DEVELOPMENT OF EDUCATION IN MALAYSIA: A STRATEGY-BASED ANALYSIS OF EDUCATION DEVELOPMENT IN MALAYSIA.

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EDUCATION DEVELOPMENT OF MALAYSIA

Rome was not built in a day.

Malaysia’s achievement thus far did not come about in a day, in a year, or a few years.

Malaysia went through a tough white-water-ride before she achieved, though not fully, what she set out to achieve. There is a lot more to be done.
THE EDUCATION DEVELOPMENT IN MALAYSIA PREDICATED ON TWO KEY FACTORS

- CONTINUITY

- CONSISTENCY
BRIEF HISTORICAL BACKGROUND

• Prior to independence, there did not exist, in the strict sense of the word, a national system of education.

• Schools that existed then were left to their own devices. No national curriculum as such.
• They were other than inner oriented

• The colonial policy may be summed up as one of laissez-faire.
HISTORICAL BACKGROUND

• When Malaya attained independence, these were the empirical regularities:
  • there was no system of education in the proper sense of the term;
  • the population was simply a collection of three races, neatly separated from each other. Malaya then was anything but a nation.
  • There was an abundance of muscle power than brain power. The colonized were largely unskilled.
HISTORICAL BACKGROUND

• 3 major issues had to be addressed:

  1. **Ethnic issues**: Malaya was a plural society: a collection of three major races. Thus forging racial unity became an over riding concern of the leadership.

  2. **Manpower issues**: There was a severe dearth of skilled manpower. If nothing was done to improve the skill level of the Malayan manpower, the country would be condemned to an agro-based economy at the most rudimentary level.

  3. **Educational issues**: A system of education that was national in character was non existent. Everything had to be built from scratch, particularly, in terms of curriculum development and teacher training.
STAGES OF EDUCATION DEVELOPMENT

• Broadly the education system of Malaysia underwent three stages of development.

• 1. The first stage may be described as the Formative Stage (1957-1965)

• 2. The second, the Consolidation Stage (1966-1982)

• 3. The third, the strategic rationalization stage (1982-until the present.)
The formative stage: The strategic Philosophy

- The master strategic philosophy was spelt out by the first Prime Minister of Malaysia, Tunku Abdul Rahman, that became the guiding philosophy that informs subsequent strategic development thrust of Malaysia, namely,
  - ● more teachers than soldiers
  - ● more books than bullets
  - ● more schools than barracks
The Formative Stage 1957-1965: Building a Nation from Scratch

A three-pronged strategic approach adopted:

1. Establish a national system of education predicated on a common curriculum for all types of schools in Malaya.

2. Build up the intellectual capability of the people by way of restructuring the school system and continually aligning the curriculum to the needs of the nation for attaining economic development.

3. Build up an effective teaching capability by reorganizing teacher training programs.
The Formative Stage: Building a Nation from Scratch

- Deputy Prime Minister Razak made Minister of Education. He headed a committee to study the education problems and recommend measures to overcome them.
- Razak Report became a landmark report that continues to inform today’s education policy and strategy.
- Four major recommendations:
  
  1. Democratization of education. Free primary education of six years to be given to all citizens irrespective of race, culture or creed with immediate effect.
  
  2. Second chance for those who failed MSSEE could proceed to the vocationally based trades schools called “Secondary Continuation Schools”.
  
  3. New Curriculum for Malayan Schools. The Curriculum was redesigned with Malayan centric themes. This was pivotal for nation building.
  
  4. Setting up of teacher Training Colleges. Teacher training colleges were established to build up a steady supply of quality teachers.
The Formative Stage: Building a Nation from Scratch

• 5. Revamping Technical Education. 3 types of technical training, namely:

• a. Technical College providing higher order middle-level type of technical training for post-secondary school students. The college provided a 2-year diploma course in Engineering, Architecture and Surveying. It also provided a 5-year course leading to full professional qualifications in similar areas of study. Talented students with good grades were afforded the opportunity to proceed to the University to pursue such courses at degree level.

• b. Technical Institutes providing a three-year technical education at the upper secondary level for students who completed 9 years of education were established. Graduates of the technical institute would be qualified as technicians to work in industries.

• c. Trades schools. There were two types:
  • (i) Secondary trade schools for students who completed 9 years of education. Those pupils who passed the Rural Continuation School could also enroll in the Secondary trades schools. The 2 year-course provided were in engineering, electrical, and building trades.
  • (ii) Rural Continuation Schools for rural students who failed MSSEE exam. 3-year program had a strong rural bias with instructions in handicrafts, elementary agriculture, elementary horticulture, animal husbandry and housecrafts.
The formative stage: Problems and issues

• The Razak education reform was a first stab at rebuilding the education system of a newly independent nation. Such early initiatives were not without their share of problems and issues.

• Among the dissatisfactions that arose was the parents’ unhappiness over the stigma of “secondary continuation schools and secondary trades schools”. Parents felt that MSSEE did not do justice to young children.

• It was too early to stream the students after six years of education.
The formative years: Review and Reform

1. The MSSEE scrapped. It was a colonial relic which served nobody any good.

2. The secondary continuation school abolished. The secondary continuation school was ill conceived which denied late bloomers opportunities for upward educational mobility.

3. Comprehensive System of Education introduced. Practical electives were introduced so that they would not be averse to “blue-collar” occupations”. The introduction of practical electives to all students was a swift response to the unpopular idea of streaming students at an early age as was the case with secondary continuation school. The electives comprised four components: industrial arts, agriculture, domestic science and commerce. Students must choose one from the four electives.
The formative stage: Review and Reforms

• 4. Lower Certificate of Education (LCE) introduced.
• The terminal MSSEE was replaced with LCE which was administered at the end of nine years of schooling.
• The LCE served as the basis for streaming students at the upper secondary level of education, i.e., from grade 10 to 11.
• Three streams were introduced after LCE, namely:
  • Academic stream
  • Technical Stream
  • Vocational stream
THE CONSOLIDATION STAGE 1966-1982: RESPONDING TO NEW CHALLENGES

- During this period it became increasingly evident to the leadership that science and technology were critical to the country’s progress.
- Whilst it was important to produce skilled manpower by way of streaming at the school level, it was equally important that this country must produce higher order skilled manpower at the tertiary level.
- Higher Education Planning Committee (HEPC) was formed in 1967 to address manpower issues particularly at the tertiary level of education.
- The purpose was to align education with the industrial needs in order to spur the growth and prosperity of the country.
THE CONSOLIDATION STAGE: RESPONDING TO NEW CHALLENGES

• Among the measures recommended by the HEPC were the following:
  • That concerted effort be taken to ensure that the curriculum at the secondary, college, polytechnic and university levels were aligned with the needs of the industry.
  • That the ratio of the distribution of professionals, semi professionals, and junior technician be of the order of 1:4:20 respectively.
  • In line with that the ratio of enrolment in science/technology and humanities at any level of education would be of the order of 3:2.
  • That the intake and distribution of students into the universities should reflect the science: humanities ratio of 3:2.
  • That special emphasis be given to the development and expansion of training programs in the areas of science, technology, and agriculture.
The consolidation stage: responding to new challenges

• HEPC set in motion the radical transformation of the education system to meet the needs of the country in its march towards industrialization.

• The development push went on at an unprecedented pace. More science and vocational schools, and technology colleges were built. The first polytechnic was built during this period. Two more universities, one a dedicated science university, were built.

• Mandatory to obtain a pass in science and mathematics at the LCE for obtaining a full LCE certificate and securing promotion to upper secondary schools. Those who failed would not proceed to upper secondary but would be channeled into vocational schools.
THE STRATEGIC RATIONALIZING STAGE: 1982 until the present

- This stage is called thus because the system has now reached a stage that enables it to do the needful to move forward in tandem with the changing world scenario. Past education reforms and initiatives had achieved certain significant milestones. Malaysia is now ready to move on to the next level.

- At the rationalization stage the thrust is to continue realigning the system with changes in the world scenario. Toward this end a high level Cabinet Committee was formed in the latter part of 1970 to study the implementation of education policies in terms of the extent to which the system fulfilled the goals and aspirations of the country. The Cabinet Committee chaired by the then Deputy Prime Minister, Dr Mahathir Mohamad
The Strategic Rationalizing Stage: The Mahathir Report

- The Mahathir report called for curricular reforms at Primary and Secondary levels.

- Primary Education is divided into two stages
  - Lower primary: from Year One to year Three: mastering 3 r’s and developing personality
  - Upper Primary from Year Four to year Six.: developing linguistic and mathematical and manipulative skills
OBJECTIVES OF THE INTEGRATED PRIMARY SCHOOL CURRICULUM

• To MASTER THE National Language
• To master the basic language skills
• To develop and improve intellectual capacities which include rational, critical and creative thinking
• To master arithmetic skills and use them in everyday lives
• To master learning and thinking skills
• To master English as second language
• To develop leadership qualities and self confidence
• To be sensitive towards man and his environment
• To master scientific and technical skills
• To master the basics of entrepreneurship and productivity
• To develop talent and creativity
• To develop positive attitudes
THE LIST OF SUBJECTS FOR PRIMARY SCHOOL

CORE SUBJECTS
• National Language
  • English & MOTHER TONGUE
• Islamic Education
• Moral Education
• Mathematics
• Science
• Local studies

COMPULSORY SUBJECTS
-- Physical Education
-- Health Education
-- Living skills & invention
-- Art education
-- Music education

ADDITIONAL SUBJECTS
-- Chinese
-- Tamil
-- Arabic
The strategic rationalizing stage

• The New Secondary School Curriculum:
• Lower Secondary Curriculum: Practical electives were replaced with new subject called Living Skills (similar to that introduced at Primary School, but on a more advanced level).
• Lower Secondary Students are offered Four electives from which to choose, namely:
• Technical skills with emphasis on Invention and creativity
• Domestic Science elective
• Agriculture science elective
• Commerce and entrepreneurship elective.
• At the end of nine years of education students sit for Lower Secondary School Assessment examination (LSSAE). The LSSAE is not a terminal examination as Malaysia now extends universal education from nine to eleven years.
OBJECTIVES OF THE INTEGRATED SECONDARY SCHOOL CURRICULUM

• To increase proficiency in the National and English Language
• To develop and enhance intellectual capacity
• To acquire knowledge and develop mastery of skills
• To develop skills to cope with new areas of knowledge and development in technology
• To acquire competencies beneficial to the individual and society
• To develop self confidence
• To understand and appreciate the history and the socio-cultural milieu of the country
• To be aware of the importance of good health
• To develop environmental awareness
• To inculcate moral values
• To develop patriotism
THE LIST OF SUBJECTS FOR LOWER SECONDARY

- SUBJECTS FOR LOWER SECONDARY SCHOOLS
- CORE SUBJECTS
  - National Language
  - English
  - Islamic Education (for Muslims)
  - Moral Education (non Muslims)
  - Mathematics
  - Science
  - History
- Compulsory Subjects
  - Physical education
  - Health education
  - Art education
  - Music education
  - Geography
- **Living skills: creativity, design and invention; technical skills**
- ADDITIONAL SUBJECTS
  - -- Chinese
  - -- Tamil
  - -- Arabic
The Rationalizing Stage: The upper secondary

- THE UPPER SECONDARY SCHOOL CURRICULUM
- Students at the upper secondary level (grades 10-11) now are provided with a greater choice of subjects that they can pursue.
- Vocational schools have now been integrated into technical schools. Vocational subjects are offered to all students at upper secondary schools. This change is made in response to the mounting popularity of vocational subjects.
- At the upper secondary level students may choose from the following streams to pursue their educational interest. They are, namely,
  - The Academic Stream offering Pure Science and Arts courses
  - The Technical Stream offering technical types of course.
- At the upper secondary level, besides the core subjects that students must follow according to the streams that they enter, a variety of practical electives are offered to students (see appendix 5 the list of subjects for the Upper Secondary).
The rationalizing stage: subjects at Upper secondary

- **CORE SUBJECTS**
  - National Language
  - English
  - Islamic Education (for Muslims)
  - Moral Education (non Muslims)
  - Mathematics
  - Science
  - History

- **COMPULSORY SUBJECTS**
  - Physical Education
  - Health Education

- **ADDITIONAL SUBJECTS**
  - Chinese
  - Tamil
  - Arabic
ELECTIVES

PURE SCIENCE
- Biology
- Physics
- Chemistry

ADDITIONAL SCIENCE
- add. Science subjects
- I.T.
- I.T. subjects
- Referig & Aircond practice

ISLAMIC STUDIES
- Quranic studies

LANGUAGE
- Arabic (communication)
- Higher Arabic

APPLIED ARTS
- Basic economics
- Accounting
- Commerce
- Home science

TECHNOLOGY
- Additional mathematics
- Agriculture science
- Engineering drawing
- Mechanical eng. studies
- Civil engineering studies
- Invention
- Engineering technology

HUMANITIES
- Malay literature
- Lit. in English
- Geography
- Art education
- Islamic worldview
- Music education
- Electrical & electronics Engineering studies
The rationalizing stage: upper secondary electives (contd)

- -- Geometrical&electrical drawing -- Referig& Aircond practice
- -- Electronic technology --Geometrical&aircond drawing
- -- Radio and TV Servicing -- Catering &service
- -- welding&fabrication technology -- commerce
- -- welding practice -- Fashion design&dressmaking technology
- -- Geometrical&welding drawing -- machine shop technology
- -- Beauty culture technology -- Fitting&machining practice
- --Geeometrical&machinging Drawing -- Child care&development
- --Automotive technology -- Bakery&confectionary technology
- -- Vhicle service&repair -- Bread-making& pasteries
- -- Geometrical&automative drawing -- Basic information processing
- -- Building construction technology -- Principle of Accounts
- --Woodwork&brickwork -- Livestock production
- -- Farm machinery &Farm mgmnt-- Crop production
- -- Ornamental Horticulture & Landscape

SUBJECTS ACROSS THE CURRICULUM

CURRICULUM STARTEGY
- Drugs prevention education -- science&technology across the curriculum
- Family health education -- environmental studies
- Health education -- Critical&creative thinking skills
- Futures studies -- Study skills
- Enhancement of patriotism
The Strategic rationalizing stage: Polytechnics

- Polytechnics provides a broad-based training to upper secondary school leavers to enable them to acquire the necessary skills to become technicians and technical assistants in the various engineering fields, junior and middle level executives in commercial and service sectors as well as junior designers in the design industry.

- It also provides relevant technological or entrepreneurial education and training to upgrade basic skills. It promotes close collaboration with the private sector through time-sector privatization as well as research and development programs.

- Part time courses are also offered by polytechnics in engineering, business studies and graphic design. Certificate courses are held for 2 years and diploma, three years.
The Strategic Rationalizing stage: Polytechnics

- SUBJECTS TAUGHT AT POLYTECHNIC (DIPLOMA)
  - Civil Engineering -- Mechanical engineering
  - Wood-based technology.--Mechanical engineering (petroleum)
  - -- Electronic engineering (medical) -- Food technology
  - -- Building services engineering -- IT
  - -- mechanical eng(material) -- Chemical and process engineering
  - -- Architecture -- Mechanical engineering (packaging)
  - -- Quantity survey -- Mechanical engineering (textile)
  - -- Land survey -- Graphic design
  - -- Electrical Eng (control & power electronic) -- Industrial design
  - -- Engineering (petroleum)
  - -- Electronic engineering (control)
  - -- Electronic Engineering (computer) --
  - -- Electronic engineering (communication)
  - -- shipping engineering
  - -- Mechanical engineering
  - -- Mechanical engineering (automative)
  - -- Mechanical engineering (plant)
  - -- Mechanical engineering (manufacturing)
  - -- Mechanical engineering
  - -- Mechanical engineering (refrigeration & air cond)
The rationalizing stage: Community College

- Community Colleges provide alternative educational opportunities for young Malaysians to obtain or upgrade occupational skills in various fields. These colleges are set up throughout the country beginning 2001. The target group of community colleges are school leavers, dropouts, workers and others who need to be reskilled, upskilled or acquire new skills. The community colleges work in close collaboration with institutions of higher learning, government agencies, provincial authorities and local industries.

- The community colleges offer part-time and full-time courses that cater to the individual needs of the students. There are to date 30 community colleges in the country.
THE STRATEGIC RATIONALIZATION STAGE

• OBJECTIVES OF CONSOLIDATION ACHIEVED:
• ACCESS AND EQUITY MET IN FULL: NO ONE DENIED OF EDUCATION, EVEN AT TERTIARY LEVEL
• NOW TO MOVE ON TO THE NEXT LEVEL OF CHALLENGES.
• GLOBALIZATION & IT REVOLUTION ARE TAKEN SERIOUSLY. IN ORDER NOT TO BE SWEPT ASIDE MALAYSIA MUST MOVE TO THE NEXT LEVEL AS THE STAKES ARE GETTING HIGHER.
• TUN DR MAHATHIR TIMED HIS DECLARATION OF VISION 2020 VERY WELL AFTER 2000.
• MALAYSIA HAD THE STRATEGIC FOUNDATION TO TAKE ON NEW CHALLENGES: E.G. MALAYSIA IS POISED TO PRODUCE 100,000 GRADUATES IN S&T BY 2020 OR EVEN EARLIER. THIS IS BECAUSE ITS SCIENCE AND PREMIER SCHOOLS WERE READY TO TAKE ON NEW DIRECTIVES. OVERNIGHT THE SYSTEM COULD BE ADJUSTED TO MEET NEW CHALLENGES.
• AT THE SAME TIME TO MOTIVATE TEACHERS NEW INCENTIVES WERE DEVISED: MASTER TEACHERS AND SUPER PRINCIPLES WITH SUPER PAY HAVE BEEN CREATED.
SUMMARY OF CRITICAL INGREDIENTS

• COMMITTED LEADERSHIP
• CLEAR GOALS AND VISION
• CONSISTENCY OF APPROACH
• ALERT TO PHENOMENON OF UNANTICIPATED CONSEQUENCES, A REGULARITY WHICH CANNOT BE PREVENTED BUT MAKING PROVISIONS FOR IT, ENABLES CORRECTIVE ACTION TO TAKE PLACE