



**YEMEN - BASIC EDUCATION SUPPORT AND TRAINING
(BEST) PROJECT (2008-2011)
Award No. 279-A-00-07-00092-00**

FINAL PROJECT REPORT

**SUBMITTED TO
USAID-SANA'A**

JANUARY 2012



List of Acronyms

AED	Academy for Educational Development
AL	Adult Literacy
AWP	Annual Work Plan
BE	Basic Education Project
BEST	Basic Education Support and Training Project
BEDS	Basic Education Development Strategy
COE	College of Education
COP	Chief of Party
CP	Community Participation
CPF	Community Participation Facilitator
DG	Director General
DCOP	Deputy Chief of Party
DOE	District Office of Education
EFA	Education for All
EMIS	Education Management Information System
FC	Fathers' Council
FDG	Focus Group Discussion
FHI 360	Family Health International 360
GOV	Governorate
GOY	Government of Yemen
ICT	Information and Communications Technology
LAEO	Literacy and Adult Education Organization
MASS	Multi-faceted Approach to Safe Schools
MC	Mothers' Council
M&E	Monitoring and Evaluation
MFC	Mothers and Fathers Council
MOE	Ministry of Education
MPC	Multipurpose Center
MRT	Mobil Repair Team
NGO	Non-Governmental Organization
PAMP	Project Advancement Monitoring Plan
PMP	Performance Management Plan
SSW	School Social Worker
STTA	Short Term Technical Assistant
SRGBV	School Related Gender Based Violence
TEP	Teacher Education Programs
ToT	Trainer of Trainers
UNESCO	United Nations Educational, Scientific & Cultural Organization
UNICEF	United Nations International Children's Fund
USAID	United States Agency for International Development
WB	World Bank
WP	Work Plan

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Project Summary

The BEST-Yemen Project was awarded to the Academy for Educational Development in 2008 and it operated within the broad framework of the Government of Yemen's (GOY) Basic Education Development Strategy (BEDS). The strategy clearly emphasized:

- Access for Yemeni children to basic education
- Equity of opportunity for females and males to education services
- Quality improvements that place the student and the teacher at the center of the education system
- Improved capacity and internal efficiency of the Ministry of Education at all levels
- Sub-national participation in the improvement of education.
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Given this framework, the Mission Statement for the BEST Project was approved as *“bridging the gap between development activities and systems-building by increasing the relevance of policies, especially as related to achievement of gender objectives.”*

In light of the mission of the project, the central goal and key objectives of BEST are expressed below.

BEST-Yemen Project Goal Statement: *To strengthen the capacity of communities, schools and the Ministry of Education to sustain educational improvements for their children and their children's children.*

Statement of BEST-Yemen Project Objectives:

- *To enhance the capacity of targeted MOE units at all levels to support educational improvement consistent with the national decentralization policy.*
- *To expand work on improvement of Education Management Information Systems (EMIS), learning environments, teacher training, Mothers' and Fathers' Councils (MFCs), learning materials and adult literacy in the schools and communities.*
- *To develop, with the MOE, a community school policy to address the issue of parity between boys' and girls' enrollment and retention in schools.*
- *To support development of policies and actions that result in recruitment and retention of female teachers.*

While building on the experience and achievements of the BE Project (granted to American Institute for Research), BEST-Yemen continued to expand its work in consultation with the MOE and other donor partners so as to ensure sustainability of successful approaches and innovations. The BEST management always ensured that the work plan for BEST is aligned with that of the MOE for all years of operation. It was done through consultation and collaboration with relevant sectors of the Ministry of Education. The rationale for doing this was to effectively "mainstream" project work plans with GOY's own educational development plans and implementation strategies so as to ensure complementarity. BEST-Yemen strived to make every effort to collaborate strategically with other related donor projects and the newer USAID-funded projects to create critical masses within and across programmatic areas. We believe that this

resulted in enhancing the overall effectiveness and in obtaining desired impact and optimum sustainability within the targeted communities, districts, governorates and, to the degree possible elsewhere in the nation.

In addition to the above more relational and technical aspects of the program, the project provided material and technical support to the MoE in the following aspects of education delivery:

1. School construction and rehabilitation
2. Establishment of regional training facilities to promote inter-governorate trainings and exchanges
3. Math, science and Arabic training materials development
4. Training of teachers and trainers in various pedagogical aspects (covering all subjects)
5. Gender awareness trainings and capacity building of MoE officials, teachers, school heads and parents' council
6. Mobilizing community members to support their schools in general and support the education of girls in particular.
7. Adult literacy support in target communities
8. Education Management Information Systems support and training

The following sections of the report provide details on achievements and challenges that were faced during BEST implementation. The information is provided according to the program components.

School Rehabilitation and Renovation

About two decades ago, school construction and maintenance in Yemen was largely considered the responsibility of fathers' councils. Those rural communities that could gather funds to construct a school for their children, valued education highly and were willing to make investments from their own pockets. However, after unification of Southern and Northern Yemen and with the influx of donor funds from various countries, school construction became a major part of the functions of the central Ministry of Education. An ever increasing educational system was also one of the reasons for establishing more centralized mechanism for school construction. Despite the MoE being more actively engaged in school construction, communities in Yemen – keeping in line with the old tradition of community resources for school establishment – remain highly engaged in all school construction and rehabilitation activities. The MoE must also be commended for encouraging community support for these activities and soliciting communities' opinions and input before a school is constructed or rehabilitated in an area.

This positive feature of Yemeni MoE-Community relationship for school rehabilitation and construction was further harnessed by BEST project. The project developed a mechanism by which communities were fully engaged in identifying school rehabilitation and construction needs, monitoring rehabilitation work, and participating in the final hand over of the school to community members. In order to ensure highest quality of construction, in addition to communities' engagement, the BEST project encouraged the participation of private Yemeni construction firms in school construction. Here again, the GoY and MoE must be credited with allowing the private firms to participate. Usually, in many developing countries, the public civil works departments act like mafias and prevent any private competition. However, under the BEST project, the MoE in Yemen allowed the private firms to bid for school construction/rehabilitation projects. This is probably one of the reasons that BEST program has been highly successful in delivering good quality schools to the MoE.

BEST also devised a highly transparent and effective mechanism for school works tenders announcements, bidding, selection, and construction monitoring. After community members identified the school rehabilitation/construction needs in their communities, the BEST project team in consultations with the MoE civil works department established the work scope. Afterwards, advertisements of the tenders took place. Upon receiving construction proposals the selection committee, consisting of MoE representatives, highly qualified architects from the engineering department of University of Sana'a, and BEST technical staff selected the vendor who offered the best price for high quality school construction work.

In addition to the construction vendor, a neutral construction monitoring firm was also selected to monitor the construction work from time to time and provide objective updates about the progress and quality of construction. Payments to vendors were dependent on the monitoring reports of the firms; reports were co-signed by the local school authorities. By placing the above mechanisms in place, BEST was able to ensure that both MoE and USAID get best value for the dollar when it came to school rehabilitation and construction.

During the 4 years of BEST program implementation, BEST constructed 6 multi-purposes centers in target governorates of Hodeida, Ryma and Amran and in Shabwa and Marib. The multi-purpose facilities serve as training and community centers for the regions. In addition, 48 schools were constructed and/or rehabilitated during the life of the project. Some schools required construction from the scratch, some required major construction work and only a few qualified with basic rehabilitation. The following table provides a summary:

BEST Construction/Rehabilitation Work Summary
<p>Major Renovation of 44 schools in Amran, Ryma and Hodeida Governorates and delivered them to the school-community receiving committee; these schools are now fully functioning. BEST project provided more than a 100 latrines in these schools. Research has shown that providing latrines results in higher enrollment for girls.</p> <p>Minor renovations and rehabilitation in 4 schools</p> <p>Built Six (6) Multipurpose Community Center in Shabwah, Ryma and Hodeida governorates. Finalized Major renovation of two schools in Shabwah governorate:</p> <p style="padding-left: 40px;">Salem Baker School: major renovation of 27 classrooms, 7 latrines, teachers’ residence and construction of a Multipurpose Community Center (MPC), and 30th November School: major renovation of 22 classrooms, 8 latrines and construction of a MPC.</p> <p>Furnished the MPCs of Alhadhqueen School (Majzer District) in Mareb , 30 November School (Bayhan District) and Salem Baker School (Khorah District) in Shabwah governorate.</p> <p>In coordination with the MOE, prepared and conducted one (1) School Building Repair and Maintenance Concepts Workshops for Eighty-Four (84) participants (82 males and 2 females) from twenty-four (24) schools in Amran and Thula Districts.</p> <p>Provided 77 Schools with small repair and maintenance tools kits in Amran, Mareb and Shabwa governorates.</p> <p>Furnished Governorate Education Office in Amran and Thula'a District in Amran Governorate. With the support of community volunteers repaired 4273 school furniture (single desks, double desks and chairs) in targeted schools.</p> <p>Sponsored the participation in a six- day training course in Sweden on “The Ecological Sanitation – ECOSAN” for six (6) representatives (5 males and 1 female) from the Ministry of Education and targeted governorate education offices to promote and implement ecological sanitation in schools.</p> <p>Conducted three workshops on “School Building Repair and Maintenance Concepts” for 49 participants in Ryma, 84 participants in Amran and 76 participants in Hodeida. These workshops took place in the multipurpose centers built by the project in Hodeida and Ryma governorates.</p>

School Construction - Lessons Learned for USAID and Other Donors

During the past two decades most donors have focused on education quality improvement in Yemen. Few donors such as the World Bank and USAID have attempted to provide large scale construction support for Yemeni schools. Through BEST, USAID was able to provide substantial rehabilitation support to 48 schools (plus multi-purpose centers). Although many others – such as GTZ, JICA, UNICEF, and international NGOs – have been engaged in some level of school rehabilitation/construction in Yemen, their efforts have not been able to meet the immense need of school infrastructure improvement in Yemen.

With rising population in all areas, more awareness about benefits of educating children and especially girls, and diminishing government resources to single mindedly invest in school construction, have resulted in a largely deteriorating school infrastructure in the country. Even those schools that were built in a sturdy manner years ago have begun to see the influence of time and hard weather conditions. With rising student populations, classroom spaces are dwindling forcing many students to study either under the sun or in bathroom spaces in the schools.

While focus on quality improvement is very important and should be part and parcel of every donor intervention in Yemen, physical conditions in Yemeni schools cannot be ignored. There is a need to renew the efforts on improving schools' physical infrastructure in all areas of Yemen. This is especially true if raising girls' enrollment in schools is a major goal of all. Providing safe school places that have a boundary wall and working latrines will not only give confidence to parents that their girls will study in a safer place, it will also encourage more regular teacher attendance in schools who could teach in an enabling learning environment.

Education Quality Improvement – Math, Science, and Arabic Training Materials Development

During the entire year of 2010 the BEST technical experts worked with the MoE officials to develop Math, General Science, Physics, Chemistry and Arabic training materials for grades 1-3 and for grades 4-9. While the MoE officials took the lead in determining the elements of the training manuals, the BEST consultants ensured that the various topics covered would reflect the lessons that are contained with the current textbooks. It was completely ensured that each subject training manual would cover a certain block such as grades 1-3 and grades 4-9. As such 11 training manuals were developed for the three subjects. After the manuals' development, they passed through an intense editing process in which the MoE took the lead. In early 2011, the manuals were printed for wider delivery and training of teachers in the project target governorates.

Please note that these training manuals are considered to be of very high quality. In his introduction letter to these manuals, the then Minister of Education wrote that “Yemen would not only be using these in Yemen but because of their high quality, the training manuals would also be offered to other countries in the Gulf”.

As most international development workers are aware, while the work with ministry officials is rewarding and leads to sustainability of interventions, some bureaucratic procedures within the government structures sometimes delay the implementation of some interventions. This happened with the development and final publication of the training manuals. Although the initial preparation work was done on time, the editing and finalization process took some extra time since various players from the MoE were involved. This resulted in delayed approval of the manuals for final printing.

It is because of these reasons that the manuals were printed in early 2011, which was also the time when the political unrest was brewing in the country. Electricity shortages negatively impacted the printing and publishing industry in Yemen during this time. Despite the challenges, through the use of private generators, the BEST program was able to print thousands of copies of each training manual for delivery to the government officials and teachers.

Education Quality Improvement - Teacher Training and Capacity Building

Complying with Yemeni Ministry of Education's objective of improving educational quality, the BEST program provided targeted support in developing high quality training materials for master trainers covering Math, General Science, Chemistry, Physics, and Arabic. In addition, subject supervisors, trainers and teachers from target governorates of Hodeida, Amran and Ryma were provided training support to understand the content of the training materials and implement the student centered pedagogical practices in their classrooms. At the start of the BEST project, during 2008 program year, using the project funds, the BEST project continued the capacity building activities of the EQUIP 1 Basic education program in Mareb and Shabwa. It was done as per the request of USAID as well as keeping in view the significant training needs of teachers in these two governorates.

The Master Trainers' Training manual (Math, Science, Chemistry, Physics, and Arabic) were developed for two blocks of grades – grades 1-3 and grades 4-9. Since training needs of teachers change as per the cognitive development of students as well as increasing complexity of subject matter, the BEST project ensured that grade specific manuals are provided to the government. FHI 360 is very glad to report that the Ministry of Education fully participated in the development of the training manuals. It was the dedication of qualified and well reputed Yemeni curriculum writers and trainers, with technical support of BEST that resulted in high quality training materials. In the preface letter which was part of the final printed copy of all materials that the Minister of Education Dr. Al Jawfi lauded the high quality of these training materials and suggested that Yemen would also like to offer these to other countries in the Arab region.

In 2011, the BEST project printed more than 700 copies of each training manual and distributed them to master trainers and more than 600 math, science and Arabic teachers in Hodeida, Ryma and Amran. BEST project provided training support to teachers and master trainers during all years but the training activities accelerated during 2011. Intriguingly, despite the contentious political situation in Yemen when security situation was precarious and most donors had left Yemen, the MoE officials were very keen to engage BEST and worked with BEST consultants to organize several trainings in the target governorates. This may reflect the typical sentiment of a

people who felt besieged by the political turmoil and wanted to ensure that their education system is not affected by what happens in the political arenas of Yemen.

In addition to subject specific training, USAID requested BEST to provide training to teachers and trainers on preventing gender-based and school-based violence amongst students. The Doorways manuals prepared by USAID-EGAT were the basis of these training sessions. BEST technical experts supervised the translation and adaptation of these manuals from English to Arabic. The manuals were adapted to the Yemeni and Islamic context. From the last quarter of 2010 to August 2011 the BEST program trained 450 academicians including headmasters, teachers, and master trainers in doorway manuals and concepts of stopping violence against students. In addition 480 students also attended training sessions that were designed specifically for them to understand the ways to prevent school based violence and understand their rights. The following table provides a summary of training activities of BEST

Teacher Training Component

Continuation of the capacity building activities of EQUIP I program in 2008:

- Trained 53 (41 males and 12 females) grades (4 – 9) science subject teachers in Mareb Governorate.
- Trained 216 school headmasters from 84 schools (199 males and 17 females) in the Governorates of Shabwah and Mareb.

The above two trainings were provided despite the end of the EQUIP 1 Basic Education program in these two governorates. This was done as per the request of the government and keeping in view the dire training needs of the teachers.

- Conducted a six-day training of trainers (ToTs) for 61 (55 males and 6 females) headmaster trainers to provide them with practical methodologies used in implementing training activities.
- Conducted a sixteen-day training workshop for 620 school headmasters and their deputies (556 males and 63 females) from 400 schools located in 8 targeted districts to provide them with skills required for effective school management.
- Conducted a three-day workshop for forty-eight (34 males and 14 females) teacher inspectors to provide them with skills required for implementing professional development visits to schools.
- Facilitated a series of 430 professional development in the 58 targeted schools (on average 8 per school) for 461 grades (1-3) teachers and headmasters (306 males and 155 females) from targeted schools in Ryma and Hodeida governorates to review field visit results with the teachers and give feedback and discuss means of improvement in the teacher and headmaster performance.
- Conducted a six-day training workshop for 72 school headmasters (66 males and 6 females) in preparation for the new academic year 2010-2011 and to enhance the

headmasters' skills in evaluating their school plans for the previous academic year 2009/2010.

- Conducted a series of workshops for the development of nine (9) training packages and supplementary educational materials in Arabic, Math's and Science subjects.
- Conducted six-day training for 20 Arabic subject trainers (all males) from Amran, Ryma and Hodeida governorates.
- Conducted six-day training for 313 Arabic subject teachers (145 females and 168 males) from Amran, Ryma and Hodeida governorates.
- Conducted a series of Arabic, Maths and Physics training workshops for 322 grades (4-9) teachers (196 males and 126 females) from Amran, Ryma and Hodeida governorates.
- Conducted Maths subject training workshops for 332 teachers of grades 1-3 teachers (209 males and 123 females) from 58 targeted schools in Amran, Ryma and Hodeida governorates.

Multi-faceted Approach to Safe School (MASS) Program (School Based Gender Violence)

- Supervised the entire process of the Arabic translation and the Yemenization of the three Doorways Manuals received by USAID.
- Conducted ToT MASS training for a total of 54 trainers (46 males and 8 females) from the training sector of the Ministry of Education at central and targeted governorate levels of Amran, Shabwah, Hodeida and Ryma.
- Conducted five-day training for 39 headmasters (2 females and 37 males) from the governorates of Amran and Shabwah.
- Conducted six-day training for 367 teachers (82 females and 285 males) from the governorates of Amran and Shabwa.
- Conducted five-day training for 480 students (117 girls and 363 males) from five-schools from Shabwa and Amran governorates.

Teacher Capacity Building – Lessons Learned for USAID and other Donors

Like school rehabilitation, teacher training and capacity building remains a major demand of all governorates in Yemen. Due to lack of transportation for subject supervisors and difficulty of access to hard to reach schools, many school teachers do not receive any training for many years in a row. So there is a significant gap between the demand for training and its supply. A major drawback (or a system's flaw) in the Ministry of Education is MoE has created a culture of actively seeking from donors the „consultancy fees' for its trainers for training purposes. In

other words when government trainers are asked to conduct a training - something which they are supposed to do but are unable to do so because of lack of training budget – they demand fees from donors. One would think that when a donor provides funds for training materials, cost of venues, and money for food, lodging, and transportation of trainees and government trainers that the extra “cost” of MoE trainers’ time to deliver the training should be borne by the MoE itself. However, this is not the case. Donors in Yemen are sometimes even harassed by MoE trainers who seek fees for their services; this has become a „standard practice’. Although what MoE trainers ask for are nominal fees (less than YR 6000 per day), there is certainly a need for all donors to negotiate with MoE with one united voice against such practices.

Gender Awareness Training

Ensuring gender equity has been at the core of the BEST-Yemen whole school development model. Rather than treated as a separate component, gender equity was a primary focus throughout all of BEST components. Key interventions aimed to achieve gender-equal opportunity to educational services include: improving equality of access and participation of boys and girls in schools; contributing to the creation of a gender sensitive school environment; improving school administration/management and teaching methods through the use of a “gender lens” so as to promote gender equity. The overall aim of gender equity within the BEST project is to eliminate discrimination against women and girls at the school and community levels.

Gender Equity Main Objectives

- Eliminate discrimination against women and girls at the community school level.
- Improve equality of opportunity between boys and girls in the schools.
- Contribute to the creation of a gender aware school environment.
- Improve school administration/management teaching skills and practice using a “gender lens” so as to promote gender equity.
- Collaborate in the improvement of the enrollment and retention of females in basic education institutions.

Gender Equity Activities /Accomplishments

BEST Achievements in Gender Mainstreaming

- Conducted gender assessment in 58 targeted schools (in Amran, Ryma and Hodeida
- Developed two Gender Sensitization Materials for teachers and headmaster, fathers’ and mothers’ councils to familiarize them with gender issues and increase their awareness of negative impact of prevailing gender roles in school communities (these materials are

considered to be the first gender material developed by the project for the ministry) (see Annex 3 for teachers and headmasters gender sensitization manual, and Annex 4 for fathers' and mothers gender sensitization manual)

- Compiled life skills training material that includes life skills exercises of specific interest to girls with the objective of increasing their self-confidence, problem solving , leadership and teamwork skills etc. (Trained students empowerment groups on its use) see annex 5 for lifeskills training material compiled)
- Carried ToT Gender Sensitization Training for 28 cluster Trainers (24 males and 4 females) on the material developed by the project for teachers and headmasters.
- Initiated Students Empowerment group in nine (9) cluster schools in Amran, Ryma and Hodeida governorates on a pilot base using the lifeskills material.
- Facilitated a four-day life skills training workshop for 22 participants (10 males and 12 females) in-order to train student's empowerment groups from nine (9) cluster schools initiated on a pilot base.
- Conducted a four-day gender sensitization training for 27 Heads of Girls Education, Community Participation and Inspection Divisions (16 males and 11 females) from the central level as well as the governorates level of Amran Ryma and Hodeida governorates.
- Conducted a two-day refresher training for twenty-two (22) teacher trainers (19 males and 3 females) from Amran, Ryma and Hodeida governorates.
- Conducted a two-day gender sensitization training for 58 school headmasters (54 males and 4 females) from Amran, Ryma, and Hodeida governorates.
- Conducted a two-day gender sensitization training for 200 from grades 1-9 (135 males and 65 females) from Amran, Ryma, and Hodeida governorates.
- Conducted a series of gender sensitization orientation 167 members of fathers' and mothers' councils (FMC's) in nine schools in Ryma and Hodeida governorates (97 males and 70 females) from Amran, Ryma, and Hodeida governorates.

Throughout the program implementation, gender-related issues were addressed in every programmatic activity of the project as per the approved plans. This was accomplished through development and distribution of a menu of gender mainstreaming approaches entitled, "Promoting Gender within the BEST Yemen Activities" that was developed as a guide to support Component Coordinators with incorporating gender into each component.

The BEST-Yemen project developed two "Gender Sensitization Training manuals" for the MOE and a life skills training material oriented towards girls. The gender-sensitive manuals developed by BEST were approved by the MOE for general utilization by other donors also; BEST

produced manuals is the first national level gender-training manual to be implemented by the Girls' Education Sector within the ministry.

The life skills materials, also compiled under BEST, includes life skills exercises of specific interest for girls with the objective of increasing their self-confidence, problem solving, leadership and teamwork skills etc. The material was developed according to the life skills considered most interesting for girl students such as extracurricular activities. BEST has pilot-tested the material in nine cluster schools in Amran Hodeida and Ryma governorates. **In addition, the project distributed gender-related awareness-raising posters** to targeted schools during the fathers' and mothers' council elections and training. During the dissemination, the project gender coordinator also met with mother and father councils, principals and teachers and provided them with guidance on how they could mainstream gender into their school. Please note that the BEST Project is the first to introduce simple lifeskills activities for students these lifeskills were introduced in 9 cluster schools on pilot base.

As a result of these activities, the girls in BEST target schools:

- Actively participate in the morning assembly and have contributions and announcement for the students
- Work in group together with boys to identify problems and find practical solutions (problems concerning school and community, such as cleanliness, problem, dropout, early marriage, corporal punishment, etc)
- Participate in awareness raising campaigns in school
- Get elected to head classrooms especially in higher grades (grades 6)

Gender and Challenges at the Central Level

Perhaps no Middle Eastern country has benefitted with the gender awareness interventions of the donors as has Yemen. All donors whether working in education or any other sector have provided gender sensitization trainings to the officials at all levels. There is also evidence that many MoE officials actively promote gender work and equality; however equality of men and women is not, yet, completely a part of the MoE culture. It is not clear whether it is because men actively want to discriminate against women, or because of lack of already less resources, a greater proportion of resources are diverted to boys' schools and men, by virtue of being higher in number, are able to benefit more from donor programs. In addition to the above, the very culture of Yemen such as women's lack of mobility, disallows women to benefit more from donor programming. Therefore, unless certain norms in the Yemeni society change, donor support and interventions could only help to a certain extent only.

Community Mobilization and Adult Literacy

Like gender, community mobilization for girls' education was a high priority of the project. The project team worked with parents and community leaders in all target communities to not only galvanize support for girls who are young and enrolled in schools but also to support adult literacy classes for those girls who are young mothers and those who had dropped out of schools. The BEST project devoted a considerable amount of time and resources in enhancing community participation and in introducing literacy classes.

Community Participation (CP) Component

- Conducted a twelve-day community participation training for 83 social workers (58 males and 25 females) to be able to effectively activate the roles of members of the fathers' and mothers' councils (FMCs) in the targeted school communities.
- Conducted a two-day professional development workshops for 54 (33 males and 21 Female) Social Worker Trainers (SWTs) and Heads of Girls' Education and Community Participation Divisions in Amran, Hodeida and Ryma to enable the SWTs to effectively evaluate community participation activities in project school communities.
- Conducted a two-day social worker professional development workshop for 60 social workers (19 females and 41 males) to enhance their understanding of their roles and responsibilities and activate community participation activities in schools.
- Conduct a six-day training workshop for 56 trainers of trainers and social workers trainers on Social Workers Manual, (Part II) that aimed at refreshing the trainers' skills to effectively implement Social Worker Trainers training.
- Conducted a six-day training workshop for 141 (111 males and 30 females) social workers and headmasters on Social Workers Manual (part II) that aimed at refreshing the social workers' and headmasters' skills in implementing community participation activities in schools.
- Facilitated two workshops to develop "Awareness Raising Messages to Promote Girl's Education" attended by 52 participants (24 women and 28 men) from the Ministry of Education, other government ministries, non-governmental organizations (NGOs) and representatives from the donor community.
- Facilitated a series of three CP visits that were implemented by 27 social worker trainers (11 female and 16 male) from 58 school communities to measure the performance of school-based social workers and the fathers' and mothers' councils (FMCs) in each of the schools.
- Supported 20 Summer Education Programs (SEP) that targeted over 2,535 students (1,348 males and 1,187 females) and nine hundred and five (905) fathers and mothers councils' members (103 fathers, 802 mothers) including adult literacy learners.
- Facilitated a three-day workshop for 44 participants (16 females, 28 males) including directors of community participation and girl's education at governorates and MOE levels, and social workers trainers at districts level to assess the activities of community participation, girl's education, school social services, and analyze the relevance to community needs and exchange expertise and successful experiences among the local partners.
- Conducted a two-day training workshop for 1204 members of parent's councils (419

Mothers and 785 Fathers) to enhance the planning and follow-up skills of councils' members.

- Supported the formation and training of 96 fathers' and mothers' councils (53 father councils and 43 mother councils). The council members were democratically elected and trained on their roles and responsibilities, and planning and follow-up of community participation activities).
- Conducted 36 professional development meetings for 812 members of parents' councils (521 fathers and 291 mothers) to exchange successful experiences.
- Conducted a two-day professional development workshops for fifty-six (34 males and 22 female) Social Worker Trainers (SWTs) and Heads of Girls' Education and Community Participation Divisions in Amran, Hodeida and Ryma to enable the SWTs to effectively evaluate community participation activities in project school communities.
- Conducted a two-day social worker professional development workshop for 83 social workers (25 females and 58 males) to strengthen their skills in effectively implementing and monitoring community participation activities in schools.

Adult Literacy (AL) Component

- Established 75 Adult literacy classes in Amran, Ryma and Hodeida governorates.
- Conducted a series 150 supervisory visits to 75 adult literacy classes to evaluate the learners' level of achievement and to determine how well they have benefited from the REFLECT Methodology.
- Facilitated a series of life-skills training for 47 AL facilitators to evaluate Phase I and phase II of the REFLECT¹ Methodology, address the challenges encountered in the AL classes, and effectively implement life-skills activities.
- Facilitated a series of AL training workshops for 43 AL facilitators (42 females and 1 male) to evaluate the work progress of the REFLECT Methodology and address the challenges encountered in the AL classes.
- Conducted a series of AL training for 23 AL inspectors (16 females and 7 males) from Hodeida and Ryma governorates to provide the inspector with refresher training of their roles and responsibilities.
- Conducted a series of twelve-day refresher training for 64 adult literacy (AL) facilitators (all females) to provide the facilitators with refresher training of their roles and

¹ Reflect or Reflect-Action is an innovative approach to adult literacy learning and social change with participatory methodologies.

responsibilities and identified points of strengths and weakness in their performance.

- Conducted a series of supervisory field visits to 75 AL classes in Amran, Ryma and Hodeida Governorates to assess the AL training outcomes in the field.

Education Management Information System (EMIS) and Capacity Building

In 2004, Yemen Social Fund had developed the most sophisticated EMIS. That system not only clearly showed educational indicators it was also linked to the health information system for comprehensive social planning for Yemen. The education components of this system were later transferred over the central MoE in Sana'a where some dedicated managers updated it on regular basis and connected it to google earth for additional efficiency. Unfortunately, because the information generated by the system was not used effectively by any one, the MoE's EMIS deteriorated. Today some components exist and there is even staff who manages some fragments of the system, a comprehensive and effective central EMIS does not exist. For these reasons, the BEST program attempted to establish mini EMIS systems at the governorate level where the project was operational – Ryma, Amran and Hodeida. The purpose was to gather bi-yearly data, process it, and then pass it on to the central EMIS in Sana'a for further national analysis.

Following are the achievements in terms of EMIS capacity building (these also cover work that was completed for BEST under Equip 1:

Education Management Information System (EMIS) Component

- Trained six (6) ICT directorate staff from Amran, Mareb and Shabwah governorates in maintenance of computer networks and to provide ICT staffs with the necessary theoretical and practical skills that would enable them to independently maintain the computer networks.
- Assisted in installing high speed ADSL services for the Ministry of Education in the target Governorates.
- Conducted a training workshop on “Using of collection and statistical data for the planning and decision making” for twenty-one (21) senior officers (20 males and 1 female) from the Governorate Education Office of Amran and the targeted District Education Offices.
- Conducted two (2) courses on “Education indicators” for forty-eight (48) directors and heads of divisions (45 males and 3 females) from the targeted education offices in Amran, Hodeida and Ryma governorates.
- Conducted three (3) courses on “Basic computer skills” for sixty-six (66) directors and heads of divisions (56 males, 10 females) from the targeted education offices in Amran, Hodeida, and Ryma governorates.
- Conducted a course on MS Excel for twenty-three (33) directors and heads of divisions of

statistics and ICT (all males) from the eleven (11) targeted education offices.

- Conducted three (3) courses on "Basic Management Skills" for sixty-eight (68) heads of divisions (66 males, 2 females) from the targeted districts education offices of Amran, and Ryma governorates.
- Conducted four (4) courses on "Education planning" for ninety-two (92) directors and heads of divisions (85 males, 7 females) from the targeted education offices in Amran, Hodeida, and Ryma governorates.
- Provided equipment to targeted district education offices in Amran, Hodeida, and Ryma governorates to improve the capacity of these offices to process their school data and to utilize the EMIS tools.
- Installed school database software in the district education offices of Amran and Thula and trained their EMIS staff on its management.
- Conducted training for six (6) specialists from the central Ministry of Education (all males) on the use of ISA server software to enable them organize and access the Internet and MoE network.

Project Monitoring and Evaluation Activities of the Project

The BEST project team engaged in basic M&E activities related to its programming. The purpose was not to monitor and evaluate its own activities but to assess whether the project was on track or not. In addition, the project provided training to MoE officials in basic M&E related tasks. The following are some important M&E tasks that were undertaken:

Monitoring and Evaluation (M&E) Component

- Conducted a training workshop facilitated by an international expert for twenty-four (24) MoE trainers (22 males and 2 females) in Classroom Assessment.
- Conducted a training workshop for nineteen (19) teacher inspectors (all males) to implement field studies and measure the academic achievement of students in grades 3 & 8 in Math, Arabic and Science subjects in 58 targeted schools.
- Implemented field surveys to measure:
 - ✓ Student academic achievement for one thousand four hundred and fifty-two (1452) students of grade 3 (883 males and 569 females) and nine hundred and thirty-three (933) students of grade 8 (617males 316 females)
 - ✓ Students' attendance rate from eleven (11) targeted schools for a total of four thousand eight hundred and seventy five (4875 students) (3699 males and 1176 females).
 - ✓ Surveys administered to more than 300 teachers in the three target governorates to assess their perception about the math, science and Arabic training which was provided to them. The surveys also gathered information about teachers' plans to use the training in their daily work in schools.

The Impact of the BEST Program in the Target Governorates and Schools

Increase in Student Enrollment

FHI 360 is pleased to report that there has been a significant increase in the number of girls and boys in the schools where the project was operational. Please see the following table:

Governorates	Enrollment Data 2008/2009 Baseline			Enrollment Data 2010/2011			% Increase Boys	% Increase Girls
	Boys	Girls	Total	Boys	Girls	Total		
Amran	4,541	3,379	7,820	6,268	4,775	11,043	28%	29%
Hodeida	6,583	5,014	11,597	7,021	6,392	13,413	6%	22%
Ryma	2,279	2,050	4,329	2,418	2,289	4,707	6%	10%

In terms of girls' enrollment in the target schools, Amran and Hodeida experienced the highest gains with 29% and 22% respectively. In Ryma, the increase in girls' enrollment by 10% is also substantial given the difficult terrain and culture of the governorate. FHI 360 believes that the good quality of school construction and addition and repair of latrines in addition to other quality improvement interventions have contributed to the positive changes in the enrollment of boys and girls in these governorates.

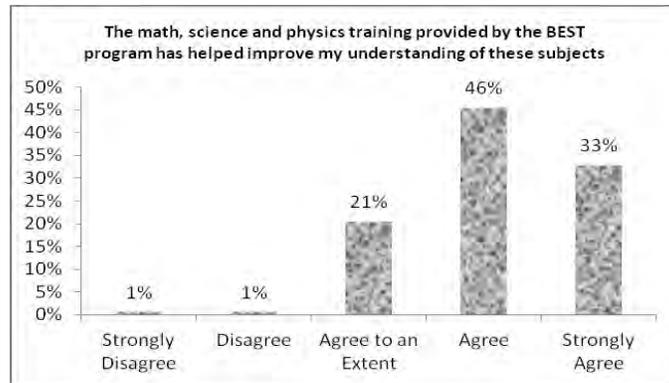
Enhanced Teaching Skills in Math, Science and Arabic

As mentioned above in the report, the math, science and Arabic training manuals, although of excellent quality, were finalized by the MoE by the beginning of 2011. Other than ensuring that the contents of the manuals are of high quality, the project team consultants had very little control over MoE procedures of approvals of learning materials. This resulted in very little time to adequately train the teachers in math, science and Arabic and monitor their progress in classrooms.

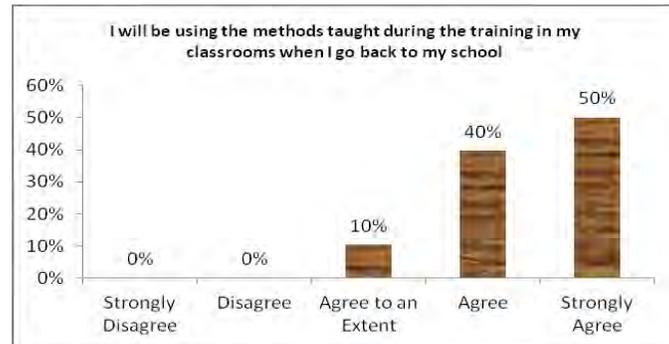
However, as soon as the manuals were approved, the project immediately mobilized the publishers for their production during the first quarter of 2011. In the second and third quarter, the trainings were delivered to math, science and Arabic teachers who teach grades 1-3 and grades 4-9. The project provided this training to more than 600 teachers in the three target governorates.

Because of time and security constraints it was not possible to follow these teachers in their classrooms and study how they were performing after the training. However, the project surveyed 300 of the trained teachers to get an idea about their perception of the training and their plans to use it in their classrooms. The survey also covered the challenges that they face in the school in terms of math, science and Arabic pedagogy.

The following is a brief summary of their responses:



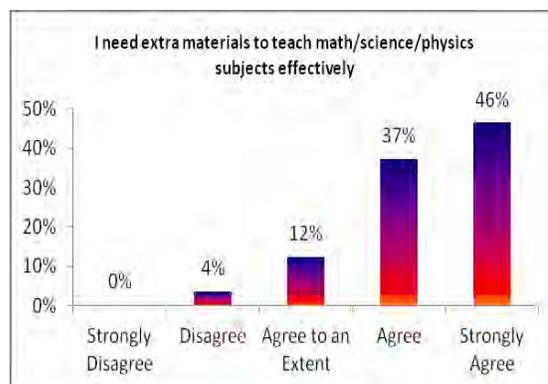
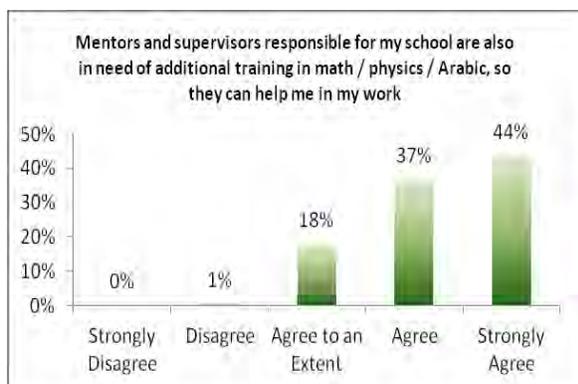
79% of the survey respondents either agreed or strongly agreed with the statement that the math, science and physics training had helped them improve their understanding of these subjects. 90% of them also reported that they will use the methods taught during the training in their classrooms.



However, 91% of the respondents stated that they need much more training to master the pedagogical aspects of math and science. Please see below.



More than 80% of the teacher also reported that they need more teaching materials to be able to do teach these subjects effectively. A majority of the teachers also said that the mentors and supervisors for math, science and Arabic learning in their governorate also need more training and capacity building. Please see the two charts below.



From the survey responses, it is very clear that math and science teachers in Ryma, Hodeida, and Amran need more and continuous attention and that short training provided by the BEST project is very obviously not enough. In addition, although the BEST project provided some learning materials, the needs in each school are very high and these teachers need to be provided additional teaching aides that would help them teach these important subjects in an effective manner.

The Impact on Student Performance in Math and Science

Related to the challenges of teachers' capacity in math and science pedagogy is the performance of students in these subjects. Although through construction and rehabilitation of schools the BEST program created an enabling learning environment, what goes on in those classrooms still requires concerted and continuous attention and support.

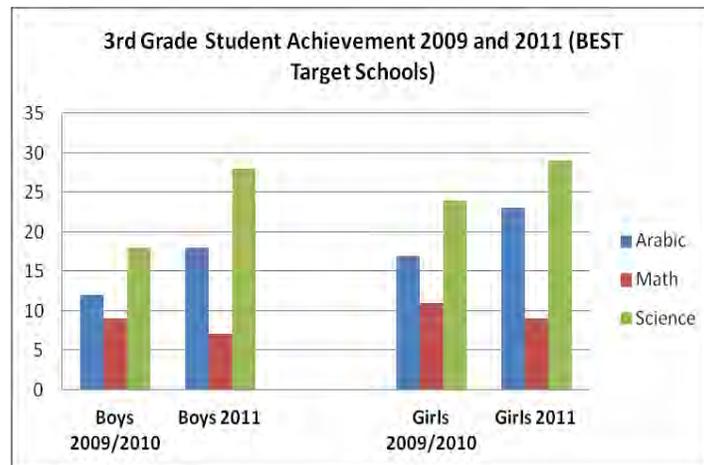
In 2009/2010 academic year the BEST project collected student performance data in math and science according to the grades. The data showed that all students performed poorly in math and science. After community participation, school rehabilitation and other project interventions during 2009, 2010 and 2011, there has been some improvement in student performance in math and science however, it remains extremely poor.

For the 2011 assessment study, students of third and eighth grades within the school sample were selected. This study focused on students in the third and eighth grades because these two grades are at the end of the first and second cycle of basic education. The study sample of third-grade students consisted of 443 students (307 boys and 136 girls); and the study sample of eighth-grade students consisted of 347 students (249 boys and 98 girls). The exams were prepared by the MoE officials and the following scoring criteria were used.

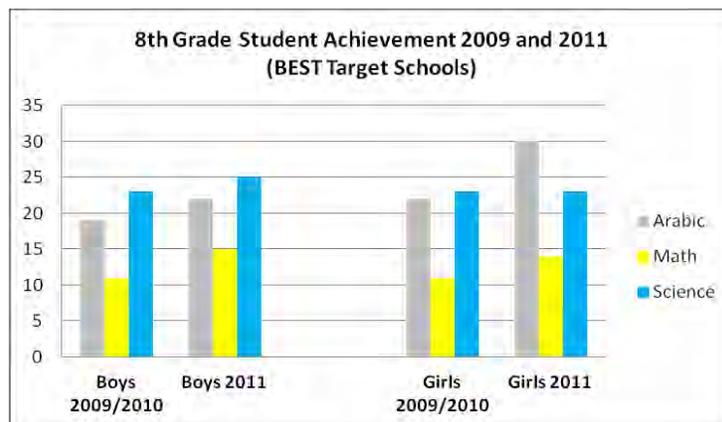
Score	Level of Performance
Less than 20 points	Fail
21-40 points	Grade D
41-60 points	Grade C
61-80 points	Grade B
81-100 points	Grade A

Please note that in the Yemeni examination system the level of “Grade C” starts from 50 to 64 points. But the BEST project opted to reduce the grade C performance scores from 50-64 to 21-40 only. The reason of adopting this criterion reflected the difficulty of the exams administered by this study and their focus on modern skills that are not usually covered in final exams in Yemen basic education schools. In other words, since the program wanted to assess critical thinking and creative skills – not covered by official Yemeni exams – the points’ criteria were lowered.

The 2011 test results for grade 3 students in a sample of students shows that although student scores in Arabic and science improved from 2009, both boys and girls performed very poorly in math exam. Please note that 3rd grade girls have performed better than boys in all subjects but still their performance in math is very poor (failed math in both 2009 and 2011 tests). Boys failed math and Arabic in both 2009 and 2011 but performed significantly better in Science in 2011 than in 2009.



8th grade students’ scores in all subjects are also very low. Please see the following chart.



Although the girls performed slightly better from 2009/2010 in both Arabic and math, their performance in science either remained the same or increased only slightly. Boys, although

performed better than in 2009/2010, their overall performance is categorized as poor in all subjects.

Why Are Yemeni Students Performing Low in Math, Arabic and Science?

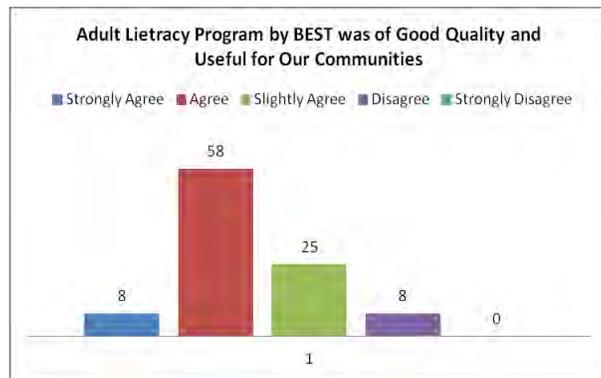
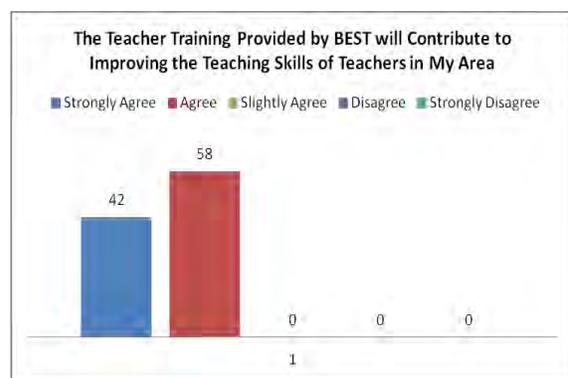
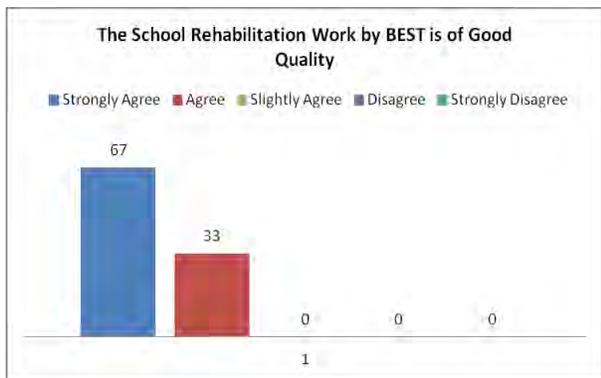
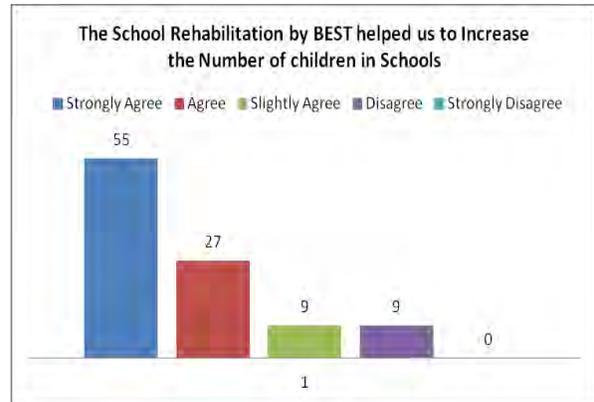
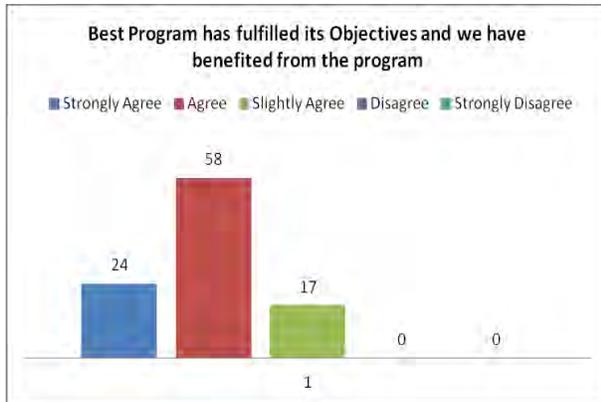
A major problem that needs donors' and GOY's immediate attention is low quality of teaching and learning in all subjects in most Yemeni schools. There are few programs and opportunities for Yemeni teachers' pedagogic skills enhancement. Many teachers, who already have low qualifications in math and science, rarely get a chance to attend good quality training in their subjects. The supervisors for math and science are rarely able to travel to school for training purposes. In addition, the learning materials to effectively teach these subjects are not available.

Although through the BEST project USAID enhanced school conditions and desks and chairs were provided to the schools, the need for teaching and learning materials is so immense that an entire and long term project is needed to exclusively focus on quality enhancement in schools. BEST project's short training programs were not enough to make any substantial impact on student or teacher performance. There is a need to provide monthly trainings for math and science teachers and create a system where their learning and teaching habits could be observed and improved through individual attention.

FHI 360 had submitted a short proposal to USAID requesting funding to implement additional training for math and science teachers in the BEST targeted clusters, however the proposal was rejected. FHI 360 had argued that there was a need to build upon the successes of USAID interventions in the 11 clusters of the BEST programs (covering 58 schools). Through USAID's program these schools were rehabilitated, communities were mobilized, schools were provided furniture and other materials; however, more funds were needed to single mindedly pay attention to quality improvement in these schools. Unfortunately, USAID-Sana'a did not want to invest anymore in the three governorates which had witnessed success during the past five years.

In Summary - Opinions of the Government Officials on the Success/Challenges of the BEST program in Yemen

In the last quarter of the BEST project the BEST team surveyed and interviewed 12 high ranking officials from the three target governorates as well as from the Central Ministry of Education in Sana'a. The official provided their responses on ten questions ranging from whether the BEST project had fulfilled its obligations to the government to BEST program's impact on increase in girls' enrollment in target schools. The following graphs present a general summary of their responses for various questions.



The following are direct quotes (translation) from written surveys and interviews from the ministry of education officials:

Amran District Officer for Education

- We highly appreciate your support to our district which is the capital of the governorate
- We would recommend that the future programs focus on school building improvement including renovation and equipments supply.

- Special attention should be given to the human resources at the district who should be provided quality training and capacity building programs.

Al Jabeen District Officer for Education

- After conducting all different interventions I think it is important to have continuous follow up and evaluation to ensure success
- Some official staff were not given their right in getting trained
- A close monitoring should be conducted when choosing trainers so as to the focus is on quantity rather than quality

Deputy Minister for Girls Education

- I recommend expanding the intervention of the project in more schools and districts in the targeted governorates.
- It is important to come up with a final joint document that serves as a guide for future replication of the project experience.
- A workshop should be held to present the status of the targeted schools before and after intervention in order to evaluation the areas of strength and weakness and to come up with recommendations for future improvement
- The Sector recommendations should be shared with the new USAID projects in order to provide further support to the Girls Education Sector

Conclusion

The BEST program was probably one of the most visible and effective education development programs in Yemen. Although it has made significant impact on awareness about girls' education and increased the number of both boys and girls in schools, much remains to be done in terms of improving quality of math and science teaching and learning in Yemeni schools. It is hoped that USAID-Sana'a will devise quality improvement programs that will further the success in Amran, Hodeida, and Ryma. As mentioned above, Yemeni teachers need concerted support in pedagogy training in math and science and need to be provided regular monitoring and evaluation support.