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Improving Teachers Professionalism to Face the Global Education Challenges: The Context of Brunei Darussalam

ABSTRACT

This paper discusses characteristics of a profession, ingredients of professionalism, reviews on teachers and teaching profession, role of a teacher, the continuing questions of professionalism, and improving teacher professionalism. For Brunei Darussalam, Master of Teaching (M-Teach) and role of ICT (Information and Communication Technology) in teacher education programmes are highlighted in the current academic session. In coming semester, the Malay medium M-Teach in SHBIE (Sultan Hassanal Bolkiah Institute of Education) will be introduced to cater for multiculturalism in Brunei Darussalam. A part from that Arabic medium of instruction will be also included in SHBIE, UBD (University of Brunei Darussalam) and Kolej Universiti Perguruan Agama Seri Begawan (Religious Teachers University College Seri Begawan) programme. In line with the 21st century skills, teachers training should consider in integrating current global issues such as new technology, diverse cultures, religions, languages and lifestyles in a spirit of mutual respect, and open dialogue in personal, work, and community contexts. Pedagogical consideration should also include by providing opportunities for “active learning” and humour to encourage pupil engagement, making learning interesting, and explaining things clearly.

Key words: *teacher professionalism, Master of Teaching, role of ICT, and challenge for the National Education System for 21st Century in Brunei Darussalam.*

INTRODUCTION

A profession is a job that needs training and formal qualification. It is a vocation requiring knowledge on pedagogy and subject content areas. A professional is one who follows an occupation as a means of livelihood and engaged in one of the learned professions such as law, medical, education and etc. Professionalism is exhibited by all the elements of a profession or all the characteristics of a profession.

Professions have their own philosophy, which must be articulated in both written and oral form. Professions must have a body of professional literature

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of research, study, and comment. Professions have, both historically and currently, those who write about and research the profession. Leaders can be writers, doers, role models, and those active in service. Professions have codes, guidelines, creeds, oaths, commitment statements, belief statements – such as statements on ethics and professionalism. Professionals in many professions are licensed, certified, and have specific initial and advanced education, as well as requirements for ongoing education. In addition, many professions require both initial and ongoing testing for admission and maintaining membership. Many professions require support and/or professional development opportunities outside the work environment such as associations or professional organizations.

Professionals are assumed to have extensive theoretical knowledge (e.g. medicine, law, scripture or engineering) and to possess skills based on that knowledge that they are able to apply in practice. Professions usually have professional bodies organized by their members, which are intended to enhance the status of their members and have carefully controlled entrance requirements. The most prestigious professions usually require at least three years at university.

Undertaking doctoral research can add a further 4-5 years to this period of education. Before being admitted to membership of a professional body, there is a requirement to pass prescribed examinations that are based on mainly theoretical knowledge. In addition to examinations, there is usually a requirement for a long period of institutionalized training where aspiring professionals acquire specified practical experience in some sort of trainee role before being recognized as a full member of a professional body. Continuous upgrading of skills through professional development is also mandatory these days. Professions seek to establish a register or membership so that only those individuals so licensed are recognized as bona fide.

Characteristics of a Profession

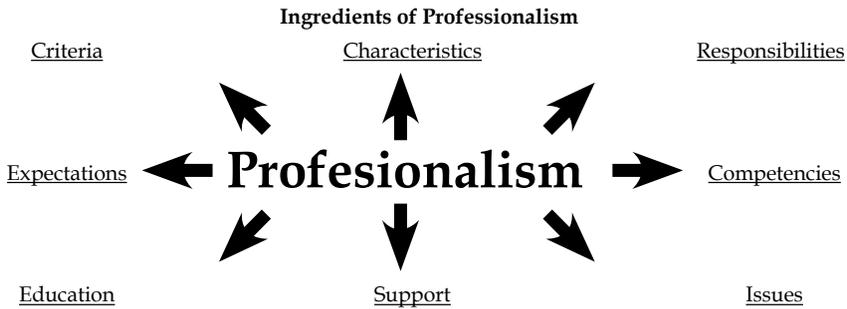
N	Characteristics	N	Characteristics
1	Skill based on theoretical knowledge	12	Control of remuneration and advertising
2	Professional association	13	High status and rewards
3	Extensive period of education	14	Individual clients
4	Testing of competence	15	Middle-class occupations
5	Institutional training	16	Male-dominated
6	Licensed practitioners	17	Ritual
7	Work autonomy	18	Legitimacy
8	Code of professional conduct or ethics	19	Inaccessible body of knowledge
9	Self-regulation	20	Indeterminacy of knowledge
10	Public service and altruism	21	Mobility
11	Exclusion, monopoly and legal recognition	22	Ect.

Professionals tend to retain control over their work, even when they are employed outside the profession in commercial or public organizations. They have also gained control over their own theoretical knowledge. Professional bodies usually have codes of conduct or ethics for their members and disciplinary procedures for those who infringe the rules. Professional bodies tend to insist that they should be self-regulating and independent from government. Professions tend to be policed and regulated by senior, respected practitioners, and the most highly qualified members of the profession. The earning of fees for services rendered can be defended because they are provided in the public interest, e.g. the work of doctors contributes to public health. Professions tend to exclude those who have not met their requirements and joined the appropriate professional body. This is often termed *professional closure*, and seeks to bar entry for the unqualified and to sanction or expel incompetent members.

Where levels of remuneration are determined by government, professional bodies are active in negotiating (usually advantageous) remuneration packages for their members. Some professions set standard scale fees, but professions have clear legal authority over some activities (e.g. certifying the insane) but are also seen as adding legitimacy to a wide range of related activities.

The most successful professions achieve high status, public prestige, and rewards for their members. Some of the factors included in this list contribute to such success. Many professions have individual fee-paying clients. For example, in accountancy, "the profession" usually refers to accountants who have individual and corporate clients rather than accountants who are employees of organizations. Traditionally, many professions have been viewed as "respectable" occupations for middle and upper classes. The highest status professions have tended to be male dominated although females are closing this gender gap. Women are now being admitted to the priesthood while its status has declined relative to other professions.

Similar arguments apply to race and class, ethnic groups and working-class people are no less disadvantaged in most professions than they are in society generally. Church ritual and the Court procedure are obviously ritualistic. In some professions, the body of knowledge is relatively inaccessible to the uninitiated. Medicine and law are typically not school subjects and have separate faculties and even separate libraries at universities. Professional knowledge contains elements that escape being mastered and communicated in the form of rules and can only be acquired through experience. The skill knowledge and authority of professionals belongs to the professionals as individuals, not the organizations for which they work. Professionals are therefore relatively mobile in employment opportunities as they can move to other employers and take their talents with them. Standardization of professional training and procedures enhances this mobility (Wikipedia, 2009).



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In education, a teacher is a person who educates others. The role of teacher is often formal and ongoing, carried out by way of occupation or profession at a school or other place of formal education. In many countries, a person wishing to become a teacher at state-funded schools must first obtain professional qualifications or credentials from a university or college. These professional qualifications may include the study of pedagogy, the science of teaching. Teachers may use a lesson plan to facilitate student learning, providing a course of study which covers a standardized curriculum. A teacher's role may vary between cultures. Teachers teach literacy and numeracy, or some of the other school subjects. Other teachers may provide instruction in craftsmanship or vocational training, the arts, religion or spirituality, civics, community roles, or life skills. In some countries, formal education can take place through home schooling (Wikipedia, 2009).

REVIEWS ON TEACHERS AND TEACHING PROFESSION

Formal teaching may be carried out by paid professionals. Such professionals enjoy a status in some societies on a par with physicians, lawyers, engineers, and accountants. A teacher's professional duties may extend beyond formal teaching. Outside of the classroom teachers may accompany students on field trips, supervise study halls, help with the organization of school functions, and serve as supervisors for extracurricular activities. In some education systems, teachers may have responsibility for student discipline. Around the world, teachers are often required to obtain specialized education and professional licensure. The teaching profession is regarded for having a body of specialized professional knowledge, codes of ethics, and internal monitoring.

In the context of a code, that is adopted by a profession or by a governmental or quasi-governmental organ to regulate that profession, an ethical code may be styled as a code of professional responsibility which may dispense with difficult issues of what behavior is "ethical". Some codes of ethics are often social issues. Some set out general principles about an organization's beliefs on matters such

as quality, employees or the environment. Others set out the procedures to be used in specific ethical situations – such as conflicts of interest or the acceptance of gifts, and delineate the procedures to determine whether a violation of the code of ethics occurred and, if so, what remedies should be imposed.

The effectiveness of such codes of ethics depends on the extent to which management supports them with sanctions and rewards. Violations of a private organization’s code of ethics usually can subject the violator to the organization’s remedies (in an employment context, this can mean termination of employment; in a membership context, this can mean expulsion). Of course, certain acts that constitute a violation of a code of ethics may also violate a law or regulation and can be punished by the appropriate governmental organ.

Ethical codes are often not part of any more general theory of ethics but accepted as pragmatic necessities. They are distinct from moral codes that may apply to the culture, education, and religion of a whole society. Even organizations and communities that may be considered criminal may have their own ethical code of conduct, be it official or unofficial. Examples could be hackers, thieves, or even street gangs.

There are a variety of bodies designed to instill, preserve and update the knowledge, and professional standing of teachers. Around the world, many governments operate teacher’s colleges which are generally established to serve and protect the public interest through certifying, governing, and enforcing the standards of practice for the teaching profession. The functions of the teacher’s colleges may include setting out clear standards of practice, providing for the ongoing education of teachers, investigating complaints involving members, conducting hearings into allegations of professional misconduct and taking appropriate disciplinary action, and accrediting teacher education programs. In many situations, teachers in publicly funded schools must be members in good standing with the college, and private schools may also require their teachers to be college members. In other areas, these roles may belong to the State Board of Education, the Superintendent of Public Instruction, the State Education Agency or other governmental bodies. In still other areas Teaching Unions may be responsible for some or all of these duties.

Role of a Teacher

N	Roles	N	Roles
1	Expert on teacher pedagogy	8	Assistants for formal and informal learning
2	Expert on students pedagogy	9	Goal setter
3	Facilitator of learning	10	Technology experts
4	Planner	11	Evaluator & assessor
5	Experts on content knowledge, skills & thinking	12	Supervisor
6	Motivator	13	Communicator
7	Curriculum implementer	14	Caretaker
		15	Specialist

THE CONTINUING QUESTIONS OF PROFESSIONALISM

Most educators in the West argue that the preparation time for teachers to be professionals is not adequate. Among them are R. Howsam *et al.* (1976), R. Howsam (1981), J.B. Dunbar (1981), J.C. Stoltenberg (1981), and B. Lodge (1984). Hence, J.C. Stoltenberg (1981) suggests a “graduate resident concept” in the teacher education program in which the program would begin after graduation from a four-year teacher education program. This focus is on coursework related to teaching and learning. This is because, “the prime focus for teaching and learning is the induction component which takes place in the laboratory of the classroom”. The writer asserts that “the resident concept is aimed at the integration of theory and practice” (Stoltenberg, 1981).

J.B. Dunbar (1981) mentions that Allegheny College moved to a five-year teacher preparation programs after 1964. This was because there was a firm belief that pre-service training alone, “does not adequately prepare teacher candidates for the realities of first-year teaching” (Dunbar, 1981). Hence, a sequential teacher preparation was planned and implemented. The traditional four-year program was replaced with a sequential five-year program. The program consists of: (1) a strong undergraduate base of studies blended with field experiences; (2) a closely supervised induction year; and (3) a period of continuing induction.

Teachers have the lowest level of preparation if compared to other established professions. Smith and Street agree with the above statement and support the argument by saying that, “the preparation time required for entry into most professions and semi-professions has been notably extended over the past half century” (cited by Dunbar, 1981). But not in education. The extension in time is needed because the customary pattern tends to squeeze educational courses within very limited time constraints. Writing in the 1980’s, R. Howsam mentions that “there is a substantial and growing movement to extend teacher preparation programs by a year or more to improve their quality” (Howsam, 1981).

In Britain, B. Lodge (1984) reports that the National Association of Schoolmasters (NAS) and Union of Women Teachers (UWT) are suggesting an eight-year teaching program. The structure of the program would be four years of B.A. or B.Sc. degree followed by a one year certificate of education and a further three years spent in schools. In schools, teachers in training are regarded as probationers with a light teaching load for two years. In the third year, teachers on probation, then would have a full load and be assessed. Successful candidates will be put on the Burham salary scale.

A B.Ed. program in Britain started in 1972 was reviewed in 1974 and a “more demanding new B.Ed. degree” emerged. The new B.Ed. would be more intellectually demanding than the old B.Ed. program existing at that time. Social and contemporary pressures were contributing to the changes in teacher education programs. Reports made by organization such as the university grants committee and council for national academic awards mentioned that “a fresh approach to professional training is needed because society is making

increased demands on teachers", i.e. teacher education should be relevant to the problems teachers have to face (Howsam, 1981).

The new B.Ed. has 15 weeks of practical teaching spent in the classrooms plus other periods of work in schools. The academic study of education includes child development and psychology, philosophy of education, sociology of education, history of education, and curriculum theory. A change was made because:

The new degrees will need to equip students with the professional skills of a teacher through courses that encompasses the intellectual demands of good Undergraduate Course. They will need to provide balanced programmes all parts of which contribute to the quality of the teacher, both as a skilled professional and as an educated person (*Times*, 10/5/1974:3).

Some educators felt the inadequacy of the professional preparation of teachers affects their performance in teaching. For example Habermann and Stinnett reported that only 20% of the coursework for secondary school teachers dealt with professional preparation, in a four-year program (cited by Howsam *et al.*, 1976). In *Educating a Profession*, R. Howsam and others (1976) concluded that nationally the professional education component made up 13% of a program for the pre-service preparation of a secondary school teacher and only a slightly larger percentage for an elementary teacher (Howsam *et al.*, 1976:34).

In 1981, Howsam proposed a model in teacher education which includes general/liberal studies, specialized studies, undergirding discipline, educational foundations, professional practice, clinical study, and field experience. He mentioned that a broadly educated and cultured teacher needs as follows:

- 1) Two years of general/liberal studies in academic disciplines, before academic specialization or professional studies begins.
- 2) Secondary teachers need in depth study in one or two academic disciplines in order to prepare for teaching.
- 3) Prospective teachers would need undergirding disciplines such as psychology, sociology, anthropology and philosophy given by other departments that could help for the effectiveness in teaching strategies.
- 4) Prospective teachers need to strengthen the theoretical and conceptual base for practical purposes and courses in educational foundation are required.
- 5) Prospective teachers would need professional practice with the emphasis on how to teach and able to apply knowledge gained in the foundation courses in the classroom.
- 6) Prospective teachers would need a minimum of 100 credit-hours in general/liberal, specialized and undergirding disciplines and 56 credit hours in educational foundation courses and professional practices.
- 7) All prospective student teachers should have the opportunity to do clinical work because other professions have clinical work as a major code for all students in their programs.
- 8) Prospective teachers need internship of a year or more of initial employment as a teacher and supervision should come from professionals in the field and from colleges and universities.
- 9) Assessments should aim to evaluate the professional level of competence and academic proficiency (Howsam, 1981:146).

The ongoing debates concerning the professional training of teachers in Britain and United States of America were reflected in Malaysia as an indication of similar concerns. For example, there were seminars for teachers concerning the teaching of subjects such as geography, languages, science and mathematics. Teachers began to attend seminars and meetings beginning in 1972 when Malaysia celebrated its first Teacher Day. In the mid-1970's the Association of SITC (Sultan Idris Training College) Teachers, *Persatuan Suluh Budiman*, was active in initiating a yearly convention on education. Its fifth convention, in 1980 in Johor Baharu, had a special focus on the teaching profession. One of the papers made a call for coordination of teacher education institutions for the improvement of the teaching profession. A lack of coordination among all universities and teachers colleges resulted in differences in teacher education programs such as the length of teaching practice, teaching supervision and evaluation, and also the placements of teachers in schools for teaching practice.

Another association known as the Malaysian Association for Teachers (*Persatuan Pendidikan Malaysia*) was active in organizing conventions and seminars on education. By 1980, the association had its second convention and by 1984, it had its fourth convention. The 1980 convention had a theme on "Educational Challenges of the 1980s" and in 1984 the theme was "Education and Social Policy" (Lee Kum Chee, 1980).

In *Isu Pendidikan di Malaysia 1982* (Educational Issues in Malaysia 1982), a collection of essays, some issues on the teaching as a profession in Malaysia was discussed. For example, in a centralized system of education teachers are caught in the examination-oriented system of education and they are expected to complete the examination syllabus under all circumstances instead of educating students according to individual differences with different appropriate approaches. It is difficult to practice what is taught in teacher education programs and the reality found in schools. Teaching is more of a vocation than a profession. As compared to other professions, teaching service is more open and lacks quality control in terms of student selection and in terms of services. Teachers regard themselves as employee of the Ministry of Education rather than as professionals. Hence, the question of teaching as a profession is endless.

THE CONTINUING QUESTIONS OF PROFESSIONALISM IN THE 21ST CENTURY

Katherine Merseth, Director of the Teacher Education Program at Harvard University, mentioned that "We need to hold graduate schools of education more accountable". Katherine Merseth says that of the 1,300 graduate teacher training programs in the country, about 100 or so are adequately preparing teachers and "the others could be shut down tomorrow" (cited by Salpeter, 2003). It surfaced during a larger discussion about how to train and recruit

great teachers – a subject of increasing interest in Washington. President Barack Obama is also calling on Congress to invest heavily in education, and improving the quality of teaching is a key piece of his plan to fix schools.

One model that holds promise of high quality of teacher education is teacher residency programs. Candidates are required to spend at least a year shadowing a seasoned teacher during the day while taking university coursework in the evenings. Those who complete the program receive the keys to their own classroom. Supporters argue that graduates of residency programs are better prepared for the challenges of teaching in high-needs schools and, as a result, are less likely to burn out quickly and quit. Two of the more successful residency programs operate in Chicago and Boston (*US News & World Report*, 2009). In this context, C. Kent McGuire, Dean of the Temple University College of Education, mentioned that:

School districts typically prefer teachers with advanced degrees on the premise that these individuals possess a deeper understanding of teaching, learning and human development. In fact, in the district in which I serve as school board member, we typically look for teachers with advanced training (and experience). We are more likely to deploy these teachers in our most challenging or demanding assignments where a broad repertoire of teaching strategies is essential (*The New York Times*, 2009).

In responding to President Barrack Hussein Obama and his Secretary of Education, Arne Duncan, on educational issues, Michael Goldstein, the founder of MATCH Charter Public School in Boston, mentioned in “A Theorist or a Teacher” (2009) that: *firstly*, they want teachers evaluated based, in part, on gains their students make (as measured by standardized tests); and *secondly*, the White House wants teachers paid based on the size of those gains. Duncan has argued that there is no link between those courses and real world teacher success (cited by *US News & World Report*, 2009).

Margaret S. Crocco, Professor and Coordinator of the Program in Social Studies and Chair of the Department of Arts and Humanities at Teachers College at Columbia University, mentioned that:

Teachers need serious preparation – in methods, multiculturalism, English Language Learners, special education, differentiated instruction, etc. As any reflective teacher will tell you, however, teaching and learning don’t necessarily go hand in hand, no matter how good the talker in front of the classroom. There is nothing as critical to the learning process as method, what John Dewey characterized as the effective arrangement of subject matter for learning. In part, that means that good teachers must know their content. Some T.F.A. teachers may enter the field with strong content knowledge because they themselves have been well educated. However, I believe that all teachers should have master’s degrees that both deepen their content knowledge and help them learn how to shape content into subject matter for effective engagement in K-12 classrooms – not an easy matter by any means (cited by *Wikipedia*, 2009).

Jeffrey Mirel, a Professor of History at the University of Michigan, mentioned that:

Indeed the “success” of programs like Teach for America that get young people with strong liberal arts backgrounds into classrooms after only a few weeks of teacher training has led for some critics to call for the abolition of education schools altogether (cited by *Wikipedia*, 2009).

Top teacher training programs are now emphasizing academic content as well as methods. At a time when, for example, more than half of all secondary students taking history courses are taught by teachers who neither majored nor minored in history, any effort for getting more people steeped in the liberal arts into teaching, as Teach for America does, should be applauded. But the assumption that merely knowing a subject makes one a good teacher is foolhardy. Knowledge of subject matter is unquestionably necessary for good teaching, but it is insufficient for being a good teacher. Education schools can make a difference. Teaching is an incredibly complex and difficult enterprise. Little about the job comes to people naturally. Prospective teachers need to learn such mundane but crucial skills as how to keep their classrooms orderly and centered on the topics at hand. Most important, at the same time, they have to learn how to make the subject matter of their content area accessible and worth knowing for their students, no easy task given the increasingly diverse backgrounds of these students. When education schools are doing their job these are the kinds of things prospective teachers learn so can they start their careers better able to handle the intense and unrelenting demands of teaching (*The New York Times*, 5/10/2009).

Arthur Levine, the President of the Woodrow Wilson Foundation and former President of Teachers College, Columbia University touched on “A Lack of Quality Control” – the idea of tying teacher salaries to the accumulation of academic credits and advanced degrees made sense when it was introduced as a vehicle for insuring fairness in pay and fostering continuing teacher growth. But it doesn’t serve our children or schools well today. This system lacks quality control and too often encourages universities to offer quick, low quality graduate programs in order to attract those teachers who may be more interested in salary bumps than professional development. In addition, there is no requirement that the subjects the teacher studies be related to the needs of his or her students or school (cited by *Wikipedia*, 2009).

There are two better alternatives. *First*, to improve the process: require that teachers study subjects which will advance their knowledge of their fields or expand their expertise into areas essential to their school’s or children’s progress. Teacher study plans would need to be approved by their principal. *Second*, to focus on outcomes: tie teacher salaries, not to what the teacher studies, but rather to the performance of his or her students. Every child in America is entitled to a qualified teacher, who prior to entering a classroom as the teacher of record, should be educated in a subject field and pedagogy and have the experience of applying both in a school setting.

James G. Cibulka, President of the National Council for Accreditation of Teacher Education in Washington, mentioned “Pedagogy Has its Place” – in

the past, most states have given an increase in salary to teachers who pursue a master's degree. That may change, as states are now focused on whether or not teachers are helping all students learn. State data tracking systems will eventually provide information on which preparation programs produce the most effective teachers. Master's programs for experienced teachers should demonstrably "add value". In terms of graduate degrees, whether it is a degree in the content area or a degree focused on pedagogy – or how to teach so students learn – depends on the needs of the teacher. Some teachers are well-grounded in content and would benefit from a focus on how to teach. Others need more knowledge in their discipline (cited by *Wikipedia*, 2009).

The most effective teachers have good knowledge and skill in both content and pedagogy. Current policy discussions are focused on how to transform pre-kindergarten through 12th grade education to ensure all students are college-and-career-ready. The current system was not designed to achieve that level of performance for all students. Preparation programs are in transition. The most effective programs for initial teachers immerse them in schools for strong clinical experiences, prepare them to function in teams, and focus on both content knowledge and pedagogical skills, including the use of data to improve student learning. Master's programs for experienced teachers should demonstrably "add value" to their teaching effectiveness.

Linda Mikel, the Principal of Sixth Street Prep School, a charter elementary school in Victorville, California asked: "*What is an educated person?*" Michigan State University has answered the question well as follows:

An educated person is someone who has learned how to acquire, analyze, synthesize, evaluate, understand, and communicate knowledge and information. An educated person has to develop skills that respond to changing professional requirements and new challenges in society and the world at large. He or she must be able to take skills previously gained from serious study of one set of problems and apply them to another. He or she must be able to locate, understand, interpret, evaluate, and use information in an appropriate way and ultimately communicate his or her synthesis and understanding of that information in a clear and accurate manner. When I look for a teacher, I look for an educated person, someone who has been immersed in books, the arts, the sciences and philosophy through a liberal arts education. Our schools need teachers who have developed capacity for critical inquiry, for problem solving and for innovation. A liberal arts education, offered by America's best institutions of higher learning, is immensely practical as a resource for life-long learning, for responding to technological and social change, and for passing on the value of a well-rounded learning experience (cited by CDW-G, 2009).

IMPROVING TEACHERS PROFESSIONALISM: CHALLENGES IN THE 21ST CENTURY

A demand for new skills in the job market in 21st century seems to quest for individual with not only knowledgeable but individual who is innovative, problem solver, and good communication skill, able to work in team. Advanced economies, innovative industries and firms, and high-growth jobs require more educated workers with the ability to respond flexibly to complex problems,

communicate effectively, manage information, work in teams and produce new knowledge (Partnership for 21st Century Skills, 2008a:6).

As reported in *Tech and Learning*, J. Salpeter reported in Tech & Learning blog summarizes on the learning for the 21st century content listed three criteria's on global awareness as listed follow: (1) Using 21st century skills to understand and address global issues; (2) Learning from and working collaboratively with individuals representing diverse cultures, religions, and lifestyles in a spirit of mutual respect and open dialogue in personal, work, and community contexts; and (3) Promoting the study of languages other than English as a tool for understanding other nations and cultures (Salpeter, 2003).

This condition as supported by Partnership for 21st Century Skills (2008b:7) stated that "high-income countries have a high capacity for innovation" – and their strategies are global in scope, which requires a workforce with skills to "offer cross-border perspective and solution" and apply "tangible skills such as language proficiency" and "skills that are less tangible, including greater sensitivity to cultural differences, openness to new and different ideas and ability to adapt to change".

In summary, as discussed above, the challenge for the 21st century on education in teacher training program is to prepare teacher with additional knowledge on facilitating learner to have good thinking skills, discipline and independent, and ability to solve complex problems, innovative mind, sensitive to other culture, and can communicate effectively. The teachers themselves have to be ready to face the challenges and changes in any teacher training programme. Their strong background is not only on their subject area but they should have other skills such as enhancing their instructional strategies by adding "tangible" and "less tangible" skill.

THE CONTEXT OF BRUNEI DARUSSALAM

Brunei Darussalam celebrates Teacher's Day in September every year. In 2006, His Majesty mentioned that:

Teachers must continue to be relevant and manage the teaching environment effectively as they are the axis of the teaching profession. Teachers not only teach but also nurture a great generation. They are the backbone of the education system. They determine the success and failure of the system. Because of this, excellent teachers are those who are able to confront different challenges while being able to fulfill the expectations of the people and the nation (as cited by *The Brunei Times*, 20/11/2007).

Following this, the concept of "Quality Teachers Raise the Nation's Competitiveness" was the theme of 2006 Teachers' Day Celebration (*Borneo Bulletin*, 22/9/2006:1); and the third SHBIE (Sultan Hassanal Bolkiah Institute of Education) Annual National Seminar/Workshop in Education (SANSWE, 2007) discussed "the Current Trends and Practices in Teacher Education" worldwide in an attempt to prepare teachers for new challenges in meeting the expectation of the proposed national educational reform – the 21st century education system.

Raising the status and quality of teachers must be at the heart of any attempt to create a world-class education system. This was highlighted by the Minister of Education, Pehin Orang Kaya Seri Lela Dato Seri Setia Awg Haji Abdul Rahman, at the third SHBIE Annual Seminar/Workshop in Education (SANSWE) opening ceremony in 2007. The Minister said that one important key to the successful implementation of any education system is bringing out the best learners within the system. This is done “by engaging, encouraging and inspiring creative and critical thinking, and thereby creating a generation of thinkers and intellectuals”, he said. The following sub-themes were concurrently discussed: (1) Teacher Professional Development, (2) ICT in Teacher Education, (3) Outcome-Based Teacher Education, (4) Teaching Practice, (5) Teacher Competencies Indicators, (6) Innovative Practices, (7) Inclusive Education, (8) Mentoring Beginning Teachers, (9) Evidence-based Practices, and (10) Initial Teacher Preparation (SANSWE, 2007).

This is in line on what we are going to discuss today that is “Improving Teachers Professionalism to Face the Global Education Challenges” with the following sub-themes: (1) Authentic problem-based learning: Develop and promote soft skills; (2) Preparing students for the challenging world and its impact to curriculum design and development through multicultural perspective; (3) Nurturing creativity in the classroom: What and why to promote and embrace and also to renewed creativity; (4) Effective teaching for all children in a globalization era; (5) In teaching what they learn, learning what they live: How teachers’ personal histories shape their professional development; (6) Preparing teachers for a changing world in the 21st century; (7) Empowerment local values and their contributions to multicultural society; and (8) The opportunities and challenges of teachers in the globalization Era.

It seems that we are talking on common sub-themes, except for multiculturalism in Indonesia and ICT (Information and Communication Technology) in Brunei Darussalam, with regards to Teacher Education and Teaching Profession in Facing Global Challenges. Thinking skills have been highlighted in the new education system in Negara Brunei Darussalam (SPN21, *Sistem Pendidikan Nasional Abad ke-21*) to meet the challenges of lifelong education. Teaching thinking skills such as problem solving, creative, and critical thinking are part of the essential skills in the new National Education System (SPN21, 2007:21, updated 7/3/2009). Azlan Othman wrote in *Borneo Bulletin* (29/11/2006:1) on the implementation of “the 21st century education system amid the challenges brought about by the process of globalization” in Brunei Darussalam. Teaching essential skills such as problem-solving skills are also stressed. Problem-solving skills (thinking and creativity) as part of the essential skills in the new National Education System (SPN21, 2007:21, updated 7/3/2009) should be thoroughly practiced. Other essential skills include communication skills, numeracy skills, ICT skills, self-management and competitive skills, work and study skills, interpersonal skills, physical skills and aesthetic skills.

Three challenges in empowering higher order thinking skills in the new education system include: (1) to translate the lower order thinking questions to higher order thinking questions; (2) to orientate higher order thinking in teaching and learning; and (3) to empower teachers with higher order thinking skills and culture.

TEACH THE MIND AND WHAT EXPERTS SAY ON GOOD TEACHER?

To be able to be caught up into the world of thought – that is being educated. What is really important in education is not that the child learns this and that, but that the mind is matured and that energy is aroused. In Brunei Darussalam, the concept of *thoughtful education* within the context of *thoughtful schools* was first proposed in 1997 by the then Minister of Education. The concept of *thoughtful education* is integrated with ICT (Information and Communication Technology) where “*the teacher played a mediating role in engaging students to learn with the computer, rather than from the computer*” (in Lim & Upex eds., 2006).

At the secondary level, the Thinking Skills Project was started in July 1993. At first six government schools and one private school were involved with two thinking skills educational packages (Perceptual Breadth, CoRT 1 and Creativity, CoRT IV). In 1997 and 1998, all government secondary schools were involved. With SPN21, thinking skills should be taught to all schools and integrated in all subject areas.

Innovative teacher-training programme – Teach First: offers practical and hands-on training. Professor Patricia Broadfoot, a former Professor of Education and now Vice-Chancellor of the University of Gloucestershire mentioned that the highest quality teaching and learning comes when we have the greatest autonomy for the teacher and the learner, the good teacher is someone who is “*left to get on with what he thinks his students need*”. The key ingredients of good teaching included: creating an atmosphere of mutual respect and fairness in the classroom, providing opportunities for *active learning* and humour to encourage pupil engagement, making learning interesting, and explaining things clearly (cited from <http://www.news.bbc.co.uk>, 28/1/2010).

Professor Debra Myhill, from Exeter University, argued that while good subject knowledge and intellectual ability were both important, they were not *sufficient* to be a good teacher. The crucial ingredient was a teacher’s ability to reflect on his or her own performance and then to change it. A good teacher should go in for *creative subversion* i.e. not to passively comply with government initiatives but *adapt them creatively* (Ontario Institute for Studies in Education, 2007).

Professor Mary James, from the Institute of Education with her recipe for good teachers, mentioned as follows: (1) One of her top 10 requirements was that the teacher should “*promote the active engagement of the learner*”; (2) If learners are not involved in their learning, they do not learn; (3) Teachers liked to be given practical guidance on how to improve their teaching, they really needed to develop their own judgment of what works and what does

not work in their own teaching; and (4) This emphasis on engaging pupils and self-reflective teaching might horrify those who support a more traditional subject-based, discipline-oriented approach (as cited at www.news.bbc.co.uk, 28/1/2010).

To implement “the 21st century education system amid the challenges brought about by the process of globalization”. How? Namely: (1) Change in the assessment system; (2) Strengthen English language acquisition; (3) Upgrade performance in mathematics and science; and (4) Enhance performance in Malay.

Create various pathways, or *channelization*, as follows:

No.	Secondary Education	Cohort
1	Specialized education for gifted pupils	05%
2	Secondary academic	15%
3	Secondary general	35%
4	Secondary applied to be technology and business	45%

Notes:

1. Channelization will create flexibility, “Inclusive multiple pathways”;
2. “Quality as a hallmark whilst [...] upholding the Bruneian identity”;
3. Raise quality of teachers for better education.

On quality education, the Education Minister of Brunei Darussalam, Pehin Dato Haji Abdul Rahman, says that a world class system requires constantly upgrading on the status and quality of teachers (*The Brunei Times*, 20/11/2007; and <http://www.bt.com.bn/en>, 20/1/2010). Raising the status and quality of teachers must be at the heart of any attempt to create a world-class education system. This was also highlighted by the Minister of Education, Pehin Orang Kaya Seri Lela Dato Seri Setia Awg Haji Abdul Rahman at the third SHBIE (Sultan Hassanal Bolkiah Institute of Education) Annual Seminar/Workshop in Education (SANSWE) opening ceremony in 2007. The Minister said that one important key to the successful implementation of any education system is bringing out the best learners within the system. This is done “*by engaging, encouraging and inspiring creative and critical thinking, and thereby creating a generation of thinkers and intellectuals*”, he said. The Minister also pointed out a recent report by Mckinsey, a global consultancy firm, about how well-intentioned school reforms have failed for decades in many countries despite massive spending increases, smaller class size, and greater school autonomy because they overlooked teachers.

“*Therefore, we in the Ministry of Education and the universities must play an important part in preparing teachers for their new role in the classroom*”, he stressed. The Minister also highlighted the “new teacher education” which has been emerging with three closely coupled pieces: constructed as a public policy problem, based on research and evidence, and driven by outcomes. The Minister said then as follows:

The challenge for education policy makers everywhere is to find a way to improve teacher quality so as to improve learning outcome for pupils in schools [...] but in order to legitimize policy there is a need for research on which to base decisions (SANSWE, 2007).

The Minister expressed hope that this year's SANSWE (2007) will be able to provide answers to important questions like what will improve teacher quality, learning in school and the effect of size, how and what do good teachers do, and what and how do good pupils learn. He also pointed out that studies have shown the teachers' quality significantly affect the quality of education, as demonstrated by education systems that have recruited top students into the ranks of teachers. Success also depends on monitoring every child and ensuring raw recruits become effective teachers through practical initial training, coaching and collaboration in schools, and mentoring by heads. He also said that this raises the question of how those who manage school can best induct new teachers in their roles, and helps them to sustain their knowledge and interest in developing new approaches to education (SANSWE, 2007).

ON THE MASTER OF TEACHING

Professional development seems to be essential to teachers nowadays due to changes on time that change the skills needed by the work force. In Partnership's Report, 21st Century Skills, Education and Competitiveness stated that *"business now require workers who can handle more responsibility and contribute more to productivity and innovation"* (cited in CDW-G, 2009:3). Most of the studies agreed that one of the factors that have given effect to globalization is internet. As a result, most of the students in any country are connected to internet. This scenario will give impact on the workforce in future in terms of communication and competitiveness. *"People will telecommute to their jobs more in future, while their companies compete globally"*, as reported by B. Madhumita and M. Hartnett (2008:41).

The challenges in teaching and learning seem to be complex and difficult due to the information explosion and dynamic communication between the learners and teachers around the globe. The progression of communication technology through its larger bandwidth and small gadget has shrunk the world. Internet seems to be common to people, especially to a younger generation. Information in the internet is so huge, so teaching and learning have to be changed too. The learning environment should be changed. The delivery method and techniques should be enhanced. Learners should not be confined in a limited space. The technique should not be limited to "traditional lecture".

Traditionally lecturing is often perceived by students as boring, with little intellectual simulation coming from monotonous lecturers (Exley & Dennick, 2004:3). Stephen Leacock stated that most people tire of lecture in ten minutes; clever people can do it in five. Sensible people never go to lectures at all. However, lecture can be enhanced by adding more value in it by providing activities for active learning and interaction. K. Exley and R.

Dennick (2004:84) stated that in order to increase attention span, engage the students and encourage them to think, it is also recommended that the lecturer consider breaking the lecture into short sub-sections of "lecture input" and interspersing this with student activities that provide opportunities for active learning and interaction.

In England, Masters in Teaching and Learning (MTL) is implemented as a government funded project to upgrade the teacher's skill on hands-on, classroom-based qualification developed in order to help the in extending their teaching skills and abilities. Training and Development Agency for Schools London (2009:7) stated that MTL is being introduced in recognition of the high quality of education currently offered to children and young people in England and the fact that, in today's world, as the learning needs of the pupils are becoming increasingly challenging, complex and diverse, the demands on teachers' knowledge and skills is increasing.

Stranmilis University College, UK, stated that the aims of Master of Teaching is to support serving teachers seeking to achieve masters level accreditation for the highest standards of professional reflection and action in their own classrooms and schools. Teachers will be provided with opportunity to review their own professional development, research their practice and investigate new ways of improving pupil learning. In US, College of Education, Seattle University, stated that:

The Master in Teaching (MIT) program is designed and delivered based on collaboration among the College of Education Faculty and the school community to prepare teachers to meet the educational demands of the 21st century. *First*, a strong grounding in an academic field is essential for this program. Additionally, the program infused with the ethical and value-laden issues inherent to the teaching profession. In Canada, Ontario Institute for Studies in Education, University of Toronto (OISE UT) stated that "Since teaching has been increasingly acknowledged as a complex and difficult challenge, many jurisdiction, both in Canada and outside, have move to broaden and lengthen teacher education programs. At OISE UT, the MT program combines strong professional preparation with rigorous academic study. It depicts the epitome of integration - the amalgamation of practice and research" (as cited by Pratt & Pallof, 2001).

Melbourne Graduate School of Education, Australia, in the Dean remarks on Master of Teaching stated that the master of teaching aspires to develop a new breed of teacher, to improve and elevate teaching profession. What makes it different is the unique delivery program using new models that link theory and practice. On a whole, Master of Teaching emerges as program to provide teachers skill and knowledge to face the new challenges this 21st century. Most of the program offered in M-Teach seems to focus on the effectiveness of teaching and learning according to its theory and practice. It also provides a real experience through school and community partnership (Pratt & Pallof, 2001).

MASTER OF TEACHING IN CONTEXT OF BRUNEI DARUSSALAM AND THE NATIONAL EDUCATION SYSTEM FOR THE 21ST CENTURY

Brunei Darussalam, in its Brunei Vision 2035, stated that by 2035, Brunei Darussalam is recognized everywhere for: (1) The accomplishment of its well-educated and highly skilled people; (2) The quality of life; and (3) The dynamic and sustainable economy.

In order to face a global challenge, learn to teach needs to explore innovative and creative ways of delivering the knowledge to the learners to produce “well-rounded” learner with creative and critical thinking skills and able to analyze and synthesize information. In Brunei Darussalam, the National Education System for the 21st Century is introduced to fulfill its 4 aims: (1) meet the social and economic challenges of the 21st century; (2) realize the Ministry of Education’s vision and mission; (3) equip students with 21st century skills; and (4) fulfill the Strategic Themes as outlined in the Ministry of Education’s Strategic Plan for 2007-2011.

Six policy directions in the Education Strategy, Brunei Vision 2035, are: (1) Fulfillment of the Ministry of Education’s mission “Provide Holistic Education to Achieve Fullest Potential for All”; (2) Comparison with Education Systems and Curricula of various countries; (3) Raising students’ achievement in the 3 core subjects: English Language, Mathematics, and Science; (4) Increasing the percentage of students’ enrollment into higher education from 14% to 30% by 2011; (5) Strengthen proficiency in *Bahasa Melayu*; and (6) Local researchers and consultants from overseas have identified certain aspects of the National Education System that need to be improved.

The Dean of Sultan Hassanal Bolkih Institute of Education (SHBIE), Dr. Poh Sing Huat in his briefing in Board Meeting on November 19, 2008, regarding SHBIE as a graduate school said that:

The introduction of the new education system (SPN-21) in Brunei Darussalam in January 2009 requires a paradigm shift in term of teachers’ mindset, understanding of epistemology, and their pedagogical approaches. The new education system attempts to provide students with more holistic education and opportunities to develop 21st century knowledge and skills such as those related to communication, entrepreneurship, ICT and critical thinking that are considered necessary for global competition and continuous survival of the nation (Poh Sing Huat, 19/11/2008).

Due to this condition, he added as follows:

SHBIE, being the main teacher training institute in the country, has to reexamine its teacher preparation programmes to ensure that they align with the aspirations of the SPN-21, and the current development and reform in teacher education in many top universities in Australia, Europe, US and UK which have transformed many of their faculties of education into graduate schools, offering innovative postgraduate programmes, in particular, the Master of Teaching or M-Teach (Poh Sing Huat, 19/11/2008).

Due to this situation, all pre-service undergraduate programmes are to be discontinued. The existing programmes will be phased out. Instead Master of

Teaching degree in SHBIE will provide prospective teachers with a professional qualification for entry to the teaching profession. It prepares teachers to make real difference in the classroom. This innovative programme links theory and practice to provide powerful insights into learners and the teaching process (Lim & Upex eds., 2006).

Basically, the entry requirement for the programme are a good honors degree (at least second class lower) or equivalent from recognized university, excellent English communication skills at the level of, at least IELTS 6.5 or TOEFL 600, and successful performance in an interview. Master of Teaching in SHBIE provides four specialist degree programs comprising of: (1) Early Childhood Education and Care; (2) Primary Education; (3) Secondary Education; and (4) Vocational Technical Education.

The programme structure consists of three semester full programme (18 month) and five semester part-time programme (30 month). Each semester the teacher needs to have a two days a week school experience with additional 15 day block and seminar series.

ROLE OF ICT IN TEACHER EDUCATION PROGRAMMES

The emerging technologies in the internet have given us a great impact to teaching and learning. Teachers can easily deliver their content through Web 2.0 tools such as social networking tools, wikis, blog, podcast, instant messaging, Google Maps, RSS feed, etc. Accordingly, Wikipedia (2009) described Web 2.0 as a transition to a more distributed, participatory and collaborative environment.

Traditional pedagogy has moved to *electronic pedagogy* (Pratt & Palloff, 2001:25) where teacher can design their own lesson electronically through the internet. Teachers can actively created their own content in blog and communicate dynamically with their student in social networking. Wikipedia (2009) stated that the shift occurring in the Web from static content environment where end user are the recipients of the information – defined as Web 1.0 – to one where they are active content creator.

Content can be delivered not only through computers but through small gadget such as pocket pc, handheld devices, and mobile phones. Wikipedia (2009) stated that as technologies become more sophisticated and as they begin to converge (e.g. cell phones becoming multimedia-capable and Internet-connected), educators will have more options for creating innovative practices in education.

In SHBIE University of Brunei Darussalam, most of the ICT courses in either existing or new programmes have been reviewed and enhance to follow the trend and technology progression. In the National Education System for the 21st Century (SPN 21), ICT is one of the components that need to be emphasized in teaching and learning in order to produce student with innovative, creative and critical thinking skills, and able to survive and compete in the real world. In SHBIE, in the existing programmes ICT have been integrated quite a long time with core courses such as Educational Technology (English and Malay

medium) with additional specialize elective courses such as 3D animation in teaching and learning, Information System, etc. The core and elective courses are mainly conducted by Department of Educational Foundations in SHBIE. Some of the ICT unique courses are also conducted by other departments such as Department of Science and Mathematics Education, Department of Language Education, and Department of Art and Social Science Education. In upgrading teachers' skill, SHBIE has also offer ICT courses through its In-Service Training (INSET). Most of the existing courses have been reviewed to fulfill the current trend and needs of the teacher.

In Master of Teaching, ICT skill is taught separately within the Technology, Pedagogy and Content Knowledge (TPACK) framework. TPACK is run throughout the programme except Early Childhood Education and Care. Teachers have been provided new innovative ways of delivering the lesson to the learners by using Web 2.0 tools through blended and self-directed learning.

The role of ICT in Teacher Education programme is not only using "ICT to teach" but use it as a tool to deliver effectively with an appropriate tool and techniques. To the learners, ICT is used as a tool to improve their thinking skills. The emergences of Web 2.0 tools has given teachers opportunities to explore new ways of delivering their lesson. Communication can be enhanced through social networking, learning can be administered through Learning Management System and at the same time information such as Learning Objects are available for free and can be used as the instructional materials.

CONCLUSION

As a conclusion, we would like to summarize what we have said. So far, we have discussed characteristics of a profession, ingredients of professionalism, reviews on teachers and teaching profession, role of a teacher, the continuing questions of professionalism and improving teacher professionalism.

For Brunei Darussalam, Master of Teaching (M-Teach) and role of ICT (Information and Communication Technology) in teacher education programmes are highlighted in the current academic session. In coming semester, the Malay medium M-Teach in SHBIE (Sultan Hassanah Bolkiah Institute of Education) will be introduced to cater for multiculturalism in Brunei Darussalam. A part from that Arabic medium of instruction will be also included in SHBIE, UBD (University of Brunei Darussalam) and *Kolej Universiti Perguruan Agama Seri Begawan* (Religious Teachers University College Seri Begawan) programme.

In line with the 21st century skills, teachers training should consider in integrating current global issues such as new technology, diverse cultures, religions, languages and lifestyles in a spirit of mutual respect and open dialogue in personal, work, and community contexts. Pedagogical consideration should also include by providing opportunities for "active learning" and humour to encourage pupil engagement, making learning interesting, and explaining things clearly.

Bibliography

- Abdullah Mohd Noor. (1986). "A Study of National Education Policy Regarding Teacher Education at the University Level in Malaysia from 1963 to 1984: Change and Development". *Unpublished Ph.D. Dissertation*. Bloomington, USA: Indiana University.
- Article "An Introduction to the Masters in Teaching and Learning 2009/2010" in Training and Development Agency for Schools London. (2009). Available also at http://www.tda.gov.uk/upload/resources/pdf/m/introduction_to_mtl.pdf [accessed in Bandar Seri Begawan: 30 September 2009].
- Article "Do Teachers Need Education Degrees?" in *The New York Times* (Oct. 5, 2009). Available also at <http://roomfordebate.blogs.nytimes.com/2009/08/16/education-degrees-and-teachers-pay/> [accessed in Bangi, Malaysia: Oct. 22, 2009].
- Borneo Bulletin*. Bandar Seri Begawan: 22 September 2006.
- Borneo Bulletin*. Bandar Seri Begawan: 29 November 2006.
- CDW-G. (2009). "21st Century Classroom Reference Guide: Preparing Students for the Future". Available also at <http://www.the21stcenturyclassroom.com/> [accessed in Bangi, Malaysia: Sept. 26, 2009].
- Dunbar J.B. (1981). "Moving to a Five-Years Teacher Preparation Programme: The Perspective of Experience" in *Journal of Teacher Education*, Vol.32 [Jan/Feb], pp.13.
- Edem, D. Akpan. (1967). "A Comparative Study of Teacher Education Programs for Secondary School Teachers in Nigeria and the United States". *Unpublished Ph.D. Dissertation*. Illinois, USA: The Graduate School of Southern Illinois University.
- Exley, K. & Dennick, R. (2004). *Giving a Lecture: From Presenting to Teaching*. Madison Ave. NY: RoutledgeFalmer.
- Howsam, R. et al. (1976). "Educating a Profession". *Report of the Bicentennial on Education for the Profession of Teaching of the American Association of Colleges for Teachers*. Washington: AACTE.
- Howsam, R. (1981). "Trouble with Teacher Preparation" in *Educational Leadership*, [November], p.146.
<http://www.news.bbc.co.uk> [accessed in Bandar Seri Begawan: 28 January 2010].
- Lee Kum Chee. (1980). "A Profile of the Academic Profession". *Paper presented at the National Convention II on Education in Federal Hotel, Kuala Lumpur, on 7-9 November*.
- Lim, Swee Bee & Stephen Upex [eds]. (2006). *Fifty Years of Teacher Education in Brunei Darussalam*. Bandar Seri Begawan: SHBIE University of Brunei Darussalam.
- Lodge, B. (1984). "Teacher Training Should Take Eight Years" in *Times Educational Supplement*, [February, 3], p.5.
- Madhumita, B. & M. Hartnett. (2008). "Adressing Diversity in Design of Online Courses" in *Education for a Digital World*. British Columbia, Canada: Commonwealth of Learning.
- Magazine of *Times*. New York: 10 May 1974.
- Newspaper of *The Brunei Times*. Bandar Seri Begawan: Tuesday, 20 November 2007. Retrieved from <http://www.bt.com.bn/en> [accessed in Bandar Seri Begawan: 20 January 2010].
- Newspaper of *The New York Times*. New York: 5 October 2009.
- Ontario Institute for Studies in Education. (2007). *Master of Teaching: Overview*. Toronto: University of Toronto. Available also at <http://www.oise.utoronto.ca/mt/overview.html> [accessed in Bandar Seri Begawan: 28 September 2009].
- Partnership for 21st Century. (2008a). "21st Century Skills, Education and Competitiveness: A Resource and Policy Guide". Available also at http://www.21stcenturyskills.org/documents/21st_century_skills_education_and_competitiveness_guide.pdf [accessed in Bandar Seri Begawan: 4 October 2009].
- Partnership for 21st Century. (2008b). "Learning for the 21st Century". Available also at http://www.21stcenturyskills.org/images/stories/otherdocs/p21up_Report.pdf [accessed in Bandar Seri Begawan: 4 October 2009].

- Poh Sing Huat. (2008). "Briefing in Board Meeting". *Speech Paper* at the SHBIE [Sultan Hassanal Bolkiah Institute of Education]. Bandar Seri Begawan: UBD [University of Brunei Darussalam], 19 November.
- Pratt, K. & R.M. Pallof. (2001). *Lessons from the Cyberspace Classroom: The Realities of Online Teaching*. San Francisco, CA: Jossey-Bass - A Wiley Co.
- Salpeter, J. (2003). "21st Century Skills: Will Our Students be Prepared?" in *Tech & Learning Website*. Available also at <http://techlearning.com/article/13832> [accessed in Bandar Seri Begawan: 4 October 2009].
- SANSWE [SHBIE Annual National Seminar/Workshop in Education]. (2007). *The Current Trends and Practices in Teacher Education: A Seminar Proceedings*. Bandar Seri Begawan: UBD [University of Brunei Darussalam].
- Small Library Management Training Program. (n.y.). "What is Professionalism?" Available also at <http://www.tsl.state.tx.us/ld/tutorials/professionalism/IC.html> [accessed in Bandar Seri Begawan: 24 September 2009].
- SPN21 [Sistem Pendidikan Nasional Abad ke-21]. (2007). *SPN21 di Brunei Darussalam*. Bandar Seri Begawan: UBD [University of Brunei Darussalam], updated by 7 March 2009.
- Stoltenberg, J.C. (1981). "Pre-Service Preparation to In-Service Competence: Building a Bridge" in *Journal of Teacher Education*, Vol.23, January-February, pp.1-16.
- Wikipedia. (2009). "Teacher". Available also at <http://en.wikipedia.org/wiki/Teacher> [accessed in Bandar Seri Begawan: 24 September 2009].