

***Project LIFTS –
Harnessing ICTs to Serve the Region***

A Full Paper Presentation

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Project Overview

The world is confronted with changes so swift that we have been outpaced by the demands of this information-based and technology-driven era. The means by which we do business, learn, teach and communicate have been altered drastically. On top of this, the Department of Education declared that the whole country is experiencing an educational crisis so extensive that the very future of the country is at stake. It is not only a likelihood but a looming certainty that this deep-seated crisis would be aggravated further unless we do something about it. Yet again, we find the same reluctance in many of us to act. Drastic changes call for drastic measures. Apathy and mediocrity can no longer be tolerated in education which, for so long, has been a repository of diatribes against falling standards and has been labeled unjustly as a litter bin of social ills.

These pronouncements, though quite disturbing, were not made just recently. It's a long-standing fact and should really be a cause for alarm since there are no manifestations that we are coping successfully with the situation.

A decade or so had passed since the dawn of the information superhighway and the computer becoming a dominant factor in education among other fields. It was two years ago when Secretary Abad brought forth the SFI as a response to the declining conditions of education. Apparently, we hardly managed to produce a dent in the backlog in spite of all the efforts generated to address these problems. Although shaken by the fact that we are still deep in crisis, it appears that an open weave of solutions is all that we have to satisfy the equation.

Learning Improvements for Teachers and Students (LIFTS) is a project born out of bare necessity. Having identified several major constraints which prevented the region from achieving its goals, an overarching scheme was finally formulated. Twenty five (25) "learning stations" were established that will cater to the most pressing training and learning needs of practically all schools in the region. Relatively, these stations are the most equipped, well-resourced schools in MIMAROPA as far as ICT is concerned owing to the dynamic leadership of their respective school heads. Each learning station is run and managed by twenty (20) highly-trained learning facilitators whose exceptional performance in their chosen field earned for them the highest respect and recognition this region can confer.

Project LIFTS is by far the most comprehensive project undertaken by the region but by no means a panacea. It is basically a catalyst to engender the desired changes in education among the schools it serves. Its initial task is to create a capacity building environment for English, Science and Mathematics teachers and students and, in due course, would include teachers and students in other learning areas. Moreover, steps had already been taken to pursue its mission of reducing if not totally eliminate as of yet the digital divide vis-à-vis its vision of becoming one of the leading advocates of ICT in the whole country.

Background of the Project

The constraints preventing MIMAROPA from achieving its goals may be unique to the region or characteristic of the problems that beset the whole country. Its geographical configuration led to physically isolated divisions, islands within a school division and widely dispersed schools. Such diverse physical and cultural features of the region pose a grave challenge to everyone. Regional and division staff as well as teachers go through an ordeal of hopping from one island to another to conduct or attend trainings. It is, indeed, an extremely harrowing experience during bad weather conditions when the sea becomes treacherous and unforgiving.

Delivery of services is not only confined to the question of whether one has the physical power but more so if one has the luxury of time and the funds to carry out the task. These factors are so closely linked as to be impossible to consider separately. If one is in conflict with the other, then there is no option but to put off any plans until a later time or date no matter how imperative it may be.

The inadequate training of teachers is the most debilitating factor that impedes students' achievement. Regardless of the number of resources and facilities available, nothing can be accomplished much if teachers would remain impoverished of skills in content and pedagogy. On the other hand, creative and resourceful teachers endowed with unquestionable knowledge of content could best serve the students in improving their performance.

The proliferation of teachers who are teaching in areas outside their majors or area of specialization creates an imbalance between expectations and learning outcomes. Keeping these teachers and helping them advance and deliver to the best of their capabilities is such a laudable gesture of support and attention on the part of the department.

Regionwide, studies showed that 80% of the teachers actually handling English, Science and Mathematics are non-majors, a clear manifestation of disparity between teachers' area of specialization and the actual teaching load. Likewise, teachers have limited access to instructional materials and technological facilities that could have significantly aided teaching and other activities.

In terms of learning achievement, only SEDIP and TEEP divisions garnered a relatively better performance as evidenced by division, regional and national tests. TIMSS-based regional achievement test likewise revealed that sample schools tested failed to achieve even a 60% MPS while the total tests (in MPS) in the National Achievement Test were 44.68 and 49.54 respectively in 2004 and 2005. Though Romblon topped the regional ranking, only three (3) learning competencies were mastered.

With due consideration of the foregoing, providing teachers unlimited access to training and materials through the maximum use of technology available in

selected and strategically located secondary schools is believed to be the best means of achieving desirable ends. Thus, Project LIFTS was born.

Objectives

The following are the objectives of Projects LIFTS:

- *Create an alternative, efficient and cost effective mode of service delivery*
All learning stations are practically extensions of the Regional and Division Offices. These stations would be utilized as learning centers for both elementary and secondary school teachers where the transfer of learning may be done through modular instruction, distance learning, video conferencing, visiting faculty, online consultation and face to face instruction. They will be exposed to technology based training without leaving their respective localities.
- *Build the capacity of English, Science and Mathematics teachers*
Project LIFTS is aimed at improving the competence of teachers and students. It aims at addressing the professional growth of teachers by building and improving their capacity, competence, creativity and resourcefulness through better learning opportunities and experiences. Teachers' performance is believed to be the single most accurate predictor of students' achievements. Teachers' capability, creativity, and resourcefulness are therefore essential factors to be developed and enhanced perpetually to equip them with skills in shaping brighter futures for their students. At least fifty percent of English, Science and Mathematics teachers in the schools served by a particular learning station should have been trained at the end of the first year of project implementation.
- *Reduce then eliminate the digital divide*
Project LIFTS will provide opportunities for teachers and students to access various modes of learning with the extensive use of information and communications technology. Further, with Project LIFTS in place in different learning stations, teachers and students alike will have access to the worldwide web where they can surf enormous amount of timely and relevant information. With local and global resources readily available and with sufficient equipment, learning stations would be appealing enough to teachers, students and to the community as a whole to make them visit the stations and avail the services they offer.
- *Decentralize management of training*
As part of the program of the region for shared governance, teachers are now empowered to conduct trainings, make decisions, draft policies and develop educational programs and materials among others. Selected teachers from identified learning stations shall be trained to serve as learning facilitators. A total of five hundred elementary and secondary school teachers shall be exposed to trainers training.

- *Develop teachers' skill in producing technology-based instructional materials*

Nobody can refute the fact that teachers are in the most expedient position to determine what is best for their students. Although there exists a numerous array of educational software, one has yet to make modifications to adapt them to the local context. A teacher, having direct involvement in the teaching-learning process, possesses a great deal of information about his or her students especially their academic strengths and weaknesses. Once equipped with the skill of using different computer applications, a teacher can develop courseware for computer-based teaching.

- *Foster communities of practice where everyone shares and learns in the experiences of others.*

Once the project has been fully implemented all the schools in the region are no longer isolated islands as they used to be. Through the learning stations, ideas may be exchanged freely, instructional software materials developed by one may be used along with others, problems may be discussed in real time during online consultations, mentoring goes beyond borders and many more.

Target Beneficiaries

Immediate beneficiaries of the project are elementary and secondary school teachers and students of English, Science and Mathematics.

Major Components/Activities

Phase 1: 1.a Selection of schools across the region to serve as Learning Stations

A team of individuals from the Regional Office which is mainly composed of the people from the Secondary Education Division was formed for the selection of 25 learning stations. Selection shall be done by actual visits and ocular inspections of all computer-recipient schools with consideration of the level of technological leadership of the school head. This activity aims to accomplish the selection in three months from the start of the school visitation.

1.b Identification of donor agencies, COEs and TEIs/Refurbishment of Learning Stations

Inasmuch as financial constraints always pose as deterrent to any project, the Regional Office has to form alliance with other agencies for the transformation of learning stations into fully functional information and communications centers.

Likewise, partnership with prominent educational institutions reputed for their excellence in teacher and student development shall be established to ensure competence among the learning facilitators in content and pedagogy.

The Regional Director should succeed in brokering financial and academic assistance by the end of February, 2006.

Phase 2: *2.a Selection of teachers to serve as learning facilitators*

The Elementary and Secondary Education Division were tasked to identify teachers qualified to serve as learning facilitators. The chiefs of both divisions as well as education supervisors of English, Science and Mathematics have to administer survey questionnaires and tests and conduct interviews with individual teachers. The activity will start on January, 2006 and shall be concluded at the end of March, 2006.

2.b Training of learning facilitators in participating COEs and TEIs

By May, 2006, all learning facilitators must have been trained in cooperating COEs and TEIs regarding content and pedagogy. All elementary and secondary educational supervisors of English, Science and Mathematics shall perform regular monitoring of the progress of individual learning facilitators for the duration of their training.

Phase 3: *3.a Computer advancement and facilitation skills (CAFS) training of learning facilitators*

The learning facilitators of the 25 learning stations shall undergo training as initiated by the Regional Office for six days to develop their facilitation and computer skills. Computer training shall focus mainly on the employment of the newest ideas and techniques in Microsoft PowerPoint for courseware development.

3.b Development of educational software

Regional trainers came to a decision to just maximize the use of computer applications available to the teachers in the development of courseware instead of spending considerable amounts of money for the procurement of additional software. This has two advantages. The regional and division offices as well as the learning stations can avoid additional expenses and teachers have already a basic knowledge of the selected applications for developing technology-based lessons.

3.c Development of course design

The learning facilitators together with elementary and secondary education supervisors of English, Science and Mathematics shall contribute to the construction of a course design for the training of non-major teachers in the three areas. Such should be specific and definitive as far as the actual needs of these teachers are concerned. The least learned competencies of the students shall form part of the issues for consideration.

Phase 4: *Training of Non-Majors in English, Science and Mathematics*

Having equipped the teachers of the necessary skills in the performance of their functions as learning facilitators, the learning stations are now ready to deliver basic learning and training services to the non-majors of English, Science and Mathematics. It is expected that initial trainings shall be held by August, 2006.

Project Accomplishments

- On October, 2005, the Regional Office conducted surveys and ocular inspections of qualified schools on the basis of their strategic locations and their ongoing ICT programs. On December, 2005, the three-month long activity led to the development of a Geographical Information System (GIS) of each division upon which the selection of schools was primarily based.
- A series of casual meetings between the directors of Regional IV-MIMAROPA and DOST-SEI took place during the months of January and February of 2006. Eventually, the whole month of March and the early part of April were utilized by both agencies in formalizing their agreements. A generous amount of 6.9 million pesos was granted by DOST-SEI for the training of trainers and 2.5 million pesos for the procurement of multimedia equipment which include computer units, LCD projectors, karaoke, headsets and microphones.
- The Hon. Sen. Aquilino Pimentel likewise made a benevolent contribution of 1.5 million pesos for the networking of computers and the procurement of *NetMaestro*, a software program for real time monitoring and remote controlling of client PCs. All learning stations were fully equipped by the end of May, 2006
- Seven hundred forty (740) teachers were screened to ascertain those who possess the minimum qualifications to perform the duties of a learning facilitator. A total of 500 elementary and secondary school teachers were finally selected at the end of March, 2006. Two hundred fifty (250) of these teachers are secondary school teachers teaching English, Science and Mathematics.
- The learning facilitators underwent a five-week training at the Philippine Normal University (PNU), De La Salle University (DLSU) and the University of the Philippines – National Institute for Science and Mathematics Education Development (UP NISMED) from April 16 to May 19, 2006.
- Four hundred forty (400) Learning facilitators of 20 learning stations in six divisions underwent CAFS training for 6 days. Outputs required from the participants were SLEs and computer-based lessons. Learning facilitators of 3 learning stations in Occidental Mindoro are scheduled to undergo the same training on August 21-26, 2006. This is the last leg of the CAFS training.

Key Issues and Challenges

- identification of schools capable of serving as learning stations
- qualification of teachers who would serve as facilitators
- selection of technological tools which the facilitators are capable of using or learning with ease
- unrestricted access to ICT resources
- course design and content

Success Factors

- partnership with DOST-SEI, COEs, TEIs, etc.
- school head's technology leadership
- open and clear communication lines
- reward system
- training on content, facilitation and computer skills

Policy Recommendations

❖ Implementation of the Project

- There should be adequate and proper orientation of key persons.
- A pilot phase must be carried out before the phase rollout.
- Deliverables of the project should be defined.
- Those involved in the selection of learning facilitators should come up with stringent standards in selecting facilitators

❖ Facilitators / Teachers

- The Regional Office together with COEs and TEIs should develop concrete learning management system for the learning facilitators / teachers
- There should be increased involvement and participation of learning facilitators in managing learning content
- The activities and experiences in the learning stations should promote "personally gratifying" experiences for facilitators and teachers.

❖ Learning Stations

- The kind and number of equipment should meet minimum requirements.
- Satellite schools and the learning station should mutually support the maintenance and proper upkeep of the stations with emphasis on value and not just price.