A SMART PARTNERSHIP PROGRAMME : THE COMPUTERIZATION OF A TECHNICAL SECONDARY SCHOOL

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ABSTRACT

Relative to the advent and sophistication of information technology, whereby the process of learning and teaching can be greatly enhanced, efforts to "computerize" institutions of learning especially technical secondary schools in Malaysia are still lagging behind as compared to countries like the United States, United Kingdom, and Canada. And if Malaysia is not to be left behind in its global quest for academic excellence then greater and more practical measures in the computerization of its educational institutions need to be implemented - fast! It must be noted that efforts towards "computerizing" our Malaysian schools should not be left to the sole responsibility of the education authorities but also complemented by all other parties committed to the educational well-being of our children. Therefore, this paper aims to present a report on how one local technical secondary school was "computerized" at very minimal cost and that benefits everyone population of the school concerned. What is unique about this project is that the whole process of computerizing the school was the result of a smart partnership comprising the school administrator, the Parent Teacher Association (PTA), the Equipment Repair Center (ERC) and of course, the most important element of them all, the teachers of the school themselves. Furthermore, the entire project was and is still fully funded by the PTA of the school receiving full moral and technical support from the Technical Education Department of the Ministry of Education. Today, the school boasts not only of a fully equipped air-conditioned computer laboratory complete with about 40 desktops and other peripherals but also and most importantly that each and every one of the 1200 students who graduated from this school would have been well-equipped with a 2-year basic computer skills necessary when venturing into the real farther world of academic

endeavours. All these have been made possible at a minimal cost of only RM30 per students - thanks to the smart partnership programme!

Introduction

Computer-Aided Learning (CAL) seems to be the "in-thing" in today's learning environment. Ever since the last decade or so, education authorities all over the world are beginning to realize the importance and benefits of towards enhancing and improving the educational development of the population. Already countries like United States, Sweden, and Canada have and are fully gearing up to "computerize" their schools. According to a recent survey, Canada has become the first country in the world to connect all of its public schools, including first nation schools, to the internet. This is followed by US where more than 95 % of all its public schools having access to the internet for students to use (The New Straits Times, 18 Sept 2000).

In fact, among educationists, they strongly believe that CAL should be part-and-parcel of the whole learning process itself as evident through their research findings. In a study conducted upon first semester students of Institute Teknologi Tun Hussein Onn, the researcher discovered that Malay students who were normally reluctant and shy to use the target language felt that they could improve on their face-to-face speaking sessions in class after having gone through CMC interaction processes. They were actually "speaking with their fingers" (Berhannudin, 2000). Based on the analysis of a Computer-Mediated Communication forum, MOOtalk, and on the interviews with participants in her PennMoo class, Wan Fara (1998) in her study on the use of MOO, concluded that the virtual platform presented an opportunity for the participants to practice "speaking" in the target language. It has also been found that there were greater improvements in the level of active participation, discussion quality and group dynamics compared to the traditional classroom setting. It has also been found that there were greater improvements in the level of active participation, discussion quality and group dynamics compared to the traditional classroom setting. In another studies, findings indicated improvement in self-reported mastery of material, critical thinking and analysis skills (Alavi, 1994; Cerratto & Belisle, 1994 cited in Marjanovic, 1999:129-138).

The A-Team

In Malaysia, the "formal" process of computerizing institutions of learning especially at school level has only been recently launched under the "Sekolah Bestari" programme or Smart School programme (Ministry of Education, 1999). Initially, only 85 secondary schools and 5 primary schools have been selected for a pilot project and nine new smart schools are due to be completed by the year 2000. However, this current figure is not even 5 % of the total number of about 8000 schools in the country. Although the remaining schools will, sooner or later, be "computerized" but the question is:

> *"Do we have to wait that long and let our children be denied the immediate benefits that CAL has to offer before our schools can be fully wired-up?"*

or

> *"Can we not do something to complement the existing programmes to take advantage of the numerous unlimited lifelong benefits of CAL that would have otherwise been lost or deemed outdated as a result of delay and procrastination?*

This dire need to be proactive as regards providing lifelong education opportunities for our younger generation was recently highlighted by one prominent Malaysian educationist in his speech on conjunction with the recent World Teacher's Day:

> *"More than any other group in society, teachers are expected to understand the importance of lifelong education. They must therefore, become the champions of lifelong education … While knowledge is universal, the access to knowledge is not universal and is differential. Teachers are among the leaders in society who are entrusted to create opportunities for access in any way possible"*

I would conclude that the term "teachers" as referred to by Ibrahim above includes the school Principal as well. Specifically, the principal, being the head administrator of a school is responsible towards providing the right conducive learning environment and services that enhance quality learning. This can of course be achieved through excellent planning, implementation and coordination of various school development related programmes through smart partnership and cooperation among and between teachers, non-academic staff, PTA as well as the other internal and external learning-related organizations as illustrated by Al Ramaiah (1992) in Figure 1 below:

| MINISTRY OF EDUCATION |
| DEPARTMENT OF EDUCATION |
| DISTRICT EDUCATION OFFICE |

ORGANIZATION SCHOOL

INTERNAL ENVIRONMENT

1. School vision and mission
2. Human Resource
3. Client (Student)
4. Parent Teacher Association
5. Financial Resource
6. Buildings
7. Supporting Infrastructure
8. Equipment
9. Curriculum and Co-curriculum
10. Regulations

GOVERNMENT AGENCY

COMPETITOR

SUPPLIER

CUSTOMER

VESTED INTERET GROUPS

FINANCIAL INSTITUTIONS

PRIVATE / NGO AGENCIES
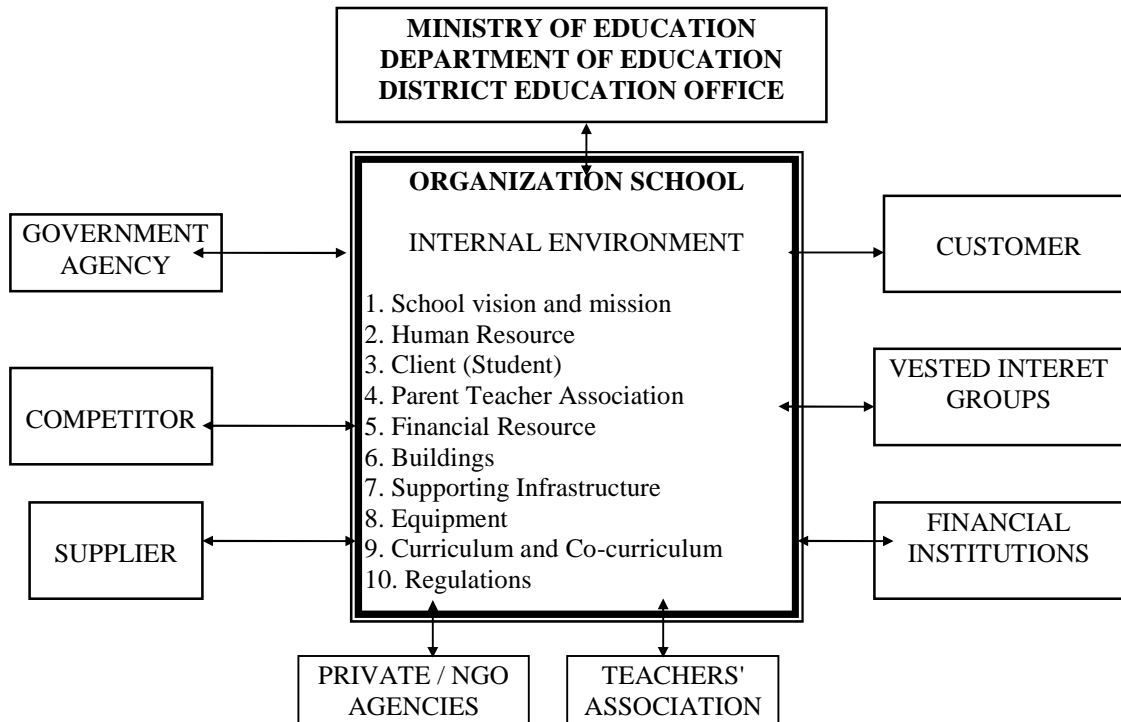
TEACHERS' ASSOCIATION

Figure 1: School Organization Environment (Adapted from Stoner & Winkel, 1989)

The Parent Teacher Association (PTA) is one of the most influential body outside the school organization that can and should contribute towards meeting the needs of educational benefits of the students. Other than providing a forum and service to both the teachers and the parents the association is also to contribute towards meeting the material needs of the students for their academic and co-curricular activities. In this regard, PTAs can help by complementing the "Sekolah Bestari" project to provide sufficient computer facilities and training for the students through fund raising campaigns, donations or smart partnerships with the general public or the relevant agencies.

Another leading member of the smart partnership team is the Southern Zone Equipment Repair Center (ERC). In Malaysia, it is one of the four ERCs under the purview of the Technical Education Department of the Ministry of Education. Among others, the role of the ERC is to assist the department in its mission to realize a world class technical education system towards meeting the dynamic needs of the country. More specifically, the center provides technical service and assistance in aspects of training, repair and

maintenance of equipment and buildings of technical and vocational secondary schools in Malaysia (Ministry of Education, 2000).

The DIY Project

Thus, realizing the prominent roles that every member of the school fraternity can play and of the great benefits that computers can contribute towards promoting educational development, the idea of a Do-It-Yourself (DIY) computerization project through a smart partnership programme came into being. The main objective of the programme was to provide better and maximum opportunity for ALL students and staff of the school to receive a more planned and intensive computer training. It also aims to provide students and staff with enough computer facility for academic and co-curricular purposes. This is actually complementing and in line with the Ministry's aim of equipping students with IT competence towards bringing about a systematic change in education from an exam-dominated culture to a thinking and creative knowledge culture (Ministry of Education, 1999)

"Win-Win Situation"

Among the rationales justified for the project was that being a prominent secondary school that offers technical, vocational and skills training it was felt that providing the students with good and sufficient basic computer training should be part and parcel or the "hidden curriculum" of the school. Furthermore, the real cost of basic computer training incurred would have been relatively expensive by as much as 85 % more for the students if they were to undergo training with private IT companies.

With the implementation of the proposed programme, it was hoped that the school could overcome the persistent difficulties and irregularities of fee collection from students. From previous experiences, private IT companies providing computer education classes to students of the school had a hard time and faced loses in terms of fee collection and repair and maintenance of computer equipment. As in many other schools, there are

bound to be instances where students would fail to fully pay for the computer lessons either deliberately or otherwise.

With the availability of the school's own computer facility and teaching manpower, **ALL** the students, regardless of socioeconomic background, would have equal opportunity to learn computer skills throughout their 7-days-7-nights length of study in the particular school without having to make any further payment. Furthermore, those students who would have not bothered to become computer literate or whose homes are too far away from nearby computer training centers would have the opportunity to learn computing right at their very doorstep.

On the part of the team, because it was a Do-It-Yourself (DIY) project, the teachers and PTA committee members would have learned invaluable computer assembling skills for "free" which otherwise would have been very costly if learned from private IT companies. A sense of pride, commitment, belonging, ownership and care for the public capacity of the school would have also been instilled among staff and students of the school because they themselves paid for the computer facility and that it was out of their own collective effort that has made the whole project possible.

As for the school administration, it would have the chance to acquire, maintain and repair as many computer sets as it likes and at the cheapest cost possible since it has the full financial support of the PTA and the already available trained manpower in its possession. And of course, its inventory of computers and all its peripherals could be easily added with the annual intakes of students.

Implementation of the Project

Prior to launching of the programme, a working paper was prepared and presented in the PTA's Annual General Meeting for approval and endorsement. A working committee was then formed comprising of the school administrators, teachers, Parent Teacher Association and the Southern Region Equipment Repair Center (ERC) of the Ministry of

Education. The team headed by the writer himself, started forming sub-committees, outlining and delegating tasks for implementation (Appendix 1).

The financial aspect of the project was looked into by the PTA. It was decided that members of the PTA contribute a minimum of RM30 each towards funding the project of which was spent on computer components, workshop, training, maintenance and one year teaching allowances for computer teachers. The technical aspects of the project as regards purchase of computer components, training, certificates and workshop was handled by ERC. Meanwhile, selection of participants for the training and workshop was left to the school administrator. The respond among the staff of the school was so encouraging that many were quite disappointed for not having been selected to participate in the 3-day computer training and assembly workshop. Only a nominal fee of about RM20 per participant was charged mostly for handouts and refreshments which the 30 participants paid themselves. Space for training and workshop as well as the room for conversion into a furnished computer laboratory was provided for by the school administrator.

CONCLUSIONS

From the day of its inception in October 1998, the project was finally materialized in early 1999 The project worked out well as planned. Beginning with only 10 computer sets, two dot matrix printers and several other peripherals the figure now has increased to about 40 sets. ALL 1200 or so technical, vocational and skills students of the school are now reaping the benefits of the project whereby computer lessons are conducted every day including weekends by their very own teachers. - for free! Not only can they learn about computers and computer applications, the students can also polish up on their computer skills through preparing society reports, publishing newsletters or building web pages. In terms of cost, the whole DIY project cost only between RM40,000-RM50,000 and resulted in a saving of about RM240,000 in terms of training of staff, computer parts, 1-year computer lessons and computer assembly workshop.

Future plans for upgrading of the computer facility includes purchase of LCD projector, and link to the internet. With the availability of the fully-equipped computer center, systematic training programme and an A-team of committed staff the school is now more reflective of being identified as a complete technical and vocational learning institution - thanks to the smart partnership programme of Sekolah Menengah Teknik Batu Pahat!

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