Malaysia's agenda in the late 1990s involved making the transition from an industrial economy to a knowledge-based economy. Thus, the more traditional purpose of education, that is, to produce an educated person, needs to be reevaluated. If the nation's Vision 2020 is to become a reality, the educational program needs to make a fundamental shift toward creating a more technologically literate and thinking workforce. The education culture must be transformed from one that is memory-based to one that produces an informed, thinking, creative, and caring generation. This paper discusses some of the reforms in the 1990s that Malaysia has undertaken to improve the quality of education. Among the reforms described are the new primary and secondary curricula. Focusing mainly on secondary education, the setting up of different types of schools, changes in assessment methods, and exemplary projects undertaken by the Ministry of Education are highlighted. A brief overview of the expansion and privatization of higher education is also presented. (RT)
Education Reforms in Malaysia.

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EDUCATION REFORMS IN MALAYSIA

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Abstract

The agenda in the late 90s is for Malaysia to make the transition from an industrial economy to a knowledge-based economy. Thus, the more traditional purpose of education, that is to produce an educated person, needs to be reevaluated. If the nation's Vision 2020 is to become a reality, the educational program needs to make a fundamental shift towards creating a more technologically literate and thinking workforce. The education culture must be transformed from one of memory-based to one that is informed, thinking, creative and caring generation. This paper discusses some of the reforms in the 90s carried to the new millennium that Malaysia has undertaken to improve the quality of education. Among the reforms described are the new primary and secondary curricula. Focusing mainly on secondary education, the setting up of different types of schools, changes in assessment methods, and exemplar projects undertaken by the Ministry of Education are highlighted. A brief overview of the expansion and privatization of higher education are also discussed.

Introduction

Since its independence in 1957, Malaysia has moved from the colonial education system. Agendas such as democratization of access to quality education between all levels of education and between rural and urban students, educating the poor, national unity, basic education for all, and keeping children in school have been addressed. Although numerous strategies and efforts have been made to remedy these problems, some of the difficulties and problems remained. Nevertheless, some substantial gains have been made in reducing the gap in achievement between rural and urban children by providing more financial support and trained graduate teachers. Results showed that the goal “basic education for all” is achieved and the emphasis has now shifted to “quality education for all” (Wan Mohd Zahid, 1994).

Over the years, there is a growing concern on the decline in English language acquisition, needs of the nation that are not met by the curriculum, and serious disciplinary problems. The Ministry of Education has approached these problems by developing and evaluating the curriculum, introducing new subjects as core or elective subjects, setting up new types of schools, diversifying and providing intensive training of

teachers, and numerous other projects. Tertiary education has also been expanded by setting up more public universities, private universities, oversea universities set up locally and setting up of twinning programmes and distance learning programmes. For the expansion on education, as an example, in 1995, Malaysia spent 5.3% of GNP on public education expenditures, far higher than countries such as Japan (3.8%), Korea (3.7%) and Singapore (3.0%), whose education sector is already well established. The Government of Malaysia, in its economic program for 1996 to 2000 (Seventh Plan) has placed special priority on improving the quality of its science programs and increasing the number of students in the science stream. Additional emphasis was placed on improving the quality and access to schools in underserved areas.

The agenda in the late 90s is for Malaysia to make the transition from an industrial economy to a knowledge-based economy. The more traditional purpose of education, that is to produce an educated person, needs to be reevaluated. If the nation’s Vision 2020 is to become a reality, the educational program needs to make a fundamental shift towards creating a more technologically literate and thinking workforce. The education culture must be transformed from one of memory-based to one that is informed, thinking, creative and caring generation. This paper discusses some of the reforms in the 90s carried to the new millennium that Malaysia has undertaken to improve the quality of education.

New Curriculum for Secondary and Primary School

The new Integrated Curriculum for Primary School (KBSR) was implemented in 302 schools as pilot in 1982 and was fully implemented in all primary schools in 1983. As a continuum for the six years in primary school, the new Curriculum for Secondary School (KBSM) was implemented starting 1988. The Report of the Cabinet Committee (1979) serves as a basis in the development of KBSR and KBSM. The report asserts that:

1. Emphasis is given to the basic education of 3Rs, reading, writing and arithmetic.
2. Emphasis is given to spiritual education and required disciplinary elements.
3. Emphasis is given to a curriculum tailored to Malaysia.
4. Two mainstreams of secondary level of education, academic and vocational.
5. The opportunity to extend schooling from 9 years to 11 years.
6. Well managed plan for educational management to enhance the overall quality of education.

KBSR and KBSM are the nation’s first curriculum fully developed by the Malaysians. To ensure the quality of education, the set up of the curriculum do take into account curriculum of more developed nations. KBSM emphasizes on religious and

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moral education, as the core to fulfill spiritual needs. Apart from the existing Islamic Education, the non-Muslim students attend the Moral Education classes during the time the Islamic students attend the Islamic Education classes.

Emphasis is also given towards vocational and technical education to fulfill the country's need for skilled workers. Apart from the set up of vocational and technical schools, technical and vocational aspects are infused in the Integrated Living Skills subject introduced in lower secondary schools since 1991 and Living Skills subject launched in primary schools since 1992.

In the previous curriculum, students who do not pass the Lower Certificate of Education (LCE - taken at the end of the third year of secondary education) are dismissed from government schools. They have the chance to repeat Form Three in a private secondary school and re-sit for the examinations. KBSM offers students the opportunity to continue education up till Form Five regardless of their performance in Lower Secondary Assessment. Although new problems arise such as illiterate students progressing to Form Four and Five, it does provide opportunity for free schooling to the very slow learners.

The Education Act (1995) reemphasized on some of the educational policies:

1. The national education system is designed to produce world-class quality education to achieve the country’s aspirations.
2. The National Philosophy of Education is the basis for the national Principles of Education.
3. The duration for primary education is 5 – 7 years.
4. Pre-school education is part of the national system.
5. Improved technical and polytechnic education.
6. Provisions are made for the monitoring of private education.

The National Philosophy Of Education serves as a basis in the development of KBSR and KBSM, starting with the setting up goals for each subject offered within the curriculum. Besides focusing on producing knowledgeable and competent citizens, it also ensure that values are inculcated among students to produce a generation of well balanced citizens in light of intellect, spirit, emotion and physical.

Education in Malaysia is an ongoing effort towards further developing the potential of individuals in a holistic and integrated manner so as to produce individuals who are intellectually, spiritually, emotionally and physically balanced and harmonious, based on a firm belief in and devotion to God. Such an effort is designed to produce Malaysian citizens who are knowledgeable and competent, who possess high moral standards, and who are responsible and capable of achieving a high level of personal well-being as well as being able to contribute to the betterment of the family, the society and the nation at large.
It is further emphasized that the philosophy underlies the national Principles of Education. The development of the KBSM is thus based on the following principles, (i) continuity from the primary education, (ii) basic education for all, (iii) lifelong learning, (iv) the integration of the element intellect, spiritual, emotion and physical; (v) use of existing body of knowledge, and (vi) use of Bahasa Melayu as the main medium of teaching, the main language for communication and the unifying language among the different ethnicities (Nik Azis, 1992).

Emphasis in KBSM and KBSR

To meet the goals in education, based on the National Philosophy of Education, certain aspects are emphasized and inculcated across all subjects.

(i) Analytical and creative and critical thinking skills.

The emphasis on memorization is reduced even for subjects such as History or Geography. In the teaching and learning of History, the core moves away from having students memorize events and dates. They are expected to start with knowing the historical aspects of their school and town. For example, as a group project for lower secondary, they have to send in assignments based on information gathered through various sources such as interviews they conducted with the locals, the internet, and books. The questions on History are no longer based on the recall of historical facts but more focused on higher order thinking skills. An example question would be “Parameswara’s religious inclination was not stated in any of the history books. To your opinion, what was his religion? Support your decision with information you have gathered from your readings.” For science, as early as in primary school, students are asked to make hypothesis and draw inferences from an experiment. Group and collaborative efforts are encouraged and they are to present their project or solution to the group.

(ii) Problem solving skills

The ultimate goal in every subject is to enable students to solve problems which can guide them in making sound decisions. For example, in mathematics, the four stage problem solving strategies based on Polya’s method is emphasized. In certain sections of the textbook, the breakdown of problems according to the stages are discussed. It is hoped that the systematic analysis of problems would enhance students’ problem solving ability in general.

(iii) Pedagogical approach towards meaningful learning

KBSM and KBSR focused on meaningful learning based on approaches such as constructivists approach, cooperative learning, and contextual learning.
Information on new teaching approaches is disseminated through in-service and pre-service courses, web-sites, books and workshops. Teachers who attended courses are to share with their fellow colleagues by giving talks or organizing workshops at the school or district level. Teachers have also been given the opportunity to participate in workshops overseas.

(iv) Noble values

It is hoped that the education standards set would produce citizens with high moral standards, and who are responsible and capable of achieving a high level of personal well-being. Noble values such as honesty, justice, cooperation, tolerance, and patience are inculcated across all subjects for the betterment of the individuals and to shape individuals who can contribute to the society. Noble values are directly mentioned or inculcated indirectly in the teaching or through examples, but are well planned and must be relevant to the context of the subject content. For example, questions such as “Mr. Lim earns RM 5,000 a month. In each month, he saves 10% of his income in the bank, gives 5% to his mother and 2% is donated to the Selangor Orphanage ....” instill responsibility towards others.

Introduction of New Subjects

New core subjects are introduced to meet the needs of the individuals and the nation. To instill love and loyalty to the nation, History was made a core subject throughout the five years of secondary schooling. The component on English Literature has been added to the English syllabus since 2001. Subjects such as Living Skills focused on basic skills that an individual might need in his life. Information Technology skills are incorporated through various subjects, while invention skills are incorporated in Living Skills. New elective subjects such as Economy, Accounting, Engineering Drawing, and Home Economics are offered in upper secondary education.

Offering Greater Opportunity: Setting Up of Various Types of Schools

In this section, the different types of schools in Malaysia are discussed. The main agenda in the 90s was the setting up of the Smart School project, as one of the flagship when the Multimedia Super Corridor (MSC) project was launched.

Pre-School

Most children between four to six years of age begin their education at pre-school. Within the broad guidelines set by the Ministry of Education, a high degree of flexibility prevails in terms of teaching approaches and medium of instruction. Kindergartens provide a secure and stimulating environment that will prepare children for their first year of schooling.
Primary Education

Primary schooling begins at seven years of age, and may be completed within five to seven years. Sensitive to the multi-ethnic nature of its population, Malaysia has set up two categories of schools, the National and National-type schools. National schools use Bahasa Melayu as a medium of instruction and English is compulsory. National-type schools use Mandarin and Tamil as a medium of instruction. Bahasa Melayu and English are compulsory subjects.

Secondary Schools

Secondary schools offer a comprehensive Education programme. The curriculum includes a wide variety of subjects ranging from arts and sciences as well as vocational and technical subjects that provide a practical basis and a hands-on approaches to learning. Several religious schools and special education schools also offer secondary education. Following the Lower Secondary Assessment (PMR) at Form Three, students move into more specialized fields of study at the upper secondary level, based on choice and aptitude, and re-evaluated at Form Five through the Malaysian Certificate of Education assessment examination. At upper secondary level, several technical and vocational schools have been set up to provide technically-biased academic education and pre-employment skills. With the emphasis on technological literacy, the smart school concept was introduced in 1996.

Smart Schools

The key concepts of the smart schools are meaningful learning and thoughtful students through the use of multimedia educational courseware, exploratory learning, collaborative education and distance education. A consortium of 12 mainly multinational IT firms have been charged with devising systems and software to equip 90 fully computerized schools. Some 30 per cent of the designated schools are in rural areas. The idea is for the consortium to design a "total solution" for computerized schools, including electronic teaching materials as well as systems for student assessment and administration and management. Children will be able to study at their own speed, and take exam, accessed online from a centralized database whenever they are ready to. "Courseware" on CD-ROM will be provided for four subjects: Science, Mathematics, English and Bahasa Melayu learning.

Technical and Vocational Schools (now known as Technical Schools)

Technical and Vocational Schools offer education at the upper secondary education only. They play a significant role in preparing students to pursue technical and scientific tertiary education well as for careers as technicians and semi-skilled workers. Technical schools generally prepare students for higher education. Vocational schools are career oriented. Both types of schools provide an alternative path towards higher education.
National Religious Secondary Schools

Initially these schools offered Islamic Religious Studies and Arabic Studies preparing students for professions in Islamic Religious Affairs, education and law. Today these schools have expanded their programmes to include science and technology related subjects. These schools maintain their uniqueness in offering specialized elective courses in Islamic Studies which are not available in other schools.

Special Education Schools

Special education provides educational opportunities for pupils with special needs such as spastic, handicapped, visually impaired, hearing impaired as well as those with learning disabilities. Such children are given extended time frame to complete their education.

Changes in Assessment Methods

Malaysia has long established a standard examination for all students. Generally, it is administered at the end of primary schooling, the end of Form Three and Form Five in the secondary school and again at Upper Six Level of the post-secondary schooling. The heavy emphasis on examinations has set a rather depressing exam-dominated culture among students, parents, teachers and administrators alike. Apart from the school, parents urged children to attend tuitions at the mushroom-growing tuition centers and that left little time for students to pursue their interest in other beneficial pursuits such as sports and culture.

The Ministry of Education has looked into this problem by giving less emphasis on the exam-dominated culture. Apart from the regular common public exam, some of the weightage of evaluation is now given to continuous school based assessment at all levels. The school based assessment has been practiced for the evaluation on conducting the practical aspects in Science and Living Skills and project works in History and Geography. News has it that the Lower Secondary Assessment will be demolished by year 2005.

Malaysia has also embarked on shifting from the Norm-Based-Testing (NBT) to Criterion-Based-Testing (CBT). This will greatly reduce the negative influence of individualistic and competitiveness sense in the students.

Programs

Many projects are undertaken to approach many of the problems faced in school. Apart from the Smart School Project, various computer related projects have made its way in the schools since 1986. Among the computer-related projects are Computer Literacy, Computer Assisted Instruction, Computer-in-Education, Inventions, Computerization, and the introduction of Information Technology Curriculum.
At the end of 1998, the subject Information Technology is offered as an elective subject in KBSM. Among the objectives of the subject is to generate ideas in improving technology related to the identified needs and to use information technology effectively in communication and problem solving.

Another project making its way in the schools is the School-Industry Partnership Initiatives (SIPI Program). The mission of the SIPI Program is:

i. to link schools with the world of work through joint school-industry learning programs
ii. to have better cooperation in order to develop potential in the human resources for the future
iii. to develop a better understanding of generic learning skill
iv. to promote the sharing of knowledge, skills, experiences and values among the participants in the program
v. to attain greater equity in education

The goal of the SIPI program is to develop smart learning that stresses on the preparation of life-long Education for the 21st century using generic skills in learning. Under the SIPI program, the approach taken by the company involved would be to link up with a school and provide sustainable commitment in terms of time and human resources and the appropriate funding within the means of the industry.

Higher Education

Many new public and private universities have been set up in the 90s. Twinning programmes, a collaboration with local or oversea universities, are offered by many colleges. Other programs that provide opportunities to students who were not fortunate enough to enroll in the more prestigious public universities and private universities are the distance learning programmes and off-campus programs offered by local universities or oversea universities. The expansion of higher education provides opportunities to thousands of students seeking for higher education since the approval of the ‘3+0’ structure. The aggressive reform meets to a certain extent the national agenda of increasing higher education intake from a current level of 11% to a respectable 40% by the year 2010. Apart from that, the government’s move to permit the establishment of foreign and private universities is to reduce the outflow of about US 1 billion annually for overseas education. The government’s first priority was establishing universities associated with national unity and resource companies such as Petronas University (oil and gas) and Telekom University (telecommunication). Amendments to the University and University College Acts 1996 allows universities to have greater autonomy to manage and operate their institutions in a more dynamic and proactive manner (Yip Kai Leong, 1997).

According to Prof. Wan Zawawi in his keynote address at a conference on higher education held in New Zealand, the recent development in Malaysia was the result of the combined desires of the government to transform higher education into one that can directly contribute to national development, and of universities to seek a return of
autonomy. According to him, it was Malaysia’s successes with the privatisation exercises that have made it possible for the gaining of support to the ‘corporatisation’ initiative. The idea that universities should be allowed to generate income to reduce dependence on government’s expenditure augurs well with the already accepted practice of the privatised entities.

Conclusion

Malaysia’s current standing in the international scene invites for a more drastic reforms in education. In the Third International Mathematics and Science Study (Repeat), TIMSS-R (Educational Planning Research and Development, 2000), Malaysia was at the 22nd place of 38 countries in overall science achievement comparison while the top achievers are Taipei, Singapore, Hungary, Japan and South Korea. In the overall mathematics achievement, Malaysia falls in the 16th place behind leading countries such as Singapore, South Korea, Taipei, Hong Kong and Japan. Nevertheless, Malaysia was way above the international average in both subjects. Bracey (1998) commented on the success of some Asian countries based on the results of TIMSS (1996) and noted that Asians students are subjected to extra-school influences to ensure that they will gain entry to the top-ranked ‘right’ college, and that they may be missing valuable experiences such as extracurricular activities, dating and taking after-school jobs.

Malaysia’s school system is much influenced by the English system while in higher education, there’s no defined pattern. Some are inclined towards the English system, some are for the American system and the Australian system. The influence is greatly due to education experts, of which some are locally trained but quite a number, especially those who graduated before the 90s, had received education from Western countries mainly United Kingdom, United States, Australia and New Zealand. Through my experience, western education system offers opportunity for students to reason, venture, experiment and communicate in a very conducive and enjoyable environment and emphasizes very little on formality. Although much was learnt and could be learnt from the western educational system, the reforms that the Malaysian educational system needs must seek a balance between the well-established education pioneers of the Western region and the very fast moving, determined and developed regions in Asia.

References


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