

Education Challenges of the 21st. Century:
*Establishing education-business partnership and its implications for
the restructuring of schools.*

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Abstract

Managing education of the 21st. century is undoubtedly a challenging one. Amidst changes that have been generated by the so-called waves of education reforms world wide, the Malaysia's context of education and schooling society unavoidably needs urgent redefinition and restructuring respectively. This paper attempts to provoke discussion on some of the essential challenges in education of the third millennium. As venues and providers for formal education, schools institutionalise the acquisition of knowledge and endorse certification of skills required for vocations. Since our nation conceptualised and operationalised "school" about a century ago, the nomenclature of the term had been synonymously used with "education" (and training). While learning is presumed on the pretext that school-aged individuals are in schools, other institutions, like business sectors and commercial organisations are seemingly detached from the process. Such a practice is a manifestation whereby schools are authoritatively running the "educating business". A venture into partnership between schools and the actual business circle, is not only interpretive of the notion that education for the third millennium needs to be more divergent but, arguably a practical approach to engender natural and enriched environment for lifelong learning.

Introduction

School system globally adopts a convention that knowledge acquisition ought to be institutionalised. "*School*" as a nomenclature closely associated with the delivery of education, is thus, conceived as a "public institution". As an institution, school characterises societal development in terms of education and learning. In Malaysia's perspective, the existence of a school within a society subtly symbolises the existence of education. The society by itself is believed to be among those who have some "learned" individuals within. Thus, in the process of developing itself, Malaysia still conceives "schooling" as it is conceived by the majority of its people; both socially and politically.

Why our perception about school needs to be reoriented, will basically be my central theme for argumentation in this paper while broadening it into issues of more awakening third millennium challenges in education. In relation to this, the discussion also highlights experiences of some developed countries like the USA Australia and the European countries, in assuming partnership between schools and the business

communities to enhance education to meet vocational requirements and the growing belief that education needs to be made a lifelong commitment.

As in most developing countries, education is still the main business of the government. The government does not only provide the basic facilities that necessitates learning but is equally responsible in deciding what its people should learn. Although this still does not prove effective in quite a number of developing countries, Malaysia could still be proud of being in a better position in the league table. However, education development of late has attracted local education thinkers for good concern when numerous so-called educational programs almost jam our National Curriculum. While other countries have experienced education reform decades ago, our reform history echoes well in our memory. Will another reform to take effect? Or just another new curriculum to be introduced? Such is the scenario in our country since the last five years.

Have our schools failed in its mission as public institution? It is indeed premature to arrive at such a conclusion especially in our context to up-date schools with curriculum although it is a process which has been authoritatively a ministerial business.

Scenario of the 21st. Century

Preparing our new generation with the advent of sophisticated and more scientific third millennium will inevitably busy almost everybody in the street. This is because we are about to enter yet another span of a thousand years with hopes for a more conspicuous change in human communication, transparent economic development as well as an improved world peace and order.

As an undisputed tool of development, education will become everybody's concern in the next century as well as for the rest of the millennium, as much as it is for the government, the sole provider and policy initiator, at present. Education of the 21st. century will be based on parental choice, which the present system fails to provide. Parental choice determines not only the type of education young individuals are to obtain but is associated with the future career they are inclined to undertake. An early intervention in the form of mental training or mental orientation for work or vocation is inevitable because economic trend globally demands a more cerebral skill workforce than manual skilled workforce.

An initial step for a more varied management of education today is indicative of the 21st. century scenario. In Malaysia's context itself, it is anticipated that the country's education development for the next century will be vitalised by a more open policy for education. More and more private institutions of higher education are given the opportunity to operate. Even this alone would not justify for a firm policy to generate parental choice. The government intervention is still significant especially in areas where privatisation could not possibly work well.

The 21st. century will also witness education as another profitable business and industry. If the present development of twinning programs between local institutions with universities overseas could be exemplary, more diversified ventures will augur

well for the next century for our country. But, just a word of admonition will be, is it profit making or another profiteering?

While much of the development focuses on education and the stakeholders, the teaching profession will also face drastic challenges of the next century. Reflecting the present trend in our country where one could assume permanency in the profession, the next century could possibly mark the abolition of such permanency. Teaching will be a strictly professional take-it-or-leave-business. Those in the profession, are those who are, by their own professional choice, committed to contribute to the profession. And, in such a scenario, permanency may only minimally exist in state-controlled institutions.

What role will education assume for the next century, is another significant issue to ponder on. The present global economic crisis has indicated for a reciprocal ventures among countries especially those badly affected. Education will be both a natural commitment and vital economic endeavour. The preparation of skilled workforce starts early at school level. Already developed countries like the USA and the European countries have taken this step after experiencing several economic setbacks since the industrial revolution.

Education-business Partnership: the concepts and reality

The relationship between schools and business has taken place as far back as in the early 1800s (Lankard, 1995). However, such relationship was only formalised into partnership since the late 1970s. With several developed countries initiating new approaches to improve education quality and skill training, for the USA the partnership was geared towards enhancing skilled workforce supply because in the 1980s, the country faced serious low skill level of workers.

The underpinning assumption of education-business partnership as highlighted by Judith and Aspin (1997:200) is not a matter of the rhetoric of school-community relations or of schools seeking philanthropic benefits from their links with such agencies. The partnership will be much more as a matter of survival.

Malaysia's experience in establishing school-business partnership was first initiated by Sarawak with the introduction of the SWAJAYA Program in 1995 (Sarawak Education Department, 1996). Emulating the British style of Work Experience Program, SWAJAYA was introduced to open learning opportunities for the low achieving group of students in year 10 through year 11. The SWAJAYA concept is then expanded and the Ministry of Education Malaysia further elaborated it by initiating the SKK Program (Ministry of Education Malaysia, 1998). The SKK (*Sekolah ke Kerjaya*) which blends the USA School-to-Career Program and the SWAJAYA also caters for low achieving grade 10 students. However, like the SWAJAYA, it also has an improvised academic curriculum and more examination focussed compared to the ordinary SPM syllabus in both the core and elective component subjects.

The School-to-Career Program was introduced in the USA under the Clinton Education Policy when School-To-Work Opportunity Act was passed in the American Congress in 1994 (Brown, 1998). School-to-Career program has attracted a number of

American states. It is accepted as a transition from the formal learning scenario to real world of work (Imel, 1995). The program caters for all students and parents are actively involved in most of the processes.

Now the concept of such partnership gradually spreads in countries like Canada and Australia as well as the South East Asian nations. Pertinent issues arising from such partnership range from inclusivity to sustainability. How inclusive is the partnership as per learning opportunities? Does it only cater for the low achievers? What choice do parents have in the partnership? For how long can such partnership last? What role could each partner assume to enhance lifelong learning?

With these issues in our mind, any consideration for future implementation requires some forms of innovation to meet local needs and social adjustment. Bringing it into reality for local conception will not only benefit more participation but will further enhance business-education relationship for the country.

Partnerships and the needs

Partnerships between education and business emerge in varying forms depending upon the needs. In **one-to-one institutional partnership**, the needs of one school or one business drive the agreement. Traditionally, business is the *benefactor* and the school the *beneficiary* (Lankard, 1995). In such an instance, schools benefit from the generosity of their business partners by receiving up-to-date equipment, incentives for students attendance and scholarship, and opportunities for students to learn about the real world application of knowledge and skill. Although, it is rather traditional and typically philanthropically inspired, it can also be attached to long-term goals that reflects self-interest-a better prepared entry-level work force that would reduce training costs, increase productivity, and improve products and services.

The SWAJAYA and SKK are both **one-to-one short-term institutional partnerships** as it serves short-term objectives. These objectives are more students-biased than the business partners are. The needs as manifested by the objectives of both programs are fulfilled once the students have completed their apprenticeship at the respective agencies or the schools' partners. The table below shows the SWAJAYA and SKK objectives.

SWAJAYA*	SKK (<i>Sekolah Ke Kerjaya</i>)
1. To ensure that students who are rather weak in their academic performance to cope up with certain subjects that are already tailored to their capacity.	1. To provide opportunities for students to acquire applied skills at the workplace.
2. To provide training in entrepreneurial and vocational skill for students to enable them to handle their living after they leave school.	2. To enable students to understand career options that are suitable to their interests and capabilities.

3. To provide students with working experience at the respective public and private agencies.

3. To develop the students' potencies and to exalt their self-confidence as well as their self-pride.

Source: Sarawak Education Department, 1995; Ministry of Education Malaysia, 1998.

*The term SWAJAYA is a combination of the prefix *swa* (self) and *jaya* (success).

There are one-to-one business-education partnerships created to resolve the more immediate needs of a given business or company. Stone (1991:48) reveals that the US Office of Technology Assessment estimates that 20% to 30% of US workers lack the basic skills they need for their current jobs. Motivated by this skill crisis, businesses such as Motorola and General Motors are joining with educators to offer basic skills courses with local community colleges and technical institutions to upgrade their workers' technical skills (Dreyfuss, 1990). In one-to-one partnership, the arrangements can be targeted simply and specifically to a given problem.

As partnerships expand to involve multiple partners, the agreements become more complex and the benefits more far reaching. Both educational and business are full partners in these agreements, which formally detail "each partner's responsibilities and expected outcomes and imply a reciprocal commitment between or among partners" (Clark, 1992:2). Such partnership attempts to involve a number of agencies in multiservice projects that are jointly planned and governed, for instance, dropout prevention, employability training, and workplace literacy. They build upon the identification and acceptance of compatible goals and strategies for improving some aspects of education through mutual cooperation (Grobe et. al. 1993). An example of a cooperative agreement between the public school system and local business, universities and labour is the *Boston Compact* (Chapman & Aspin, 1997; Lankard, 1995b). In *Boston Compact*, partners work cooperatively to provide high quality education for all children in the Boston school system (Grobe et. al. 1993).

Another example of a **cooperative partnership** agreement is the Minneapolis Youth Trust, which is a collaborative of major employers, city and state agencies, social service organisations, and public schools. Through the partnership, these multiple constituents developed an apprenticeship and summer employment initiative and a mentorship program (Clark, 1992).

The **comprehensive collaborative** is a broader approach than the cooperative agreement. Comprehensive collaborative are "represented on the continuum (of school-community partnerships) as the most sophisticated and fully developed partnership. Broad-based and involving multiple organisations, comprehensive collaborative requires long-term institutional commitment. They proceed with a commonly shared vision, goals and objectives developed through consensus, shared authority and decision making, new roles and relationships for the various players, integrated delivery of multiple services and cross-institutional activities" (Clark, 1992: 2). The *Boston Compact* evolved into this form of partnership as it grew in members and expanded in focus to address the increasing and varied concerns regarding the comprehensive needs of children from grades K-12.

When businesses engage in collaborative partnerships, they look for benefits that affect their operation, productivity, and profit line-elements that enable them to be competitive in a changing society. Such benefits as improved public relations, better prepared entry-level employees, decreased training costs, increased productivity, and heightened potential for local economic development will all affect their "bottom line." Hall et al. (1993:2) note the following advantages realised by businesses partnering with the Springfield Public School District in Virginia. .

- i. Corporate image is enhanced.
- ii. The organisation has a greater visibility in the community.
- iii. Organisations can observe how tax dollars prepare students for the future.
- iv. Individual participants within the organisation derive personal satisfaction from assisting in the development of productive citizens.
- v. The relationship helps prepare future employees.

Whatever the type of business and education partnership, the benefits must be realised by all partners or the arrangement is not a partnership (Grobe et al. 1993). In successful partnerships, the benefits radiate from one partner to another, resulting in rewards for all constituencies-business, education, higher education, parents, and communities. For example, education's gains of increased access to new technology, enhanced opportunities for professional growth and development, and increased staff morale and student success that reduces such problems as violence, truancy, suspension, and dropout rates all contribute to the gains realised by business. A better prepared work force, increased public confidence and support for education, and an improved quality of community life heighten the potential for local economic development and improve the economic health of businesses and of the entire country.

Partnership: the focus, the success and learning the US experience

As the benefits of business and education partnerships are related to the goals of the partnership, they are better described within the context of their particular focus. With the experience in the USA, the focuses reflect partnerships' objectivity and sense of direction (Lankard, 1995).

Focus 1: Classroom Teaching and Learning.

Kubota (1993:1) describes teacher-focused partnerships for scientific work experience programs. The goal of these partnerships was to "expose teachers to new technology, give teachers authentic work with real world problems in laboratories or businesses, provide teachers opportunities to interact with scientists and other technically trained professionals, and assist teachers in transferring work experience into classrooms". These experiences helped teachers to improve their mathematics and science teaching strategies, transfer work experiences back to the classroom, and act as change agents within the school systems; the businesses involved gained a new appreciation of teachers and the teaching profession. The impact of experiences such as this one are the trust and belief that "partnerships are a necessary investment in the future and that they will, indeed, make a difference" (ibid. p.2).

Focus 2: Vocational Education Program Development.

Evaluation of the automotive program of Los Angeles Harbor College by outside consultants led to a partnership between Harbor College and Hyundai -one founded on the needs of both partners. The evaluation report led Harbor College to recognise the potential of its automotive department through the retooling of its program and resources. Hyundai, looking to establish satellite training program for its technicians, saw Harbor College as a training resource. Both partners invested in the arrangement. Together, the partners developed the training materials and technical skill modules for the program. Hyundai trained (and certified) instructors from Harbor College. Hyundai supplied \$150,000 in equipment, including cars, tools, and training aides; Harbor College used grants and curriculum development funds to supplement the funding from Hyundai. (Evaluation and Training Institute 1993).

Focus 3: Apprenticeships.

Cooperative apprenticeships are "a form of structured workplace training in which (a) employers and labor unions join with community colleges to provide formal instruction in which a structured work-based experience is an integral part of the instruction, (b) an apprentice agrees to work for the employer for a specified period of time, (c) the employer agrees to provide structured and formal training in a specific field or trade over a defined period of time, and (d) the employer provides continued journeyman level employment after the training is successfully completed" (Cantor 1994:9). In partnerships that focus on cooperative apprenticeships, all parties must be able to derive benefits, collectively access external funding, and mediate to reach common goals, and agree on specific roles and responsibilities (ibid.) Community colleges receive equipment, facilities, and training for their faculty; employers have an opportunity to participate in program and course development. Remedial programs for employees of the business, onsite administrative support provided by the college, and college-assisted recruitment of new trainees is a few of the benefits realised by business (ibid.).

Focus 4: Work Experience Programs.

Southern California Edison Company and its unions entered into a job skill partnership with local high schools to offer mentoring services to juniors and seniors. Paired with journeyman mentors for a full year, students experienced 6-week rotations in maintenance, operations, administration, warehouse, and technical occupations. The Utility Workers of America, (Local 245) was actively involved in the program, as was the International Brotherhood of Electrical Workers, (Local 47). The success of the program is evidenced by an increased number of schools and businesses involved since its inception. Initiated in one school with five students at one Edison facility, the program grew by the third year to include 11 partner schools with 44 students placed at six Edison facilities (Ingles 1994).

In a special issue of *Fortune* (Spring 1990), Morrison notes that businesses are "taking the lead in a long-term revolution to save public education" (p. 8). "Leading the field are such companies as IBM, Exxon, Coca-Cola, RJR Nabisco, and Citicorp, which have mounted a virtual crusade to save the public schools" (Dumaine, 1990: 12). In the new economy, where school and work are intertwined, it is increasingly apparent that a dual approach to public school reform has appeal and that business and

education partnerships will continue to flourish in an attempt to improve the educational capacity of the nation

Work-based Learning and Knowledge-based society of the Third Millenium

What will transpire in the next millennium has seemingly attracted the attention of many people across all works of life. Education thinkers and philosophers render their share of thoughts through considerable number of forums and voluminous of publications. The notion of a knowledge-based society invigorates a collaborative effort to bring in the business community into exploring education. The traditional rigid classroom setting of knowledge acquisition will have to pave way to real world undertakings and full exploration of students' owned-experience. The fundamental facility to learning is the provision of natural freedom (Rogers and Freiberg, 1983). With their critics to the conventional of teaching as information delivery, Rogers and Freiberg further suggest that the school system amicably detach itself from the highly bureaucratic setup so that it can create a more facilitative learning condition. The freedom to learn affords personal development which Muhammad Mumtaz Ali, (1994) describes as a way our wisdom could be realised. Such wisdom, a part from being a natural facility itself, exalts man if it is wisely used.

Reform for schools is essentially to provide the natural wisdom as well as to "reinvent" our notion for a more favourable freedom to learning. The work-based learning will be an equally effective form of knowledge acquisition as it provides us with another milestone in education development.

As one of the envisioned programs for education-business partnership, work-based learning (WBL) includes a number of different activities that can be identified along a continuum from shorter-term introductory types of experiences to longer-term, more intensive ones, including paid work experience and formal training. Outlining its significant for education-business partnership, Naylor (1997) asserts that it is part of a three-pronged approach to school-to-work (STW) transition that also includes school-based learning (SBL) and connecting activities. Relating to the experience in the USA, she further explains that the new interest in work-based education since passage of the School-to-Work Opportunities Act of 1994 has resulted in a body of policy formulation, program development and research activity that can help other policy makers and practitioners at all levels to education develop work-based education policies, models and practices suited to their own community's need.

Kazis and Goldberger (1995) foresee that the most important challenges facing teachers and others involved in programs linking school and work-based learning experiences are:

- i. Recruiting sufficient numbers of employers willing to commit to the high level of employment involvement implicit in work-based learning, and
- ii. Ensuring that learning at worksite is of high quality.

There are several recommendations suggested to overcoming this and other challenges inherent in designing and delivering high quality work-based learning programs. They include:

(i) Overcoming structural barriers to work-based learning programs

Poczik (1995) proposes six strategies for overcoming the structural barriers to work-based learning: a concerted, multiyear effort by national, state, and local partners to restructure the educational system to integrate work-based education into existing educational programs and connect it to other school-to-work initiatives; a coalition of federal and state labor department officials, employer organisations, and labor unions to address issues involving child labor laws, as well as health, safety, civil rights, and liability related to work-based education; a coordinated effort by employer organisations at the national, state, and local levels to encourage the employer involvement that will be needed for work-based education to become available to all students; regional organisation of employer recruitment; and a major public outreach campaign to enlist school personnel, students, parents, employers, and unions in broad implementation of work-based education (pp. 70-72).

(ii) Encouraging Employer Involvement

Bailey (1995) argues that an incentive policy encouraging employers to act together may be more effective than general subsidies, tax credits, or other policies that focus on individual incentives. Bremer and Madzar (1995) contend that involving employers in work-based experiences will require a multifaceted approach consistent with employers' capabilities and short-term interests, offering employers several possible paths of involvement and degree of commitment. Toward that end, they make specific policy recommendations regarding tax credits, federal funding through the Job Training Partnership Act, use of labor market projections, general student assessment, involvement of national business organisations, development of school and small business coalitions, and curriculum design.

To practitioners having difficulty recruiting sufficient numbers of employers, Vo (1996) suggests concentrating on businesses with plenty of entry-level positions. Stern (1995) advises offering employers the following less-demanding participation options that still preserve some or all of the benefits of the more ambitious types of involvement: providing job shadowing and unpaid internships; offering placements for teachers; encouraging student attendance and performance; counselling individual students; providing instruction and field trips; giving advice on curriculum, instruction, and assessment; and donating money or materials.

(iii) Ensuring High-Quality Learning at the Worksite

The following basic design elements can contribute to the quality of a work-based learning program: consensus on the work-based program's goals and how to achieve them; a written learning plan to guide student learning at the workplace; work-based experiences designed to help students distil and deepen the lessons of work experience; worksite learning activities that have been carefully documented and assessed; orientation program to prepare students (both socially and psychologically) to enter the workplace; and ongoing support and counselling programs to help

students cope with the work environment and its demands (Kazis and Goldberger 1995).

(iv) Connecting School- and Work-Based Learning

After a work-based learning program has been designed, its school and worksite components will require continuous coordination and management. The various coordination, liaison, technical assistance, placement, and follow-up duties entailed in connecting school- and work-based learning components are best handled by a school-to-work coordinator (Ingham ISD 1995).

With respect to implementation of work-based learning at the postsecondary level, Bragg and Hamm (1996) found that the following factors contribute to overall program effectiveness: strong program leadership; exclusive connections between the program and its environment; frequent and effective communication with local employers; beliefs about program excellence; an effective school-based-learning component; adequate and diverse financial support; and innovative and pedagogical features (structured individualised plans for student success, an effective mentoring system, articulation agreements from the secondary to the two-year college and to the four-year college levels, program flexibility and adaptability, a mix of work-based learning models and pedagogical approaches, and a combination of personalised documentation and standardised performance-based competency profiles).

Thoughts for Restructuring of Schools

How ready we are to proceed with our education agenda for the 21st. century will depend on our readiness to restructure our schools system. Based on my earlier observations, the way we perceive school is influenced by materialistic conception, *inter alia*, that school is a status symbol for the existence of education within the community. Thus, to certain extent, its existence has sentimental values. In Sarawak, our society finds it uneasy to depart with it even if it serves little purpose (under-enrolled primary schools) especially in areas where management cost proves not viable. However, it is still praiseworthy because it manifests high morale for education among the people.

Partnership between business and schools in Malaysia's perspective demands enormous support from both political and communal leaders. Current development on privatisation of higher institutions has paved ways to a more systematic partnership. Positive development it is, Malaysia's schools should be made ready to emulate some improvised ventures as discussed earlier. With in-depth considerations for a more flexible operations of both the primary and secondary schools nationwide, sound policies in terms of class size (the number of students per class), flexible schooling age and teachers' working hours and workloads, need to be reviewed.

Class size

The present ruling on class size is rather obscure and vague. A clear policy on this will articulate the management of the key resources: pupils, class, schools and

teachers. These key resources have been the subject for public interest although at the managerial level it is assumed as under controlled.

The US system may be only acceptable for its system of schooling. But, the new education policy on class size which only allows 18 students per class for grades 1-3 (US Department of Education, 1998) is not viewed as luxurious but to provide a more interactive learning environment.

Schooling age

Schooling age is a variable that is less debated on. Our acceptance of six-years-old as the "right" schooling age is presuppositional. But, indeed learning starts much earlier. However, considering for prosperous education-business partnership, the age-limit variable could be the basis for negotiation between policy makers and the masses.

Teachers' workloads

Teachers' workloads inevitably correlate with the above variables. The term "workload" might be regarded as unprofessional and a manifestation of negative attitudes; where as the household terms like "responsibility" and "commitment" are administratively preferred and professionally valued. But, making sense of the man-hours employed during teaching, the former is basically a legal term of reference. Professional teachers only teach the subject or area they are only trained to teach. Again, this is another basic principle in human resources management and deployment. The restructuring of school system will need to take into consideration this basic principle so that teachers will grow more professionally and enjoy the fullest satisfaction of their profession.

If education-business partnership were to focus on the enhancement of teachers' professionalism, teachers' education and training are the cornerstones to harness. This will further invigorate the cyclic process of education-business partnership in this country. As an interim measure toward long-term partnership, it is significant that these variables be treated as guiding principles for major schools' restructuring.

Conclusion

Partnership in education industry in this country has a promising future. It is a commitment that will ultimately decide the future direction of education development in this country. Consequently, it endorses our strong belief in the universality of education. Our country has actively participated on the business side of the education industry. For example, the initiation of Smart Schools Program subtly facilitates future ventures into partnership as well as our entry into the next century.

A journey into the next millennium starts from today. Without any necessity for a massive countdown, a remarkable take-off would be to confess some correctable failures of the past and to submit ourselves for smarter endeavours in the future. While developed countries foresee brighter prospect for profitable businesses through several forms of partnerships globally, Malaysia needs to strengthen its present education philosophy. This means to review some of the interpretations that have been seemingly detracted from the primordial path. The primordial path as envisioned

in our national education agenda seeks to prepare future Malaysia's generation as men of wisdom with strong religious belief. Their daily undertakings, interactions as well as decision-making processes will be based on *musyawarah* (consultation) and mutual understanding. While our mission to the next century is imbued with those notions and at the same time accepting the rule of nature, our duty to manage education through business partnership will be a commitment to regain wisdom to know the difference.

Education development in Malaysia is not only developed through physically conspicuous projects. Subsequently, neither it is to be rightly equated with the existence of rigidly written policy that only confines its expansion. It is about humanisation that requires extensive exploration into the various available resources, human potential as well as the potential of our lovely young ones who are at present enjoying themselves at the limited space we termed as schools.

Apparently, collaborative effort to bring education development into the mainstream of national agenda requires support from parents, school communities as well as the professional people. A question of who will initiate the partnership will rest upon schools' management, teachers and interested teams of people who could see it as a call for sacred services for human cause and concern.

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