

E-LEARNING FOR LIFE - WITH A DIFFERENCE
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Abstract

This is a project jointly sponsored by the Malaysian Ministry of Education, United Nation Development Programme, and Coca-cola Far East Limited. The specific objectives of the project were to: Equip some hub schools with physical and technical infrastructure and facilities; Provide training to the teachers and students to initiate the multiplier effect and; Improve the teaching and learning culture. However, the main objective of this paper is to discuss the mobilization of the local community to participate in this project.

This project aims to correct this imbalance and bridge the digital gap between the urban and the rural areas through a sustainable e-learning scheme. It is a novel, noble and notable attempt to bridge that ever-widening digital divide between the urban and rural areas. It is a noble project in the sense that it puts the local communities as part of its main agenda. The project tries to bring the school and the local community together. Most ICT projects conducted by the Ministry of Education focused only on the schools. The digital divide is not the only thing widening between the school and the community. The contact, interaction, and the communication between the school and the community are also widening, resulting in the school developing separately from the community. More often than not the school is staffed by 'outsiders', who may be devoted professionals, but lack the affection for the community of which they are not part of. A project like this can hopefully bring back the cooperation between the school and the community to work for a common benefit.

Two major concerns of the project were the issues of effectiveness and sustainability. The issue of effectiveness is more often related to the cost of implementing the project whereas the issue of sustainability refers to the objectives and needs. The central concept of this project is the transformation of Malaysian Schools into centers of excellence for life long learning experiences involving students, teachers, and community members.

The project did not result in a major mobilization of the local communities in the use of ICT to leverage socio-economic opportunities. It was obvious that the schools could have done more to attract the participation of the local community, however, given the circumstances that they were in and the pioneering status of the project, the schools were hoping for the ball to roll by itself. It would seem that if the community were to get too involved, the school might not be able to accommodate the extra work. There were also apprehensions among the teachers that they may not have the necessary competency or the time to entertain the needs of the local community.

INTRODUCTION

This is the evaluation of the E-learning For Life (ELFL) project, a partnership between the Government of Malaysia which is represented by the Ministry of Education (MOE), United Nation Development Programme and Coca-Cola Far East limited. The main objective of this project is to find sustainable ways to bridge the digital divide more effectively between urban and rural schools and between schools and communities of different socio-economic status using limited resources.

The project aims to provide sustainable growth in the economic and teaching and learning aspects based on the objectives of the project inception (within eighteen months) and examine whether the programme was able to:

- Provide substantial increase in information and communication capacity of the beneficiaries through the provision of physical infrastructure for information acquisition and distribution, through modern computer technologies (hardware, software, connectivity, etc.).
- Contribute towards bridging the information and knowledge gap through building the skills of a core group of students and teachers as peer trainers who would then transfer their skills and knowledge to others. Over time the number of teachers and students benefiting from the multiplier effect of the training of trainers could amount to hundreds or thousands respectively.
- Leverage, mobilize and provide socio-economic opportunities for the local communities through the use of information and communication technologies, and provide options for a cost effective long-term mechanism to provide continuity of service, so that it can be replicated elsewhere in Malaysia or other countries.

This report was written based on the project proposal and the quantitative data as well as qualitative information and evidence about the programme, especially with regards to the aforementioned scope.

BACKGROUND OF THE ELFL PROJECT

This is a pilot project which is trying to revive the community extension concept but takes it several steps further to ensure that the benefits are accrued to both schools and communities. In particular the project proposes to:

- Equip at least six schools with essential hardware, software, and information;
- Develop a design and implementation approach that addresses the sustainability issue;
- Develop a strategy for extending the school's ICT facility to the community with a view to bridge the digital divide more effectively; and
- Build capacity of selected school staff, teachers, students, parents and community members to not only use ICT in a manner that improves their lives but also to train their peers and to transfer the knowledge as widely as possible.

OBJECTIVE OF THE EVALUATION

The original objectives of this study were firstly to evaluate the impact of implementation of the E-learning for life project and secondly to provide recommendation on the suitability and sustainability of the project. The specific objectives of the project were to:

- Equip the hub schools with physical and technical infrastructure and facilities
- Provide training to the teachers and students to initiate the multiplier effect
- Improve the teaching and learning culture
- Mobilize local community participation

METHOD OF EVALUATION

The evaluation of this project was carried out using, both quantitative and qualitative measures. The quantitative data were gathered through two sets of questionnaires; teachers' questionnaire and students' questionnaire. The qualitative data were gathered through observations, interviews and document analysis from actual site visits.

MOBILIZING LOCAL COMMUNITY PARTICIPATION

The main issues of this project were:

- The quality and suitability of facilities provided
- The Multiplier Effect of the training and usage of the materials and
- The mobilization and the participation of local communities

However, this paper will concentrate on the final issue, i.e. the mobilization and the participation of local communities. However, we need to understand the first two issues first before we could begin to understand the issue of the mobilization and participation of the local communities in this project.

The Quality and Suitability of Facilities Provided

All the schools were connected and equipped with the following equipment: 1 G4 computer as a server (equipped with a CD burner), 3 iMac G3 computers (stand alone), 5 iBook portable laptop computers, 1 Wireless system (Airport), 1 Laser Jet color printer, 1 Scanner, 4 – 29inch Television sets, 2 – Digital Video Cameras and 1 duplicating machine (Xerox*). However, only two schools accepted the duplicating machine. Nonetheless, the following sub-section gives a more detailed answer to the above questions.

The facilities were strategically situated in very conducive environment and at the rate of its present usage; the facilities provided are sufficient to meet the needs of the teachers and teaching. However, judging from the observations and interviews, the future usage could be on the rise. Therefore, the people involved must be ready for this trend. This is because during the site visits the team of evaluators recorded that most teachers were actually interested in using the facilities. However, they felt that the teachers were still uneasy about the technology. The older teachers (40 years and above) felt that too much time and energy is taken up to master the knowledge and skills to use the facilities. Nevertheless, even these teachers are changing their teaching paradigm. The younger teachers, who will form the bulk of the teaching staff soon seemed able to adapt to the changes around them. Furthermore, it was found that the location of facilities and the accessibility for presentation of teacher-developed materials were strategically located within the school premises.

The facilities provided were suitable although the Apple computer provided were new to the users. They seemed reluctant to get used to the new computer environment initially but once they realize that this system is compatible to the PC environment and at times outperform the PC, they began to take to these computers. The security based maintenance plan was basically a 'key and lock' issue. The facilities were kept in special rooms under lock and key, which were maintained by the coordinating teachers. Care was also taken to prolong the life span of the computers as well to ensure that all facilities were functioning. For that purpose a logbook on the usage and movement of the laptops were kept. The coordinators were doing a fine job in keeping tabs on the security and administration maintenance of the facilities. However, there was not much they could do when the facilities broke down.

The Multiplier Effect

Some of the key questions that were asked about the multiplier effect were; Did the multiplier effect take place? Did the training of a core group of trainers result in more training? Did a multiplier effect on personnel, usage, and products occur?

Ten teachers from each school attended a workshop arranged by UNDP at RECSAM, Penang in May 2001. The workshop was conducted by personnel officers from Apple Macintosh. The main objective of the training programme was to develop a core group of trainers to handle the computer facilities that will be sent to these schools as well as to train other teachers, students, and the local communities in the same capacity. However, there was no formal training conducted for the students.

Based on the data gathered, it can be concluded that generally, the teachers have a positive belief on the importance of ICT in teaching and learning, particularly in preparing their lesson plans and teaching materials, but they were not yet able to use the ICT in their teaching fully. 51.5% of the teachers consider that technology is an important element in their teaching, and after undergoing the training provided, 60.2 % indicated that ICT has enabled them to create lesson plans and teaching materials easily and 56.1% ICT tools has also allowed them to work together as a group, such as in developing teaching materials and sharing lesson plans. However, they seldom include multimedia features in their teaching (34.2%) and they admitted that they do not have the skills to operate all the ICT tools (22.4%) provided.

Although they did gain knowledge during the training (15.8 % Disagreed) and had no difficulties applying the knowledge in practice (22.0% Disagreed), only half (49.5%) of the teachers agreed that the training could help them manage the technology used in their teaching. Nonetheless the training has helped them use the materials and facilities provided (51.5%). The study found that less than 35% of the teachers have used multimedia in teaching. However, it must be remembered that these are rural schools. Therefore, 35% is an encouraging figure considering the available facilities and the training the teachers have had. Unfortunately, this does not tally with their response to the ability to operate ICT tools as only 22% said that they were competent to operate these tools.

The multiplier effect is important as resources become scarce. This is further aggravated when the demand for its supply increases tremendously as teachers become more accustomed to its

usage. As such the best solution under these circumstances is to maximize the use of limited resources efficiently.

The Schools' Participation

The appointed trainers trained the other teachers in this school. Hampered by a series of problems such as the unreliability of Internet connection, limited resources and knowledge, they still carried out their responsibility to ensure the project success. Initially they made very little attempt to upload the teaching and learning materials that they have developed onto the portal. The collaboration between teachers in different schools was still minimal. Nonetheless, internal collaboration is increasing.

One of the projects' objectives was for the core trainers to train a core group of students in the use of the ICT tools. These students were then expected to train their peers. An examination across all the hub schools showed that the students received no formal training from the core trainers. This core group of students was in turn expected to train other students as part of the multiplier effect. However, we found no evidence to show that they were trained formally. Generally the students were passive recipients of the project through the teaching and learning processes.

Communities' Participation

The E-learning for life was a noble project in the sense that it puts the local communities as one of its main agenda. Most ICT projects conducted by the Ministry of Education focused only on the schools. The E-learning approach was a logical one given the widening digital divide in the country. Naturally being the first and at a time when the divide is still widening it would be imprudent to depend too much on this project to cover the gap.

The project did not result in a major mobilization of the local communities in the use of ICT to leverage socio-economic opportunities. This is because 85% of the respondents were either unsure or could not agree to the success of this portion of the project. Only one school had any significant activity to introduce ICT to leverage economic status, and that was SMK Batu 4, Kuala Rui, when they tried to coordinate and encourage a group of locals to start developing an eco-tourism industry in Gerik.

It was obvious that the schools could have done more to attract the participation of the local community but given the circumstances that they were in and the pioneering status of the project, the schools were hoping for the ball to roll by itself. It would seem that if the community were to get too involved, the school might not be able to accommodate the extra work. There were also apprehensions among the teachers that they may not have the necessary competency or the time to entertain the needs of the local community.

The main question was; "Did the project result in the mobilization of the local communities to use information and communication technologies to leverage socio-economic opportunities? Particularly:

- Were selected individuals and groups from the community introduced or trained in the use of ICT?

- Were a community portal established for purposes of dissipating relevant community information and services?

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Most of the data for this section were gathered through direct interviews and in cases where the respondents were not available, data were gathered through documents and the teachers involved. Generally it would seem that there was very little involvement of the local communities in this project. The project did not result in a major mobilization of the local communities in the use of ICT to leverage socio-economic opportunities. This is because 85% of the respondents were either unsure or could not agree to the success of this portion of the project. Only one school had any significant activity to introduce ICT to leverage economic status, and that was SMK Batu 4, Kuala Rui.

The school and the NPC officer had tried to coordinate and encourage a group of local people to start an eco-tourism industry in Gerik. A few local residents were identified and a number of meetings were arranged in the school. The first few meetings did not materialize as very few people turned up. The eco-tourism idea was an extension to the home-stay concept, where tourists get a semblance of the tranquility of a kampong life and a chance for rest and recreation such as fishing and jungle tracking. ICT will be used for promotion and advertisement purposes and other facilities such as the digital camera video which can be used for recording purposes. As such, revenue can be generated to sustain the project. In order for this to work it needs the commitment of the schools and the local communities. It also requires someone to take charge of the whole project and this is sadly lacking. The following are some illustrations of the community projects in the specific schools:

a. Sri Pengkalan Secondary School

Sri Pengkalan did not pay much attention to the involvement of the local community. Their priority during the duration of the project was to introduce and implement the project goals to the school teachers other than the core teachers. They have also made arrangements to introduce the project to the school students and the local communities in stages at a later date. Presently, the teachers were still coming to terms with this relatively new technology. They needed to understand a lot of things with regards to the E-learning for Life concept; its uses, its functions and its potentials. They also needed to gain a certain level of competency before they could impart that knowledge to others.

b. Dato Menteri Secondary School

At the moment the project did not result in any concerted effort by the school to promote the involvement of the local community. Their priority during the duration of the project was the security of the facilities and to safeguard the facilities from damage. They were also very concerned about using the facilities as teaching aids and for developing materials to be used in class. They were engrossed with this role as many of the concepts such as the use of common

portals to download and share materials were new to them. In short they were not ready for the community hitherto.

c. Sri Muda, Penaga Secondary School

There were some efforts initiated by Sri Muda to involve the community in the project. By and large the individual selected to participate was the representative of the Parent Teacher Association. One such person was also a teacher in the school. His involvement in the SCEC was limited to reporting the progress of the project to the PTA mainly because the PTA was chipping in to help sustain the project. The school also tried to get the involvement of some prominent locals to help fund future developments of the project. They also sought the assistance of the Youth and Sports Department to get the local youths to participate in the programme. There were no evidences to suggest that the ELP information and services were extended to the members of the community other than to a small group of youths and the PTA. Sri Muda conducted a training programme on how to use some software for the youths in the area with the help of the Youth Department. A community portal was not established but one has already been set up for them.

d. Pulau Tawar, Jerantut Secondary School

Pulau Tawar attempted to get the involvement of the local community in the project. The individual selected to participate is the representative of the Parent Teacher Association, who is also a teacher in the school. His involvement in the SCEC was limited to support in the setting up of the lab. There was no evidence to suggest that the ELP information and services were extended to the members of the community, except for producing some pamphlets. Most teachers directly related to the projects were still coming to terms with the role they were expected to play. Many were still not competent in using the basic tools, such as the laptop and the scanner.

e. Batu 4 Secondary School

There were efforts to get the local community involvement through eco-tourism such as the home stay project. At the point of our visit to Kuala Rui, a number of meetings were being planned. This is a gallant effort but it needed time before the local community could get into it. They needed the support of the teachers and the school for the project to be successful. However, the partnership needed to be spelt out clearly. Apart from that there was not much community involvement in this e-learning programme. At this point in time the teachers were still grasping to gain competency in the usage of the facilities. They needed more time to tackle the roles they were supposed to play and they wanted to do it one at a time.

Like in most of the hub schools there were hardly any evidence to suggest that the ELP information and services were extended to the members of the community. Nevertheless, this does not mean that it was not possible. Perhaps those concerned were not ready for it yet. The acting principal was more concerned with his teachers gaining the necessary skill and competency and distributing and maximizing the use of the facilities rather than getting bogged down with mobilizing the facilities to benefit the communities. This is not to say that the school was not concerned about bridging the digital divide but they felt that they were not competent enough to do that yet as they also wanted to bridge their own digital divide in the school.

f. Tunku Anum Secondary School

In Tunku Anum not much collaboration between the school and its local community took place. However there was evidence to suggest that the school did make several attempts to involve the community in the E-learning project. There were indications too to show that individuals from the community were selected to participate in the programme. However, these individuals were mostly representatives from the Parent Teacher Association and their involvement was minimal. It was obvious that the school could have done more to attract the participation of the local community but given the circumstances that they were in and the pioneering status of the project, the school was hoping that the ball would roll by itself. It would seem that if the community were to get too involved, the school might not be able to accommodate the extra work. There were also apprehensions among the staff that they may not have the necessary competence or the time to entertain the needs of the local community. Lately however, the school, after training a few youths in the area tried to generate money through video recording of marriage ceremonies in their areas.

CONCLUSION

This project is a novel, noble and notable attempt to bridge that ever-widening digital divide between the urban and rural areas. It is a noble project because it tried to bring the school and the local community together. The digital divide is not the only thing widening between the school and the community. The contact, interaction, and the communication between the school and the community are also widening, resulting in the school developing separately from the community. More often than not the school is staffed by 'outsiders', who may be devoted professionals, but lack the affection for the community of which they are not part of. A project like this hopefully can bring back the cooperation between the school and the community to work for a common benefit.

It is a noble mission because people involved in this project are not part of the local community; nonetheless they tried very hard to elevate the socio-economic status of the people in the local communities. The real gain must not be seen in the activities that they have carried out but in their efforts to show the vast potential and possibilities available to the local communities through ICT. Nonetheless, changing the mind set and thinking paradigm of the local communities will take time and lots of effort.

This is a notable project because the sponsors did not throw fuel to the fire and expect it to burn by itself. They wanted to ensure that what little fuel they put in resulted in the desired fire. As such they monitored the project closely. They rekindled the fire when it was fading out and replenished the fuel to ensure the occurrence of continuous burning. The sponsors went to great lengths to plan, implement, and monitor the project and find ways to effectively sustain the project. In short they wanted the fire to continue burning, enough for the school and the community to take over the responsibility to ensure continuous burning, and there were indications that the schools can do this successfully.

It is important that projects such as this succeed because if they do they will not only close the digital divide but also the communication divide between the school and the community. The project started on the right foot when its intentions were noble, novel and notable. As a result

many significant contributions towards alleviating the digital divide were made. This is after all, a pilot project; as such the lessons learned here could be used as guiding principles to be used elsewhere.