The Mobile Solar Computer Classroom Interim Report

1. Report Summary

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<th>Report Due Date</th>
<th>February 29th, 2016</th>
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<tbody>
<tr>
<td>Project Title</td>
<td>The Mobile Solar Computer Classroom</td>
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2. 2015 Summary

The Mobile Solar Computer Classroom Project is designed to address the problem of limited hands on computer trainings and lack of access to information in low income schools and communities in Uganda.

During 2015, the project was able to empower 2,500 students and 60 teachers with computer skills and information access in 5 primary schools in Mukono District.

We conducted 5 community sensitization sessions on the relevancy of ICT and the Internet in development. Over 500 community members were reached by these sessions.

Nurturing progress through Technology Training, Job Creation and the Power of the Sun
3. **Project Activities**

Project activities included:

1. **Meeting with the School Management**: The project team had one meeting with each school’s management committee to cement the partnership and go over the MOUs.

2. **Computer School Training**: The project provided basic computer skills training to 500 students per school. The training team provided training once a week at each of the schools, during the school year. The training team spent 7 hours at each of the schools where it provided lessons to students in primary; three, four, five, six and seven. Altogether, each school was given 12 lessons throughout the year.

   a) **Topics Covered**;

   I. **Introduction to computer/Computer Awareness**: This covered general terminologies, proper handling and care, general and appropriate use of technology

   II. **Introduction to Computer**: Students were taught fundamentals of using the mouse and keyboard using Maendeleo Foundation’s self-teaching and localized **emPower Software**. Students were taught to learn through games.

   III. **Application of Computers**: Students in upper classes of primary; five, six and seven were introduced to Microsoft Word

   IV. **Introduction to the internet**: Students in upper classes of primary; five, six and seven where taught how to use the internet for research.

   b) **Methods of training used**

   I. **Hands-on computer practice**: During lessons, each student had access to a computer and they worked by themselves or in a group of two students per computer.

   II. **emPower Software**: The Maendeleo Foundation self-teaching emPower software was used to enable students use games to learn and practice their skills in a more exciting and self-paced learning environment.

   III. **Internet based games**: Where the internet connection allowed, the trainers used internet based computer and basic literacy games to enable students explore, practice and learn new skills.
IV. **Review**: There was a review of the previous lesson at the beginning of each lesson to ascertain whether the students had understood what had been taught and to answer any questions they had.

V. **Brain storming and discussions**: Students were kept engaged through discussions on various topics. At every new topic, students were given a chance to give their ideas and discuss them in groups.

VI. **Screen projection**: As a way of keeping students attentive and follow the class a projector was used.

3. **Community ICT Sensitization Sessions**: During the school year, the project had at least one ICT sensitization at each of the schools. Each school hosted one session where participants included local leaders, parents, out of school youth and various community groups such as women’s and farmers groups. Participants were addressed about the importance of ICT, information and internet in development. Topics highlighted included, using mobile phones to; communicate effectively, access and share information, transfer and receive money, and access free health services.

4. **Teacher ICT Professional Development**: Two 5 day basic computer skills workshops were held for 60 teachers from 5 schools. These workshops were held during the school holidays.

   a. **Topics Covered**;
      
      I. **Computer Basics**: Teachers were taken through the fundamental computer skills of using mouse, keyboard and given introduction information about how computers work, their relevance in society and education.

      II. **Computer Application**: Participants were introduced to;
      
      a. documentation using Microsoft Word,
      b. Record keeping using Microsoft Excel
      c. Presentations using Microsoft Power Point

      III. **Introduction to the Internet**: Participants explored how to use the internet for research, communication and collaboration.

   b. **Methods used**: The trainers used PowerPoint presentations to demonstrate how the different features work and to show what trainees can do to achieve desired outputs.
I. **Hands-on computer practice**: During trainings, each teacher had access to a computer and they worked by themselves.

II. **Practice class activities** were given to the trainees so as to enable them explore how different document outputs are achieved.

III. **Individual Support**. The trainers moved around to check on the progress of the trainees, answer any questions raised as well as provide personal support to trainees that needed it.

IV. **Group Work and Presentations**: Trainees were grouped into groups of two people and given a project which they had to present to the class.

5. **Stakeholders meeting**: The project team met with the school project coordinators, school head teachers and project support team to discuss the progress of the project. Participants discussed arising issues and ideas for improvement of the project. Each school was represented by 2 people during these meetings. Two stakeholders meetings were held throughout the year.

4. **Project Performance**;

The project is still on track since all the activities were implemented as planned and there has not been in lag in the planned activities.

5. **Project Outcomes & achievements**

**Outcomes**:

1. The project equipped 2,500 students with computer skills and enabled them get a chance to use computers. As a result student’s computer skills were developed.

2. 60 teachers improved their computer skills.

3. The projects built internet skills for 60 teachers and they were able to learn how to use the internet for research and communication.

4. Over 100 community members gained interest and knowledge about computers and the internet. They were able to explore how to access information using digital tools like computers and mobile phones.
Achievements:

1. We purchased new laptops and our lessons were conducted more smoothly as the equipment did not disturb the team during the trainings. The training team was able to spend an extra 3 hours at each of the schools.
2. We were able to pass on practical computer skills to students and teachers who can now confidently use a computer and navigate the internet to access information.
3. Student’s writing and reading skills were enhanced through constant story writing, research and class presentations.
4. The project greatly inspired students, teachers and community members to be more interested in digital technology and information access. Trainers always emphasized and demonstrated the benefits of digital skills and information to people and society.
5. The project maintained a good relationship between the organization and the schools through proper and timely communication with the school administration.

Challenges

1. Inconsistent attendance by the students due to some students. In 2 schools, there was a lot of student absenteeism due to students being sent back home to collect school fees, school requirements and some did not attend school during market days since they had to go and work.
2. The number of computers was not enough since most schools have high number of students per class. An average class over 70 students and this made it had to give students enough time to practice.
3. Low literacy levels in schools made it a bit difficult for the classes to keep the set pace. Some students could not understand English and this made it hard for the training team to effectively communicate and adhere to the teaching rules. More still, students in lower classes like primary three and four had very poor reading and writing skills which limited their level of creativity and participation during the lessons.
4. Slow internet. The internet connection was slow in most areas and it made it hard to conduct internet based lessons.
Recommendations

1. There’s need to in calculate basic reading, and writing skills training into the computer training
2. Need to engage the teachers more during the trainings so that they can pick more interest in ICT.
3. There’s need to have a day of exposure where the entire school and community is exposed to various ICT tools and host people who can give live examples on the importance of technology.

Conclusion

The first phase of the project run as planned. Although we met some challenges, we were able to come up with solutions that enabled the project to run as planned.