce a modest profit which

goes to the CS teacher in charge. The community development and esprit d' corps they engender are admirable.

c. Scholarships to OVCs in secondary schools should be not only maintained but also expanded. They are needed and widely admired for access and equity in education, human rights, humanitarian ends, and for multiple other reasons. The returns on these modest investments are incalculable.

d. Useful, practical training for the guidance counselors in secondary schools who work with OVCs would be another wise though modest contribution to vulnerable youth and secondary schools.

e. Even if CSs are given legal status in the near future, the transition into the Zambian education system will be lengthy and difficult. In addition to retaining and expanding the past successful supportive activities with community schools, consider including assistance with the development of a strategic plan to bring community schools into the government system in a systemic way.

4. School Health and Nutrition

a. De-worming should go nationwide and administered in all community and GRZ basic schools, especially those in poor, rural areas. Pharmaceutical firms reportedly have offered the tablets free of charge for Zambia-wide distribution, and now supposedly $1.5 million are needed to train teachers and for a modicum of logistical support.

b. Vitamin A supplements and bilharzia treatments should be administered to basic school children in all districts where USAID-assisted comprehensive projects operate in the coming three years. Explore having the MOH take over these treatments thereafter.

c. The Health Promoting Schools Initiative, instituted by CHANGES2, should be continued in the appropriate new USAID-funded project. This includes training for teachers and head teachers, and continued use of the School Health Card for every student.

d. The health and hygiene-related information and messages delivered through IRI should be continued. Classroom observations of IRI lessons indicated they are important.

e. Most SHN activities should be expanded into new provinces and districts.

5. Institutional Development

a. Teams that have effectively developed high-quality training courses, teachers' and student materials, community guides and the like should be kept intact, adding new blood and quality participants when the opportunity arises. Different MOE directorates, particularly TESS, and the COEs have the major responsibility to maintain these corps of expertise. USAID and other cooperating partners can assist to a marked degree.

b. District personnel are closer to the work of the schools and therefore more aware of needs of the schools and teachers, including deployment of teachers and other personnel. MOE should be encouraged to continue the activities designed to devolve

responsibility to district and zonal levels using evidence-based decision making to support schools and teachers.

c. To foster further MOE institutional development EQUIP2 should determine areas of responsibilities to be turned over to MOE staff. For example, those areas might include responsibility for the annual school census data collection and the resulting Educational Statistical Bulletin. Additionally, EQUIP2 should provide training courses for their counterparts at MOE headquarters and selected provincial and district counterparts. These steps are likely to have positive substantive and symbolic consequences, and lessen the feeling among some MOE employees that EQUIP2 staff are doing their work for them rather than training them to do the work.

6. ICT and Information management

a. Ownership of some of the information management functions could be vested in MOE and their employees, including the school census and reporting of that information, with the TA more focused on developing broader education information systems, integrated and linked to other critical national level information components such as exam results, finances, and teacher records.

b. The development of the teacher HRIS system within the MOE is critical. That work will require continued technical assistance to bring order out of chaos, and integrate this system with the functioning systems of the Ministry and the other affiliated agencies.

c. The work now underway to extend IT capacity to the provinces and colleges of education needs to be continued and expanded in order to improve communications, data collection and management, and availability of up-to-date educational information.

d. The Evidence-based Decision Making Workshops could be accelerated and expanded across the provinces to build district capacity to improve the quality of schools. The energy and empowerment that were evident in the workshop can be harnessed to include an emphasis on in-service training and instructional methodologies as well as monitoring, analysis, and reporting.

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ANNEX A

Key Documents Reviewed

Key Documents Reviewed

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ANNEX B

Places Visited and Persons Met and/or Interviewed

Places Visited and Persons Met and/or Interviewed

Name	*Designation*
USAID Zambia	
Melissa Williams	Mission Director
Sheila Lutjens	Deputy Mission Director
Jim N. Barnhart	General Development Officer
Fredrick Henning	Education Advisor
Patricia Sitimela	Program Development Specialist
Felix Chanda	Financial Analyst
Cornelius Chipoma	Project Management Specialist
Beatrice Mweene	Education Project Management Specialist
Elizabeth Chisala	Administrative Assistant
Joy Mulenga	Administrative Assistant
Ministry of Education Headquarters	
Lilian Kapulu	Permanent Secretary Ministry of Education
James M. Silwimba	Acting Chief Education Officer, Teacher Education and Specialized Services
Victor Muzatwa	Director Distance Education
Foster Lubinda	Controller, Education Broadcasting Services
Frank M. Musunga	Human Resources Development Officer
Susan Mwanza	Human Resources Development Officer
CHANGES2 Staff	
Edward Graybill	Chief of Party
Joan Woods	HIV AIDS Advisor
Peter C. Sampa	Provincial Manager, Teacher Education Coordinator
Josias Zulu	Subgrants, Community Outreach and Capacity Building Advisor
Sitwala Mungunda	M & E Specialist, Field Operations Manager
Joy du Plessis	Senior Project Specialist, Teacher Education Advisor
Audrey Mwansa	Scholarships and OVC Advisor
Meredith McCormac	Project Associate, Washington, D.C.
Evans Mumba	Provincial Manager, Southern Province
QUESTT Staff	
Richard Trewby	Chief of Party
Francis Sampa	Deputy Chief of Party
David Lungu	Monitoring and Evaluation Coordinator
Francesca Mubiana	National Outreach Coordinator
Conrad Bwalya	Provincial Outreach Coordinator
Miriam Shakafuswa	Community Radio Coordinator
Hitler Muleya	Grants Coordinator
Audrey Chitalu	OVC Life Skills Producer
Peter Mufinda	Provincial Outreach Coordinator, Livingstone District

Francis Phiri	OVC Life Skills Producer (MOSI-O-TUNYA), Livingstone District
Raphael Mazonga	Provincial Outreach Coordinator, Chipata District
Norman Tembo	OVC Life Skills Producer (MARIA), Petauke District
Cuthbert Banda	OVC Skills Coordinator (PASME), Petauke District
Gift Sitenge	Data Analyst
Kent Noel	Director, Eastern and Southern Africa, EDC
Mike Laflin,	Sr. Vice President and Director, International Education System Division, Washington, D.C.
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Happiness Hachileka	Teacher, St Vincent Community
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John Shakafuswa	D/Headteacher, Kabulonga Girls High
Caroline K. K. Serwadda	School Councellor, Kabulonga Girls High
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ANNEX C

Data Collection Instruments

CHANGES2

Thank you very much for completing this anonymous questionnaire. We appreciate the time, courtesy and valuable information you are giving in filling it out.

Please leave a question blank if you are you are not sufficiently familiar with the topic.

1. What is the degree of usefulness for children of the health, nutrition and HIV/AIDS information and awareness in the curriculum of schools and teacher training colleges?

Very Low		Low		Average		High		Very High	

2. What is the quality by which health and health concerns are integrated in the curriculum?

Very Low		Low		Average		High		Very High	

3. In your opinion, what is the level of quality of the training and supplementary materials developed by the CHANGES2 program?

Very Low		Low		Average		High		Very High	

4. To what extent have teachers' professional skills been strengthened due to CHANGES2?

Not at all		A Little		Moderately		Much		Very Much	

5. At the MOE's request, CHANGES2 has provided training in school-community partnerships for personnel not only in its core provinces but also more recently in all provinces of Zambia. What are and will be the value and results of this training?

Very Low		Low		Moderate		High		Very High	

6. The CHANGES2 program has provided scholarships to orphans and other vulnerable children (OVCs) for secondary school. To what extent have these scholarships promoted access to school and equity for Zambian youth?

Not at all		A Little		Moderately		Much		Very Much	

7. To what extent have small grants under the CHANGES2 program fostered participation by parents and community citizens in support of local schools?

Not at all		A Little		Moderately		Much		Very Much	

8. To what degree do you feel the MOE is stronger now, due to the CHANGES2 program, in supporting in-service training and services for teachers?

| Not at all ☐ | A Little ☐ | Moderately ☐ | Much ☐ | Very Much ☐ |

9. What is the quality of the training materials for Community School Teachers (CSTs)?

| Very Low ☐ | Low ☐ | Average ☐ | High ☐ | Very High ☐ |

10. How useful has the SPRINT program been?

| No use at all ☐ | A little ☐ | Moderate ☐ | Useful ☐ | Very Useful ☐ |

11. How useful are the provincial and district resource centers?

| No use at all ☐ | A little ☐ | Moderate ☐ | Useful ☐ | Very Useful ☐ |

12. Teachers, head teachers and other education personnel have been trained in 31 districts through the CHANGES2 program. What has been the quality of this training?

| Very Low ☐ | Low ☐ | Average ☐ | High ☐ | Very High ☐ |

13. What is the degree of impact or usefulness of bringing health workers and teachers together in the same schools so that they integrate their efforts?

| Very Low ☐ | Low ☐ | Average ☐ | High ☐ | Very High ☐ |

14. In your opinion, rank order from 1 to 9 (with 1 being the most useful and 9 the least useful), the value or merit of the following nine aspects of CHANGES2. Please use the same number only once.

_____ scholarships for OVCs
_____ teacher education and professional development
_____ school health and nutrition
_____ small grants to communities and schools
_____ school-community partnerships and outreach
_____ HIV/AIDS prevention and mitigation
_____ teacher group meetings
_____ training courses for teachers and head teachers
_____ capacity building and organizational strengthening of the MOE

15. Please list briefly the most valuable elements of CHANGES2:

16. Please list briefly the least valuable or useful elements of the CHANGES2 program:

17. Is there anything else you wish to mention about CHANGES2 and related aspects?

Thanks again, and best wishes to you in your important work.

QUESTT

Thank you very much for completing this anonymous questionnaire. We appreciate the time, courtesy and valuable information you are giving in filling it out.

Please leave a question blank if you are you are not sufficiently familiar with the topic.

1. What in your opinion is the quality of QUESTT's interactive radio instruction (IRI) programs?

| Very Low ☐ | Low ☐ | Average ☐ | High ☐ | Very High ☐ |

2. How would you rate the quality of QUESTT's work with teacher training?

| Very Low ☐ | Low ☐ | Average ☐ | High ☐ | Very High ☐ |

3. What is the degree of success of using volunteer teachers with the IRI programs?

| Very Low ☐ | Low ☐ | Average ☐ | High ☐ | Very High ☐ |

4. What is the value of IRI programs for orphans and vulnerable children (OVCs)?

| Very Low ☐ | Low ☐ | Average ☐ | High ☐ | Very High ☐ |

5. What is the level of quality and expertise of the technical personnel who work in the QUESTT program?

| Very Low ☐ | Low ☐ | Average ☐ | High ☐ | Very High ☐ |

6. What is the degree of relevance of the IRI methodology incorporated into the teacher education curriculum at colleges offering the Zambia Teacher Education Course (ZATEC)?

| Very Low ☐ | Low ☐ | Average ☐ | High ☐ | Very High ☐ |

7. To what extent has QUESTT helped strengthen the MOE's Directorate of Distance Education (DODE)?

| Very Little ☐ | Little ☐ | Average ☐ | Much ☐ | Very Much ☐ |

8. What is the degree of usefulness of "Fastele, Fastele," the series of 15-minute radio programs implemented by QUESTT for teachers and volunteer teachers?

| Very Low ☐ | Low ☐ | Average ☐ | High ☐ | Very High ☐ |

9. What is the extent of usefulness of ZATEC, including distance learning for Community School Teachers (CSTs) so they can stay in their villages and schools?

Very Low		Low		Average		High		Very High	

10. How useful or beneficial are the small grants to support IRI programs?

No use at all		A little		Moderate		Useful		Very Useful	

11. To what extent has the MOE strengthened itself to more adequately support IRI-based learning for children and adults (mainly teachers, including CSTs) in Zambia?

Very Little		Little		Average		Much		Very Much	

12. What is the quality of work carried out by the MOE and QUESTT to facilitate community participation and partnerships with community radio stations in providing IRI?

Very Low		Low		Average		High		Very High	

13. How useful have been the community sensitization workshops conducted by the Provincial Outreach Coordinators?

No use at all		A little		Moderate		Useful		Very Useful	

14. To what extent have the IRI programs and QUESTT increased access to education for children in Zambia?

Very Little		Little		Average		Much		Very Much	

15. What is the level of effectiveness the MOE and QUESTT have had in mobilizing communities to support volunteer teachers?

Very Low		Low		Average		High		Very High	

16. Please tell us two or three things you like or dislike about IRI programs.

17. If QUESTT had never been established, what would have occurred?

18. What difference, if any, has QUESTT made to the Directorate of Distance Education (DODE)?

19. Please list briefly the most valuable elements of QUESTT.

20. Please list briefly the least valuable or useful elements of the QUESTT program.

21. What elements or components, if any, should be added to a future MOE program such as QUESTT and what elements should be eliminated?

22. Is there anything else you wish to mention about QUESTT and related matters?

Thanks again, and best wishes to you in your very important work.

EQUIP 2

Thank you very much for completing this anonymous questionnaire. We appreciate the time, courtesy and valuable information you are giving in filling it out.

Please leave a question blank if you are you are not sufficiently familiar with the topic.

1. What has been the quality of technical assistance from EQUIP2 to improve the MOE's ability to carry out research, policy development and management improvement?

    Very poor ☐   Poor ☐   Average ☐   Good ☐   Very Good ☐

2. What has been the degree of usefulness of EQUIP2's assistance with the EMIS?

    Very Low ☐   Low ☐   Moderate ☐   High ☐   Very High ☐

3. What has been the quality of EQUIP2's work with the Community Schools policy and implementation guidelines?

    Very poor ☐   Poor ☐   Average ☐   Good ☐   Very Good ☐

4. Please rate the worth of EQUIP2's assistance to the MOE with continuous assessment.

    Very Low ☐   Low ☐   Average ☐   High ☐   Very High ☐

5. What is the quality of EQUIP2's assistance with annual work planning and budgeting?

    Very Low ☐   Low ☐   Average ☐   High ☐   Very High ☐

6. What is the level of usefulness of EQUIP2's assistance to the MOE with HIV/AIDS workplace policy and implementation?

    Very Low ☐   Low ☐   Average ☐   High ☐   Very High ☐

7. Supporting the MOE, what has been the value of EQUIP2's contributions to School Health and Nutrition policies and guidelines?

    Very Low ☐   Low ☐   Average ☐   High ☐   Very High ☐

8. What has been the quality of EQUIP2's efforts to supply IT equipment and training services?

    Very Low ☐   Low ☐   Average ☐   High ☐   Very High ☐

9. To what extent has EQUIP2 helped the MOE improve the quality of basic education?

Very Little		Some		Moderately		Much		Very Much	

10. EQUIP2 assists the MOE in the following eight strategic areas. How important is assistance in these areas or categories? On a scale of 1 to 8, with 1 representing highest value and 8 little value or merit, please rank the value of each area. Please do not use the same number more than once.

      _____ school health and nutrition
      _____ policy and research
      _____ school management training
      _____ information management
      _____ continuous assessment
      _____ information and communications technology infrastructure
      _____ HIV/AIDS workplace activities
      _____ capacity building and organizational strengthening of the MOE

11. To what extent will the MOE at all levels be able to sustain and continue the more valued programs, if any, in which EQUIP2 has provided assistance?

Not at all		Some		Moderately		Much		Very Much	

12. Please list any problems or weaknesses you have seen with EQUIP2.

13. What elements or components, if any, should be continued in a future MOE program? What should be added? What elements, if any, should be eliminated?

14. Is there anything else you wish to mention about EQUIP2 and related aspects?

Thanks again, and best wishes to you in your very important work.

Classroom Observation

_____

Observer:

Province:	District:	Date:
School Name:		Time (Start/End):
School Type: ___government basic ___ high school ___CS (community school) ___other:_____		Project(s):

Subject Area/Class:	Grade level(s):
Number of students: Total present: _____ M_____ F_____ Total absent: _____ M_____ F_____	Length of lesson:
	Topic/Purpose of lesson:

Setting and Activities:

Briefly describe the classroom setting, environment, resources, any student work displayed.

Classroom arrangement:

____Traditional

____ Circle/semicircle

____ Small groups

____ Learning centers

____ other:_____

Materials displayed:

____Student produced work

____Posters, maps, supportive material

____Previous class materials

____Bulletin boards

____other: _____

Student all have desks/seats: Yes____ No___

Students all have materials/supplies/books: Yes____ No____

Describe content or skills taught.

Resources	used in lesson	available in room
1. Textbooks, other books	☐	☐
2. Chalkboard, chalk	☐	☐
3. Posters or pictorial materials	☐	☐
4. Hand-made materials :Teacher or Student (circle)	☐	☐
5. Teacher Toolkits (CS basic schools)	☐	☐
6. Supplies for student use (drawing/writing materials)	☐	☐
7. Other: (describe)	☐	☐

Format	check if present	% of time
1. Lecture	☐	
2. Discussion to engage students	☐	
3. Students working together	☐	
4. Songs, games, rhymes	☐	
5. Questioning or assessing to determine if students understand	☐	
6. Other: (describe)	☐	

Observation

Use the chronology to rate these observations <u>AFTER</u> the lesson. Take 5-10 minutes to use your chronology to complete the ratings and fill in any details that will help you remember the category later on.

Ratings:

0	Did not occur at all
1	Occurred very little
2	Occurred somewhat
3	Very descriptive of this lesson

Teacher Organization		
Item	**Observation Rating**	**Comments**
1. Time is used effectively, time not wasted, transitions smooth, lesson completed	0 1 2 3	
2. Lesson is planned and has structure – introduction, connection to previous learning, instruction, related activities, review/recall for retention	0 1 2 3	
3. Teacher present at all times and manages the classroom	0 1 2 3	
4. Environment and available resources are used to best advantage	0 1 2 3	

Teaching Learning Process		
Item	**Observation Rating**	**Comments**
5. Teacher interacts with students	0 1 2 3	
6. Students are clearly engaged in the lesson	0 1 2 3	
7. Students are involved in their own learning – in groups, searching for information, creating	0 1 2 3	
8. The purpose of the lesson and related activities is made clear to students	0 1 2 3	
9. Lesson links to students' experiences and local communities	0 1 2 3	
10. Teachers have sufficient content knowledge to address questions as they arise	0 1 2 3	

11. Teacher questions and assesses to determine level of student understanding	0 1 2 3	
12. Teacher encourages thinking and reflection	0 1 2 3	

Additional observations or comments:

Use the following space to record what happens in the classroom chronologically during the observation session. Include both what the teacher is doing and what students are doing (example: 9:00-9:10 "Teacher introduces lesson, students attentive"). Also, describe transitions from one activity or location to another. Write specific quotes if pertinent.

Time	Activities
	Some items to look for: 1. Elements of the lesson 2. Student behaviors and attention 3. Teaching methods and procedures

66

Lesson Interruptions: Record any interruptions to the lesson you observed – distractions, noise, behaviors. Do not count your own entrance into the classroom.

Number of Interruptions	Describe

ANNEX D:

Results of Classroom Observations and Results of Anonymous Questionnaires

Types of Classroom Activities	Percent of time observed in the classroom activities			Percent of time observed in the classroom activities			
Classroom activities	Community Schools	Basic Schools	Total	Learning in Taonga Market	Other	Total	
Number of classrooms	14	4	18	13	5	18	
Lecture	7%	19%	**10%**	5%	22%	**10%**	Most of the observations were LTM lessons in CS. The guided format focuses more than 70% of the activities on interactions with students and questions about the material. Very little time is devoted to lecture, students move or sing about 11-12% of the time, and an average of 10% of the time is non-instructional.
Discussion/interaction with students	42%	38%	**41%**	42%	37%	**41%**	
Pupils working together	3%	5%	**4%**	0%	12%	**4%**	
Songs, games, rhymes	11%	7%	**10%**	12%	5%	**10%**	
Questioning/assessing to determine understanding	29%	17%	**27%**	30%	17%	**27%**	
Other: setting up, distractions, not instructional	8%	14%	**10%**	11%	7%	**10%**	
Total	100%	100%	100%	100%	100%	100%	

Observation ratings 0 to 3:   0 - did not occur, 1 - very little, 2 - somewhat, 3 - very descriptive

Observation of the learning process and classroom activities	Community Schools	Basic Schools	Total	Learning at Taonga Market	Other	Total	
1. Time not wasted, good use of time	2.6	2.8	**2.6**	2.5	2.8	**2.6**	The highest ratings for LTM were clear purpose and teacher managing the class - 2.8 and 2.7 out of 3.0. Most ratings for LTM were close to lessons taught by trained teachers. Reflection and pupils directing their own learning was lower but linking lessons to the pupils' experience was higher.
2. Lesson appears planned, has structure	2.5	3.0	**2.6**	2.5	3.0	**2.6**	
3. Teacher present and managing class	2.7	3.0	**2.8**	2.7	3.0	**2.8**	
4. Available resources and objects in the environment used	1.9	2.3	**2.0**	1.9	2.2	**2.0**	
5. Teachers interact with pupils	2.6	3.0	**2.7**	2.6	3.0	**2.7**	
6. Pupils clearly engaged in lesson	2.6	2.8	**2.6**	2.5	2.8	**2.6**	
7. Pupils involved in own learning - groups, search for information	1.6	2.8	**1.8**	1.6	2.4	**1.8**	
8. Purpose of lesson and activities clear	2.9	3.0	**2.9**	2.8	3.0	**2.9**	
9. Lesson links to pupils' experience	2.3	1.8	**2.2**	2.2	2.0	**2.2**	
10. Teacher has content kowledge to address questions	2.4	2.5	**2.4**	2.4	2.6	**2.4**	
11. Questions to determine level of understanding	2.5	3.0	**2.6**	2.5	3.0	**2.6**	
12. Encourages thinking and reflection	1.6	2.5	**1.8**	1.5	2.6	**1.8**	

Degree of usefulness or level of quality of the following CHANGES2 related activities	Teachers, Community	Colleges, Projects	Province, District, Zone	TOTAL	
Number of Respondents	11	16	32	59	
1. Health, nutrition, HIV/AIDS information and awareness in school curriculum and teacher training	**4.5**	3.9	4.3	4.2	
2. Health concerns integrated in curriculum	**4.4**	*3.5*	*3.9*	*3.9*	
3. Training and supplementary materials	**4.4**	3.6	4.2	4.1	
4. Strengthening of teachers' professional skills	**4.5**	3.6	4.3	4.1	
5. School-community partnership training value	**4.3**	3.7	4.0	4.0	
6. Scholarships for OVCs	**4.1**	3.9	4.1	4.0	
7. Grants to parents/community participation in support of schools	**4.9**	3.9	4.1	4.2	
8. MoE stronger because of CHANGES2 training for teachers	**4.3**	3.3	4.0	*3.9*	
9. Training materials for Community School Teachers	**4.3**	3.8	4.1	4.1	
10. SPRINT program	**4.9**	4.1	4.4	4.4	
11. Provincial and district resource centers	**4.3**	4.1	4.3	4.3	
12. Training for teachers, head teachers, other school personnel	**4.6**	3.8	4.0	4.1	
13. Bring health workers/teachers together in schools to integrate efforts	**4.3**	3.9	4.2	4.1	
Rank the importance of the following nine aspects of CHANGES2 work					**Rank order**
Teacher education and professional development	**3.9**	**3.8**	**2.8**	**3.2**	1
Training courses for teachers and head teachers	4.3	5.4	4.2	4.5	2
School health and nutrition	4.6	4.1	4.7	4.6	3
HIV/AIDS prevention and mitigation	4.8	**3.9**	5.7	5.2	4
Teacher group meetings	**3.8**	*6.0*	5.3	5.2	5
OVC Scholarships	*6.7*	4.9	5.1	5.4	6
School-community partnerships and outreach	4.4	5.6	5.6	5.4	7
Capacity building/organizational strengthening of MoE	*8.6*	4.8	5.0	5.6	8
Small grants to communities and schools	**3.6**	6.4	6.3	*5.8*	9

Respondents are nearly all from Lusaka and Southern Province. The Eastern Province, and other underserved provinces want CHANGES2 opportunities.

Major responses to open ended questions:

 - nearly every respondent identified teacher training and capacity building as among the most valuable contributions of CHANGES2

 - next most commonly identified valuable contributions were providing small grants to communities and the work with SHN

 - receiving many comments were school community partnership development, scholarships for OVCs, and work with HIV/AIDS.

Comments about the future included strong recommendations to broaden the work to the other provinces, more districts, down to
   zonal level, as well as imbedding the training and materials in the teacher education colleges and in-service programs.

Nothing was identified to be eliminated.

Degree of usefulness or level of quality of the following QUESTT related activities	College, Radio, Community, Projects, Teachers	District, Zone, Provinces	TOTAL
Number of respondents	18	22	40
1. IRI program quality	**4.3**	**3.8**	**4.0**
2. Work with teacher training	3.5	3.8	3.7
3. Using volunteers teachers with IRI	3.6	3.4	3.5
4. IRI programs for orphans and vulnerable children	**4.1**	**4.0**	**4.0**
5. Quality and expertise of technical QUESTT personnel	**4.1**	**4.1**	**4.1**
6. IRI methodology incorporated into ZATEC curriculum	*3.0*	3.7	3.5
7. Helped strengthen DODE at MoE	**3.9**	**4.3**	**4.2**
8. Fastele, Fastele for teachers	*2.9*	*3.1*	*3.0*
9. Usefulness of ZATEC distance learners to keep CST in their villages and schools	*2.9*	*3.4*	*3.2*
10. Usefulness of small grants to support IRI	**4.5**	**4.3**	**4.4**
11. MoE strengthened to support IRI based learning	3.6	3.6	3.6
12. Community participation, partnerships with radio stations to provide IRI	3.6	3.8	3.7
13. Community sensitization by POC	**3.9**	**4.2**	**4.1**
14. IRI increased educational access for children	**4.4**	**4.4**	**4.4**
15. Level of MOE and QUESTT successful in mobilizing community support for volunteers	*2.4*	*3.1*	*2.8*
Most positive comments about IRI focused on the motivation for pupils, the educational value, learner centered, interactive, builds listening skills, improves attendance			
Many respondents also indicated they felt without QUESTT and IRI many Zambian children would have no no access to education			
If QUESTT and their services had not existed, an overwhelming number of respondents felt many children would have had minimal or no opportunities for education			
Concerns surround poor radio reception, reduction in airtime, non availability of radios and guides that were promised have not arrived, and the fast pacing of the lessons			

Degree of usefulness or level of quality of the following EQUIP2 related activities	Colleges, Projects	Districts, Provinces, Ministry	TOTAL
Number of Respondents	11	20	31
1. Technical assistance to improve MoE research, policy, management	3.4	3.4	3.4
2. Assistance with EMIS	**3.9**	**4.3**	**4.1**
3. Work wih Community School policy and guidelines	3.4	3.8	3.7
4. Assistance with continuous assessment	3.2	3.7	3.5
5. Assistance with annual work plans and budgeting	3.4	3.8	3.7
6. Assistance to MoE withHIV/AIDS workplace policy and implementation	*3.0*	3.4	*3.3*
7. Support to School Health and Nutrition policies and guidelines	3.3	3.6	3.5
8. Efforts to supply IT equipment and training	3.5	3.9	3.8
9. Help MoE improve quality of basic education	*2.9*	3.4	*3.2*
11. Extent MoE can sustain valued EQUIP2 programs of assistance	*3.1*	*3.0*	*3.0*

Rank the importance of the eight strategic areas of assistance provided to MoE by EQUIP2				Rank Order
Information management	**2.1**	**2.6**	**2.3**	**1**
IT and information infrastructure	**3.3**	**3.8**	**3.8**	**2**
School health and nutrition	5.3	3.8	4.1	3
Continuous assessment	4.2	4.4	4.4	4
Capacity building/organizational strengthening of MoE	4.3	4.5	4.6	5
Policy and research	4.0	5.1	4.8	6
HIV/AIDS workplace activities	6.3	4.9	5.3	*7*
School management training	5.1	6.2	6.1	*8*

Common concerns identified in responses to open ended questions:
 - support from EQUIP2 concentrated at Ministry - provinces and districts want more involvement, training, capacity built in information management, as well as IT connectivity to districts and colleges - and soon
 - more transmission of skills from EQUIP2 officers to MoE employees, more building of capacity via advisory role
 - input, advice, recommendations should be sought from the field in planning, design, needs
The most common comment about what should be retained - everything - but most important identified as ICT infrastructure development and management