CHAPTER II

REVIEW OF RELATED LITERATURE AND RESEARCH

This chapter of the study would be presented with the literature required from the various sources so as to lay down solid foundations towards the research, which mostly highlight change management in higher educational administration and its related issues. All will be displayed below:

Reforms in Educational Administrations of Higher Education Institutions due to Globalization and Internationalization

First, for *"globalization"* viewpoints, Scott (1998, p.2), and Bernardo, (2002, p.3) pointed out that "Globalization" was a very different phenomenon. It reflected not only the process of global competitiveness between, for example, the great "market" blocs of the Unites States, the European Union and the Pacific Rim nations. It also involved intensified collaboration as a global division of labor between low-cost mass manufacture and services provision (largely, but not exclusively, in the poorer South) and high-value technology and innovation (located mainly in the rich North, but with intriguing deviations).

In the climate of higher education level (HE), when discussing the implications of the changing environment for governance in HE, Tierney (1999, p.104) said, "The current decentralization, incremental governance structure exists in a supportive decision-making culture typically shared by faculty if not administrators and staff." Therefore, the role of the faculty in HE was greatly emphasized. In this sense, as mentioning about a responsive university in the 21st century, Tierney (1999) added that faculty members would have new external relationships with people in their communities and regions and administrators would have new external relationships with government agencies as well as schools, libraries, co operations and other colleges and universities. And he concluded that the responsive college and university would be focused on serving others. In serving others well, the college and university would develop its contribution to students and society and would attract the resources needed

to continue its work.

Eggins (2003, p.3) with the ideas from British and other European HEIs, talked about globalization and reform in HE. He said that globalization was itself a complex force that affected all aspects of our global and national education systems. On the one hand was the pull towards cooperation, social cohesion, social harmony, transparency, equity and to enabling greater numbers to participate in higher education. On the other hand were the financial issues, the neo-liberal agenda that calls for competition, free trade, the dominance of the market. The flows of change moved first in one direction, then in another: equity, inequality; convergence, divergence; change, non-change; inclusion, exclusion; the global, the local. The recognition that higher education reforms were necessarily intertwined with the effects of globalization might enable us to understand more clearly the higher education systems and their relationship to society as a whole.

Eggins (2003, p.4) added that, to meet the demands of the 21st century, higher education institutions around the world were undergoing reforms regarding their missions and better use of their intellectual resources. The convergence of such external factors as globalization, the increasing economic role of knowledge, information technology and reduced public funding of higher education place enormous pressure on institutions to change. Other forces included: (1) changes in governmental structures, (2) increasing rate of knowledge creation, (3) demographic shifts in student populations, (4) changes in societal expectations for higher education, (5) the market model as applied to higher education, and (6) the emergence of other providers of post-secondary education.

And when globalization hits the world in all the fields, education has to change its ways, Olssen, et al. (2004, p.1) stated, "Globalization, we contend, is not a new phenomenon, but it is coming more complex and more pervasive with the advent of new technologies and the expand of global market." And they added that globalization theorists had emphasized the "new" ways, in which the individual nation-state was influenced by the international world order in relation to economic, cultural and political categories.

Lenn (2005, p.2) from the center for quality assurance of international education in Washington, D.C, U.S.A, pointed out that, first, in the context of the global marketplace, according to the 1999 World Trade Organization's Education Service Report, the global market for higher education and training was estimated at US $27 billion in 1995. IDP (International Development Program) Australia estimated that in 1999, there were 48 million learners in the world, 17 million in Asia. This compares to their projection that in the year 2025, there will be 159 million learners, 87 million in Asia. In 1997, U.S. education and training services totaled more than $8.5 billion and ranked among the country's top five service exports (ITA, U.S. Department of Commerce), placing the U.S. among the top three higher education exporters world-wide – the other two are the United Kingdom and Australia. Why is higher education growing at such a rate? Some of the key reasons lie in improved access, readiness for a more diverse range of providers and in the globalization of the professions. The umbrella for these three key reasons is the global marketplace, promoted by regional and international trade agreements. And, of course, the new technologies are enabling communication with far greater ease than even a decade ago. (i) For *access*: As countries begin to embrace the reality that more of its population educated at higher levels will only serve to improve the state of the country, avenues are opening for second country providers to offer higher education services in those countries. Regardless of the extent of the country's wealth, no country exists at present which can sustain expanding its state funded higher education system, especially those which are tuition-free. Examples of improved access are found in policy announcements by various governments.

Let us take some examples at some countries: Japan, where approximately 35-40 percent of the population is educated at a tertiary level has recently announced that it will seriously consider recognizing online education provided by higher education systems other than its own. China, which educates but 3-4 percent of its 1.2 billion people, has in recent years approved a large number of linkages with its state universities and in recent months has recognized certain state universities to provide online education with the assistance of second country providers. Malaysia in the 1980's recognized that it would be unable to educate more than 6 percent of its population through its own institutions and began partnering with international

institutions to supplement its system of higher education. In recent years, this has led to the authorization of foreign universities on Malaysian soil. (ii) For *diversity*: Hand in hand with access lays the need for diversity among nation's tertiary institutions. This includes: universities which differ in emphasis and offerings, depending on their location and national labor needs; postsecondary institutions with vocational and occupational purposes; and the provision of private tertiary education. (iii) For *globalization of the professions*: The global marketplace has accentuated the need for cross-border movement of professionals, thus providing additional pretense for international trade in education and training. (iv) For the *Trade Agreements*: Within a decade of speeches, my one transparency which depicted the few bilateral and regional trade agreements in building block formation, has been replaced by three transparencies, listing only the regional trade agreements, and a fourth sheet describing the mother of all trade agreements, the World Trade Organization (WTO).

In the sphere of education prior to globalization, globalization has given rise to new forms of transformational interconnectivity and interdependence with the development in information and communication technologies. Riviz Hershock (2007, p.63) stated, "Education is deeply implicated in these transformations, affected by the accelerating transnational dynamics of globalization." Looking back at the Asian educational settings, Hawkins (2007) presented that globalization had introduced a new language to educational policy makers in terms of privatization, strategic planning, decentralization, branding, accountability and assessment. He also added that globalization has contributed to a change in higher education from a cultural institution to a service one.

Second, for *"internationalization"* points of views, with the international students' mobility, UNESCO statistics (1995) indicated that in 1980 about 920,000 students were pursuing HE studies outside their country of origin. This number grew 1.2 million in 1990 and to 1.5 million in 1995. According to Sadlak (1998; Bernardo, 2002), more than 75% of all foreign study takes place in just 12 countries: U.S.A (30%), France, Germany, the U.K, Russian, Japan, Australia, Canada, Belgium, Switzerland, Austria and Italy.

Scott (1998, pp.108-129; Bernardo, 2002, p.3), while viewing international HE, say that "Internationalization" reflected a world-order dominated by nation states. As a result, it has been deeply influenced by the retreat from Empire, and the persistence of neo-colonialism, and by the geo-politics of Great Power rivalry (notably the Cold War). In the regard of internationalization, the inequalities between rich North and poor South remain prominent- whether the intention is on strategic relationships. And HE is not an exception. The recruitment of international students, staff exchanges and partnerships between universities in different countries are all conditioned to a significant by this geo-politics context.

Bernardo (2002, p.5) drew out that "Internationalism" was referred to as the principle international cooperation for the common good and the appreciation of international character or quality in education. And he put more ideas that (1) Internationalism as a principle or value can be constructed as being in opposition to parochialism, and (2) Internationalism is a very good exemplary of Internationlization as characterized as it presupposes the stability of nation states and argues for some attempt to cooperate among these bounded elements without transgressing the same. The efforts at internationalizing are constructed in terms of related educational and development skills. The development goals are related to the mission of developed countries to provide and support to less developed countries in their efforts at improving the capacities in their HEIs. What's more, Bernardo (2002) reveals six models of internationalization, namely international student mobility (the oldest one), faculty exchange and development, research collaboration, internationalizing curricula: foreign language study, internationalizing curricula: building international perspectives and international networks.

Hawkins and Ordonez (2007, p.27) expressed their view points that the impact of a fast changing society and globalization is inevitable because: (1) Knowledge has changed, (2) Higher learning and knowledge are no longer monopoly of universities, (3) Society's knowledge needs have changed, (4) The clientele of HE is changing and growing, and (5) HE is internationalizing dramatically in many ways.

At the same token, Lenn (2005), once talking about the Challenge to Transnational Education Providers, indicated that as reported to the Office of the U.S. Trade Representative by the National Committee on International Trade in Education (NCITE), [administered by the Center for Quality Assurance in International Education] higher education and training take on numerous forms when exported: (1) *Branch campuses*: campuses set up by an institution in a country to provide its educational programs to foreign students. (2) *Franchises*: an institution (A) approves an institution (B) in another country to provide one or more of A's programs to students in B's country. (3) *Articulation*: the systematic recognition by an institution (A) of specified study at an institution (B) in another country as partial credit towards a program at institution (A). (4) *Twinning:* agreements between institutions in different countries to offer joint programs. (5) *Corporate programs:* many large corporations offer programs (some for academic credit from institutions) which cross national borders. (6) *Companies*: which sell curriculum and training services? (7) *Distance education programs*: those distance education programs that are delivered – through satellites, computers, correspondence, or other technological means – across national boundaries. And (8) *Study abroad*: students from country (A) go to country (B) to live and study at an institution in country (B). Therefore, the challenges faced by cross-border providers are still many: firstly, in addition to not qualifying for benefits, students face difficulties in translating degrees obtained from foreign universities into national equivalents. Qualifications authorities in some countries have difficulty recognizing foreign educational credentials, whether received inside the country or out, as viable for positions such as those in the civil service. Secondly, other common barriers include custom regulations that limit the movement of education and training materials across borders. For example, medical and health related educators report that some of their materials that show the naked body in part or in whole are restricted from entry into countries with certain religious beliefs. Thirdly, in some cases, the flow of educational context is inhibited by telecommunications laws restricting the use of national satellites and receiving dishes to national entities.

Fourthly, existing barriers can limit the movement of persons, such as visas that are unnecessarily difficult or impossible for students, teachers, trainers, and administrative staff to obtain. In some countries, the acquisition of visas and work permits for teaching and administrative staff is tied to national politics related to imported education. Visas may also pose problems for third country learners (students from country C attending a university from country A with an educational program in country B). Fifthly, foreign currency controls also pose problems for education and training entities wishing to establish themselves in other countries, with measures limiting direct investment by foreign providers (equity ceilings). And sixthly, countries disregarding international agreements concerning intellectual property rights may also deter providers from bringing their materials across their borders.

Hawkins and Ordonez (2007, p.30) came to the conclusion that there appeared global trends of he, namely (1) Massification with Increasing social demand, widening access and rapid expansion, (2) Bureaucratization with growing bureaucratization and standardization, bigger and more complex Hes require more decentralized management, corporate managerialism for greater entrepreneurship and for income generation, concerns over efficiency, productivity and accountability, and autonomy – accountability trade-off, (3) Diversification with diversification of funding, policy of corporatization, cost-recovery-tuition fees, off-shore programs, and overseas campuses, and foreign students, and (4) Internationalization with increased mobility of students, staffs, programs and institutions, demand for foreign education, he as trade sevices, and more importers and exporters of cross-border

Also, Hawkins and Ordonez (2007) indicated that globalization of economy goes with commodification of knowledge. And there was an increasing trade in education services, and the potential of ICT in knowledge dissemination. This appeared distance education, nationally and internationally, and other forms of cross-border education: branchy campuses, twinning arrangements, joint degree programs ect.

Let us take a look at some models and practices at the university level. First, in the climate of educational field in Thailand, it is known that, towards the 1999 National Education Act, the education reforms at all levels. Especially, in higher education level, there are namely the reforms and development of university

autonomy, community college administration, higher education admission system, higher education curriculum, promotion of research and innovation, according to the statistics from the Office of the Education Council (OEC) and Ministry of Education (MOE) 2005-2006. Directly presenting about the administrative leadership in Thai public universities, Chaichanapamics (1998, p.1) posed, "Most Thai presidents took up their posts with some prior knowledge about academic leadership. They had collected through years of working experience, mostly within academic organizations. Though experienced as academic administrators in different positions, many of these presidents; however, still found that presidential leadership was something that required attentive learning on their parts."

Second, Viet Dzung (2001), putting into Vietnamese context prior to opportunities towards globalization, said mankind has been in the third year of the new millennium which may be said to be the millennium of "ICT civilization and knowledge economies. He added that many discoveries and innovations have been made in science and technology, which would change and reshape people's life patterns. More and more advanced production forces, characterizing the knowledge economy, would increase productivity with more knowledge-intensive goods. Then talking about the challenges from globalization to education in general, Viet Dzung (2001) said that investment for education, culture and people's lives is not sufficient. Then, education and training in many countries in Africa, Latin America and Asia has been improving in scale, but the quality is still low. Also, to the Vietnamese context, Viet Dzung (2001) posed that, after 30 years of war (the country reunified on April 30, 1975), Vietnam began her reconstruction with a very low starting point in terms of production forces and capacity. Income per capita in 1980 was only at 250 USD/year, just at half of the world average.

Meanwhile, Atkinson (2001) expressed, for HE, globalization could be defined as forces that are transforming the university from an institution with a monopoly on knowledge to one among many different types of organizations serving as information providers, and from an institution characterized by time and geography to one without boundaries (Quoc Hung, 2007). The picture of Vietnamese educational system has changed since 1986, when the whole country applied the politico-economic reforms with the famous period named "đổi mới policy" (renovation policy), shifting a

state socialism to a marketing economy. Doan Hue Dung (Mc Cargo, 2003, p.143) indicated "Since the early 1990s, the system of education in Vietnam has seen major changes in organizational structures, educational mission, curricula and the management of both finances and human resources."

Also in this context, Ashwill and Thai Ngoc Diep (2005, p.65) pointed out that Vietnamese higher education has experiences an explosion of demand that neither the state nor the more established "people-founded" (private) institutions can realistically hope to meet." According to Prof. Dr. Le Quang Minh (2006) at a meeting with MOET about the development of the Mekong Delta region, the MOET set a target for the region to reach the national average knowledge level and human resources development indicators by 2010 and compared with the Red River Delta (Hanoi) by 2015.

Third , in the case of Chinese educational settings, Ma wan-hua (2007), in his article about "Globalization and Paradigm Change in Higher Education: The Experiences of China", (Herschock, et al., 2007, p.164) expressed, "The changes China has undergone over the past three decades are so fundamental that virtually no aspect of social life has remained unaffected. Higher education is no exception." He added that, at any the system level, Chinese higher education has experienced changes with respect to expansion, diversification, massification and commercialization. Also, according to Ma wan-hua (2007), recently the Chinese Ministry of Education held two Chinese and foreign university president conferences for more awareness of the interplay of local, national, regional and global forces and issues in decision-making for institutional change and development.

Fourth, in the Singaporean case, Jason Tan (2007), when mentioning about "National Education" in Singapore schools, pointed out that the National Education initiative, launched in May 2007 by Deputy Prime Minister, Lee Hsein Loong, aimed at developing natural cohesion in students with (1) fostering Singaporean identity, pride and self-respect; (2) teaching about Singapore's nation-building successes against the odds; (3) understanding Singapore's unique development challenges, constraints, vulnerabilities; and (4) instilling core values such as meritocracy and multiracialism, as well as the will to prevail, in order to ensure Singapore continued success.

Fifth, Prof. Muongmee Suchinda (2007, p.35), in his article entitled "The Role of Lifelong Learning and Self-Directed Learning in Educational Reforms in Thailand" posed the needs for educational reforms in Thailand. He stated that the educational reform is, among other things, seen as a crucial ingredient for building a nation of wealth, stability and dignity, and a capability to compete with others in the age of globalization. He also displayed some obstacles which need to overcome as follows (1) strong leadership with clear vision and understanding of the mission of education, (2) politics influencing education, (3) a duty of the government to solve any education problem, (4) a big gap between academics and the general public in the process of educational reform, (5) the main issues of educational reform – change in mentality, behavior and work culture in education, (6) parents' thoughts about traditional education needed to be reformed and (7) students' points of view be considered.

Meanwhile, Kelly, et al. (Fullan, 2007), when specially talking about the new responsibilities and roles of the principal in our century, said that there were decentralization of decision-making to the school size, increase of the implementation of the collaborative decision-making, the expansion of accountability for principals and schools and the increasingly diverse nature of communities and greater concern for listening to the stakeholders. And they also listedout a number of models of leadership over the years: these are called instructional, transformational, moral, participative, managerial and contingent leadership.

Rong Liu (2008), in Chinese values, indicated his ideas about change organizational management that in the School of Continuing Education was to create a flat structure by eliminating unnecessary layers between the top management and front lines, allowing greater flexibility to react to changes in a timely and effective manner. In reflecting its proactive and entrepreneurial style, the School decided to set up business units, instead of academic units. These operation centers provided different kinds of professional development programs for the specialized fields and made sure that sufficient revenue could be generated to sustain their own growth. The operation tended to be more program-based than department-based, and program leaders under the different business centers were empowered to act according to the market needs with the active delegation of authority. However, they were under close scrutiny and

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became more responsible and accountable for what they did. This centre, with its market-driven structure and management, best illustrated the institutional changes in the school

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Hung (2008, p.5) pointed out that, at present, in Vietnam there were 163 universities and colleges, in which 126 are public and 37 private. All of them were under the control and management of 31 venues from National universities, Ministry of Education and Training, Ministries of Foreign Affairs, Culture, Sports and Tourism, Health, Construction, Agriculture and Rural Development, State Banks, Provincial Committees, ect

In conclusion, with the influence of globalization in the international scale and the educational reforms in the national scope, the educational administration has to deal with the suitable roles of rectors/presidents and school administrators in HE in order to switch the learning community into the lifelong learning environment along with education for sustainable development (ESD).

New Paradigms for Change Management

Up to now change management has been displayed with paradigms as presented in the following aspects.

O'Banion (1996, p.45) described "*learning revolution*" emerging in the early 1990s in some terms such as *Learning Communities, Learning Organizations and Learning Colleges*. O'Banion (1996) said that, first, in terms of *Learning Communities*, a curricular intervention designed to enhance collaboration and expand learning, a learning community "purposefully restructures the curriculum to link together courses or course work so that students find greater coherence in what they are learning, as well as increased intellectual interaction with faculty and fellow students." The structures were also referred to as learning clusters, triads, federated learning communities, coordinated studies, and integrated studies; but the term "learning communities" has emerged as the favorite descriptor. When the same 30 students enrolled for nine credit hours in a sequence of courses under the rubric of "Reading, Writing, and Rats," they have enrolled in a learning community.

Learning communities are powerful curricular innovations and certainly help revolutionize the learning process, but they are not a necessary construct in the learning revolution. Learning communities would have emerged with or without a learning revolution; it is not likely they would have by themselves created a learning revolution. In some colleges in which they exist, the rest of the institution maintains business as usual in which learning is not always first. But since learning communities do exist, it would be wise to incorporate them into the architecture of the current learning revolution (O'Banion,1996).

In addition, O'Banion (1996, p.47) gave out an example as follows: The first learning community was offered in the Experimental College at the University of Wisconsin in 1927. There have been numerous variations on the learning community in higher education for the last 70 years, and the first such experiments in a community college occurred at Santa Fe Community College (Florida) in 1966. More recently, the community colleges in Washington State, Daytona Beach Community College (Florida), and LaGuardia Community College (New York) have been leaders in developing new and expanded forms of learning communities.

Second, as for *Learning Organizations*, a learning organization is an organization skilled at creating, acquiring, and transferring knowledge, and at modifying its behavior to reflect new knowledge and insights." The goal is to create a "community of commitment" among the members of an organization so they can function more fully and more openly to achieve the goals of the organization. (Garvin, 1993; O'Banion, 1996). Also, Peter Senge (1990, p.95) chartered the territory of the learning organization in his 1990 book "The Fifth Discipline: The Art and Practice of the Learning Organization." Senge described the learning organization as one in which "people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together." According to Senge, a learning organization depended upon five disciplines: systems thinking, personal mastery, mental models, building shared vision, and team learning. Through these disciplines, a college will flatten its organization, develop models of collaboration for faculty and administrators, develop processes for evaluating and reviewing its goals, and involve all stakeholders in learning better how to do their jobs.

The basic concept of the learning organization; however, provides a powerful foundation on which to build a learning-centered institution. The concepts of the learning organization are philosophically compatible with the concepts of a learning centered institution, and the processes of learning organizations are compatible with the processes of learning-centered institutions.

Third, to *Learning Colleges*, a new term has emerged in the last several years, specifically tailored for the community college, which reflects the goals and purposes of the learning revolution in action. The term "learning college" is much more useful in describing the comprehensive nature of a community college committed to placing learning first than are the terms "learning communities" and "learning organizations." The learning college places learning first and provides educational experiences for learners any way, any place, any time. The learning college is based on six key principles: (i) the learning college creates substantive change in individual learners; (ii) the learning college engages learners as full partners in the learning process, assuming primary responsibility for their own choices; (iii) the learning college creates and offers as many options for learning as possible; (iv) the learning college assists learners to form and participate in collaborative learning activities; (v) the learning college defines the roles of learning facilitators by the needs of the learners; and (vi) the learning college and its learning facilitators succeed only when improved and expanded learning can be documented for its learners.

O'Banion (1996, p.66) came to a conclusion that the learning revolution aimed toward creating a new culture and a new architecture of education, a new system in which the learner was placed at the center of everything that occurs in the educational enterprise. The learning community was a curricular innovation that could help achieve that purpose when it is included in an institution-wide plan. The learning organization was a concept that contributes to an institutional culture in which discussions regarding student learning were more likely to take place. The learning college was a comprehensive approach incorporating both learning communities and learning organizations in helping community colleges to fulfill the aims of the learning revolution which is to place learning first.

Meanwhile, Bauman (2005, p.25), while doing his research about how to promote organizational learning in HE to achieve equity in educational outcomes at Santa Minica College, California, U.S.A, found out that organizational learning was promoted among the groups when three conditions existed: the presence of new ideas, the cultivation of doubt in existing knowledge and practices, and the development and transfer of knowledge among institutional actors. These three conditions were consistent with the organizational learning literature. He explained that new ideas could be acquired from one's own experience, the experiences and best practices of other individuals or organizations, and experimentation (Garvin, 1993; Huber, 1991; Levitt and March, 1988), that organizations learned when these stored understandings and information were called into question. When organizational actors doubt what they have traditionally believed to be true, an opportunity for learning arises (Weick, 1979; Bauman, 2005, p.31); and that knowledge is "broader, deeper, and richer than data or information" (Davenport and Prusak, 1998, p.5). Contained within the mind, it results from an amalgamation of experiences, personal values, personal characteristics, and interactions with others. People use knowledge to interpret, evaluate, and incorporate new experiences and interactions. Because it is dependent on knowers, the exchange and creation of knowledge take place within and between humans. The field of knowledge management is concerned with managing, transferring, and maximizing the knowledge held in organizational actors' minds for improvement of the organization as a whole.

Aggestam (2006), from University of Skoevde, Sweden, introduced the concept of learning organization (LO) and Organizational Learning (OL) and its relationship with each other and with knowledge management (KM). The concept "Learning Organization" (LO) refers only to organizations that are good at Organizational Learning (OL) (Tsang, 1997). LO focuses on an organization as an entity, a form of organization (Loerman, 2002; Sicilia, et al., 2005; Yeo, 2005), and OL on the process of learning, learning activities or processes in the organization. OL and LO share ideas, and both are concerned with processes for acquiring information, interpreting data, developing knowledge, and sustaining learning. How an organization manages its knowledge is therefore crucial for organizational development

In addition, Aggestam (2006), also stated that a LO has evolved a culture, with the strength of that culture dependent on the length of group's existence, the stability of the memberships of individuals in the group, and the emotional intensity of the actual historical experiences they have shared. Consequently, it takes time to foster a new culture, e.g. a learning one. A Learning Organization has a culture that supports learning and innovations both by individuals and by the organization itself. The environment promotes a culture of learning, a community of learners, and it ensures that individual learning enriches and enhances the organization as a whole The process of learning must ultimately be made part of the culture, not just be a solution to a given problem (Pedler, et al., 1989; Schein, 2002).

With the relationship between LO and OL, Aggestam (2006) drew out that learning was when changes in knowledge happen inside an individual, and learning and accumulation of (new) knowledge always starts with the individual. Individual learning does not necessarily imply changes in organizational knowledge. Organizational knowledge is knowledge independent of specific members in the organization, e.g. knowledge in know-ledge repositories, and knowledge embedded in policies, and routines. Organizational Learning (OL) is considered to depend on the collective cognitive processes of individuals. Individuals can be regarded as subsystems in the organization. The concept of LO regards the organization as an entity and focuses what are the characteristics such that encourages its members may learn. OL, on the other hand, focuses on how learning is developed in an organization (Yeo, 2005).

Learning that changes the strategies, but leaving the values unchanged, is often referred as single loop learning, and learning that results in changes in the values as double loop learning. There are differences in these two areas of study (Kezar, 2005) LO tends to focus more on external threats as the reason for fostering learning, while OL tends to focus more on internal concerns for performance and learning as part of condition of human beings within settings. A LO must be able to meet demands of both its internal and external environments. Some argue that LO is a vision. OL is a continuous learning cycle and an organization can never come to a point in time when it can declare itself a LO. On the other hand, no organization can be in a constant state of learning and declare itself to be practicing OL. According to Senge, the core of

learning organization work was based upon five "learning disciplines", each providing a true dimension in building an organization that can truly learn: (1) Personal mastery, (ii) Mental models, (iii) Team learning, (iv) Shared vision, and (v) System's thinking. Senge's five disciplines are integral components in a learning organization, providing tools and methods that are applicable and useful in the process of OL. Each of the five disciplines can be thought of on three levels: practices, principles, and essences (Aggestam, 2006).

And the following will be the relationships between LO, OL and KM with the ideas of Aggestam (2006). OL requires KM. A LO focuses on the learning process, and KM focuses on the result, the output from the learning process. The aim of KM is to create value for the organization. It includes activities such as creating, organizing, sharing and using knowledge. Most people in the organization that perform KM activities need to carry out KM activities in their normal day-to-day activities.

Senge (2006, p.3), when talking about learning organization (LO) , said that we could build up "LO", organizations where people continually expanded their capacity to create the results they truly desire, where new and expansive patterns of thinking were nurtured, where collective aspiration was set free, and where people were continually learning how to learn together. Learning organizations were possible because, deep down, we were all learners. Or learning organizations were possible because not only was it our nature to learn but we love to learn. Senge (2006, p.4) also said that learning organizations, the prominent organizational trend of the 1990s, began with early experiential learning concepts in the late 1930s. The term "learning organization" and "learning company" stemmed from the notion of "learning system" (Revans, 1969; Pedler, 1985; Schorn, 1970; Quoc Hung, 2007).

Parallel with this, Dr. Sibmeunpram Noppamonton, Chulalongkorn University, Thailand, in his article entitled, "Development of a Learning City Model: A Case Study of Sub-district Administrative Organizations in Chonburi Province" (Educational Journal of Thailand, 2007, p.43) raised his idea about "a learning city," a community which endeavors to learn how to review itself in times of change. The spread of new technologies offers opportunities for countries and regions to benefits from the transfer of new knowledge, technologies and ideas between countries and regions. In this respect, the author expressed the requirements for a learning city with (1) key

individuals in determining and supporting activities in the community, (2) key institutions representing the government, (3) core groups representing the local people, (4) key employers representing the private sector organizations and (5) wider interests of interested and willing members. Dr. Sibmeunpram also showed out the characteristics of the learning city, including partnership, participation and performance from all the learning city members.

Gonzalez (OECD, 2007) wrote about "Knowledge City Model" in Mexico presented as follow: the long-term vision for Knowledge City was to "increase the state's per capita gross domestic product through knowledge industries and activities and to promote a culture of innovation." Nuevo Leon (a city in Mexico) aimed to emulate the economic achievements of countries such as Ireland, Korea and Spain where a clear relationship had been established between economic growth and investment in research, development and innovation. The state needed a vision to provide more stable and sustainable long-term growth based not only on manufacturing but on intellectual services, or "mentefactura." And the implementation of the program's general plan consists of the following six basic strategies, described below. (1) Redesign the agenda of the Nuevo Leon education system, (2) attract research centre and innovation and technological development companies, (3) create new innovative companies, (4) promote innovation in existing companies, (5) increase the urban and cultural infrastructure, and (6) disseminate the new culture.

Gersberg and Nenonen (OECD, 2007, p.147) also mentioned about learning organization in Finland with (1) Learning environment: The learning environment should be composed of physical and virtual environments, as well as a social environment, facilitating both interaction and individual privacy in learning processes, (2) Physical learning environment: Physical places are needed for learning, discussion and group work. Spaces for group work should be of different sizes, from auditoriums to small nooks, (3) Virtual learning environment: Educational institutions could create virtual learning communities by using information and communications technology. The virtual environment could break physical borders, widening social networks and allowing greater interactivity and rewarding experiences. Many emerging technologies could emulate most traditional classroom equipment and enrich learning and (4) Social learning environment: The social learning environment provided students places to

meet, to associate with each other and to experience things together. The academic community was a complex network of human relations, work plans, schedules and daily activities, for which the building constitutes a physical environment with its own material flows and internal requirements. The educational building itself could direct and determine behaviors within the environment – it places restrictions on the core activities as well as offering opportunities to support them.

The next issue is *"leadership"* in educational administration and related legends. When change happens, it brings about changes in expectations of principals and teachers. In the traditional view, a leader is a person who exercises authority and directs the activities of others as Seyfarth (1999, p.122) stated. Yet, in the transformation time, leadership was defined as "an interactive, dynamic process" by which all organizational members built up a culture in which they could obtain their common goals. Leaders needed to encourage members in the organization to commit to a vision of the future. In addition, leaders might use incentives to secure employees' compliance with the leader's expectations, which sometimes raised concerns that the needs and aspirations of employees might be ignored in the change. Seyfarth also added that leaders assess organizational recourses and needs with strengths and weaknesses of personnel and articulate a strategy for capitalizing on the group's strengths and overcoming its weaknesses. And when Sergiovanni, et al. (1999, p.124) regarded the educational administration as the educational leadership; they also portray educational administrators as managers.

Sergiovanni, et al. (1999, p.234) added that "educational administration as educational leadership," which is a more expansive concept that includes concern for the worth of objectives and their impact on school and society. In this regard, there have been many outstanding experts, educators, professors, scientists producing theories to be implemented in the art of administrating the educational field. We have known Frederic W. Taylor with four principles of scientific management such as scientific job analysis, selection of personnel, management cooperation and functional supervision, Henri Fayol's basic management functions, Hawthorn studies about human relations approach (Lunenburg, et al., 2000). And we have also got to know several leadership theorists; for example, Robert Blake and Jane Mouton with the "Managerial grid", Fred Field Blanchard with 'Situational Leadership" (Lunenburg,

et al., 2000). Parallel with those, there have appeared the models introduced so far. They are Max Weber's bureaucratic model, Theory X and Theory Y from Douglas McGregor, Terrence Deal and Kent Peterson with "Shaping School Culture", Amitai Etzioni with "Moral Leadership", "School-Based Management" (SMB) from Joseph Murphy and Lynn G.Beck (Lunenburg, et al., 2000).

From the ideas about administration of Henri Fayole in 1950s, Cunningham, et al. (2000, p.167) stateed that administration was a process concerning with planning, organizing, activating, coordinating and controlling resources within an integrated system designed to complete predetermined objectives. Also, administration was often divided into the two major areas of responsibility- leadership and management. The former dealt with guiding improvement and infusing an organization with meaning and purpose, and the latter related to the stewardship and accountability for all the types resources and centers on implementing routines in an organization and ensuing its smooth operation.

Taking about change and leadership, Hall, et al. (2001, p.32) stated, "Change is everywhere. No one could escape change in his or her work or personal life. We were continuously bombarded with eighteen-second sound bytes about change: the information age, downsizing, standards, diversity, substance abuse, violence, the economy, the environment, technology, changes in schools." In this context, the relationship with the leader with others in the school is strengthened, as Ubben, et al. (2001, p.41) indicated, "Effective leadership instructional leadership requires a complex set of relationship between principals and their beliefs and the surrounding environment of the school."

Indeed, change appears in every field of the society in the circle of globalization. And change management, particularly in educational scope, also steps on the way. Take a look at some models introduced worldwide. Namely, William, J. Reddin posed "Three-Dimensional Model of Leadership Effectiveness" (Lunenburg and Ornstein, 2000), coming up with basic styles, effective styles and ineffective styles in the hope of training administrators. Hoy, et al. (2001) introduced "Integrated Model of Organizational Effectiveness" with the criteria to inputs, throughputs and outcomes in order to achieve effectiveness in an organization. And with Concerns-Based Adoption Model (CBAM) from Hall, et al. (2001), the individual implements a

change and the change facilitators and resource system provide with assistance, and all operates in a user system culture.

Indeed, the models suggested and applied have aimed at improving the successful leadership and organizational effectiveness in a learning community making change. And, each has its own strengths and limitations. Fullan (2002, p.77), when analyzing the three phases of change process theory from Lewin's 1951 force-field model- unfreezing, changing and refreezing, concluded that all of the three phases were of great importance for successful change. If there was lack of one of them, it would lead to weak resistance, weak change plan and process and weak enthusiasm. What's more, he added, with the theory of the four stages: denial, anger, mourning and adaptation from Jick (1993), which change leaders have to understand these stages and learn to be patient and helpful.

Bush and Clover (2002, p.122) stated that, in terms of management, there were six models, namely (1) formal, (2) collegial, (3) political, (4) subjective, (5) ambiguity and (6) cultural. And they also add that, in terms of leadership, there are nine models, including (1) managerial, (2) participative, (3) transformational, (4) interpersonal, (5) transactional, (6) post modern, (7) contingency, (8) moral, and (9) instructional. In conclusion about this issue, the six models present different approaches to the management of education and the syntheses indicated a few of the possible relationships between them. However, the ultimate test of theory was whether it improved practice. Theory which was arid and remote from practice would not improve leadership and management or help to enhance teaching and learning, which should be at the heart of the educational process. There should be little doubt about the potential for theory to inform practice. School and college managers generally engaged in a process of implicit theorizing in deciding how to formulate policy or responded to events. Theory provided the analytical basis for determining the response to events and helps in the interpretation of management information. Facts could not simply be left to speak for themselves. They required the explanatory framework of theory in order to ascertain their real meaning.

Additionally, Bush (2003, p.189) suggested applying the models to schools and colleges with the ideas that the six management models represent conceptually distinct approaches to the management of educational institutions. Similarly, the nine leadership models illustrated different approaches to educational leadership. However, as we have seen, it was rare for a single theory to capture the reality of leadership or management in any particular school or college. Rather, aspects of several perspectives were present in different proportions within each institution. The applicability of each approach may vary with the event, the situation and the participants. The validity of the various models also depended on five overlapping considerations: (1) Size of the institution. (2) Organizational structure, (3) Time available for management, (4) The availability of resources and (5) The external environment.

Bush (2003, p.55) expressed his ideas that most theories of educational leadership and management possess three major characteristics: Theory in educational management tended to be *normative* (that they reflect beliefs about the nature of educational institutions and the behavior of individuals within them. Theorists tended to express views about how schools and colleges should be managed as well as, or instead of, simply describing aspects of management or explaining the organizational structure of the school or college. When, for example, practitioners or academics claimed that decisions in schools were reached following a participative process they may be expressing normative judgments rather than analyzing actual practice), *selective* (that they emphasize certain aspects of the institution at the expense of other elements. The espousal of one theoretical model leaded to the neglect of other approaches. Schools and colleges were arguably too complex to be capable of analysis through a single dimension. An explanation of educational institutions using a political perspective, for example, may focus on the formation of interest groups and on the bargaining between groups and individuals) and often based on *observation* in educational settings. Firstly, observation may be followed by the development of concepts which then become theoretical frames. Such perspectives based on data from systematic observation were sometimes called "grounded theory." Because such approaches were derived from empirical inquiry in schools and colleges, they were more likely to be perceived as relevant by practitioners. Secondly, researchers may use

a specific theoretical frame to select concepts to be tested through observation. The research was then used to "prove" or "verify" the efficacy of the theory (English, 2002, p.1). These qualities overlap and interpenetrate, as Theodossin (1983, p.89) demonstrated, "Inevitably, research involves selection; selection is determined by, and determines, perspective; perspective limits vision; vision generates questions; and questions in turn, help to shape and influence the answers."

From this point, Bush (2003, p.155) came to a conclusion that many different theories of educational management had been presented by various writers. These perspectives overlapped in several respects. A further complication was that similar models were given different names or, in certain cases, the same term was used to denote different approaches. A degree of integration of these theories was required so that they can be presented in a clear and discrete manner.

Given the matter of *"transformational leadership,"* Eisenbach (1998, p.84) addressed the links between transformational leadership and change management. He said that transformational, charismatic, and visionary leaders could successfully change the status quo in their organizations by displaying the appropriate behaviors at the appropriate stage in the transformation process. Then he added that a transformational leader would be a good facilitator of the change process by promoting the creation of a culture that encourages team-decision making and behavior control. He added that throughout the transformation process, the leader should set high performance expectations and reward behaviors that were directed toward fulfillment of the vision. Also, Eisenbach (1999, p.84) gave out that transactional leadership develops from the exchange process between leaders and subordinates wherein the leader provides rewards in exchange for subordinates' performance. Transformational leadership behaviors went beyond transactional leadership and motivate followers to identify with the leader's vision and sacrifice their self-interest for that of the group or the organization (Bass, 1985).

Meanwhile, Robertson and Webber (2000, p. 315) said that it was necessary to have cross-cultural leadership development because the nature of school reforms internationally, over the past decade, underscores the need for cross-cultural leadership development initiatives. And educational leaders then had to respond to a wide of pressures.

Additionally, Robertson and Webber (2002, pp.521-524), when talking about a "boundary-breaking leadership model," classified leadership into: (1) yesterday's leadership were those individuals who collectively worked to create an educational framework in Western nations that saw the average level of education rise over the 20th century beyond anything imaginable in earlier are when schooling was primarily the domain of the privileged (Giles and Proudfoot, 1990; Barlow and Robertson, 1994), (2) at the turn of the 21st century, today's leaders are faced with the need to address issues, pressures and paradoxes in diverse, rapidly changing contexts, where boundaries are increasing blurred and previous ways –of-knowing are challenged and (3) tomorrow's leaders will include the expected roles of principals, teachers, superintendents, and politicians, but we should expect also to see significant leadership emerge from the ranks of students, parents, and community members.

Given the same opinions about this issue, Kimberling (2002), expressed that given the impact that change had on employees, it was clear that mangers had to learn to proactively manage employees through the many changes that were inherent in most organizations. The role of transition leader was an often overlooked but important aspect of management, with the following characteristics: (1) gains support from and confident of others, (2) listens and collaborates effectively, (3) takes accountability, (4) provides constructive feedback to others, (5) builds relationships with customers, peers and project team members, (6) inspires and motivates, (7) communicates openly, early and often, (8) provides clear direction, (9) models the ways for the team, and (10) creates opportunities for small wins. To close, Kimberling (2002) came to a conclusion that transition leaders were responsible for directly influencing the outcomes of IT and process change implementation; therefore, successful change requires that transition leaders also assume different roles. In general, transition leaders had four primary roles: catalyst, system and process helper, solution giver and gatherer, and resource linker.

Webber (2003, p. 203) once pointing out the leadership and ICT in the name of his article entitled, "Technology-mediated Leadership Development Networks" created a network in University of Calgary, Canada from its origin as a local e-mail discussion group to a loosely-coupled international leadership web. He introduced a model to future's leadership with the help of ICT. At the same token, Webber (2003,

p. 123) posed a different picture of a conservative ICT leadership and educative ICT one. The former was like an ICT manager, but the latter was an ICT user. Another was that conservative ICT leader worked as an individual, but educative ICT leader did his/her job as a network. And while the conservative ICT leader used internet for his/her privacy, the educative ICT one would like to do public demonstration of learning. Moreover, Webber and Robertson (2003, p.15) expressed that, in today's increasing globalized world, where ideas moved so easily from one nation to another, it was important to internationalize our academic worked in universities. And they added that universities had to adapt to the changing world and educate students in ways that enabled them to act on the global stage.

Meanwhile, Dionne, et al. (2004), when talking about transformational leadership, introduced a General Transformational Leadership and Team Performance Mediated Model (Transformational Leadership – Intermediate Outcomes, including shared vision, team commitment, an empowered team environment, and functional team conflict - Teamwork Processes, including cohesion " high involvement in team activities," communication and conflict management – Team Performance Outcome). And with the 4 I's from Bass (1985) (idealized influence/inspirational motivation, intellectual stimulation and individualized consideration, Dionne, et al. (2004) linked their model to Bass's (1985) with idealized influence/inspirational motivation and "cohesion," individualized consideration and "communication" and intellectual stimulation and conflict management.

Once again, Webber and Robertson (2004, p.274), upon talking about internationalization and educational leadership, concluded that (1) educational leaders should engage in ongoing professional networks that extend beyond their own cultures so that they can understand themselves in relation to the larger world, (2) graduate programs should base their international linkages with institutions and professional organizations in Western and developing countries on the question "What we can learn from them?" rather than "What can we teach them?", and (3) educational leaders should consider how school practices, policies, and organizational structures can support learning "through space and cross time."

Then, File and De Boer (2005), from Vilnius University, Lithuanian, expressed their ideas about major changes in the era of globalization, dealing with (i) Economic globalization, (ii) knowledge based economies, and (iii) information and communication technologies. And they also pose Lithuanian HE settings with (1) Mass HE provision, (2) Greater level of diversity in system, (3) Changes in nature of government co-ordination, (4) Heightened levels of competition, (5) Resources less than growth, and diversifying, and (6) More stakeholders with more involvement. Besides, File and De Boer (2005) imply that the university is considered as a mini-city or a shopping mall. Then they create the widest perspective: Burton Clark's 3 modes of authority distribution (1983): (1) The "Continental" Mode as Faculty guild & state bureaucracy – weak middle level (institutional admin. / trustees), (2) The "British" Mode as Faculty guild & some power at level of institutional leadership / trustees/ collective faculty rule, weak state influence, and (3) The "American" Mode as Weaker faculty authority, strong institutional bureaucracy, little national authority.

In a rare and fascinating account of "importing organizational reform," in this case importing to Hungary the US idea of intermediate boards of external stakeholders at the system and institutional level, the consultants came to the following conclusion that as economic and academic globalization marches on, innovative structural configurations like intermediate boards are encountering cultural traditions and long-held distributions of power. Other characteristic structural features of the region, such as relatively weak, elected rectors and very powerful senates with broad management powers, clash with what might be regarded as "global" management models that call for a stronger executive function including expanded powers of the rector and separation of administrative from faculty expertise. It will be interesting to watch the strength and pervasiveness of these dominant, increasingly perceived as global, management norms and models as they encounter regional and national culture, and ect. These are sufficiently strong, particularly in countries with large, well-established university sectors and with a culture of strong government bureaucracies, to question the value of these "global" management norms. At the very least, people believe that these global management norms will be substantially adapted by these strong regional and national cultures. (Morgan and Bergerson, 2000, p.447).

Cole and Southworth (2005, p.101), when expressing their ideas in developing leadership with creating the school's tomorrow, cited the ideas from Stacey (1993) about a frame related to the development of leaderships for a changing world, which are listed in terms of the comparison respectively: *In current thinking*, (1) We have roughly what will happen and can plan things in a linear way, (2) Visions, missions and plans are important, including shared vision across the school, (3) Decision making should be logical and analytical, based on facts and figures, (4) We should decide what to do in the school as a result of careful planning, (5) Top management should control strategic direction, and (6) We should control the long term by measuring our progress against plans and by using indicators. Yet, *in a new frame*, (1) The futile is largely unknowable, (2) We need learning teams of professionals, surfacing conflict and engaging continuously in conversation, (3) Decision making needs to be more explanatory and experimental, (4) What we choose to do (strategy) should stem from challenge and contradiction, from learning and politics, (5) Top management should create good conditions for people to generate new directions and ideas, and (6) Development is an open-ended process, with opportunities to change and learn.

Change management must be guided by leaders, Balassanian (2006) expressed that organizational leaders tasked with managing change are engaged in a great venture of exploration, risk, discovery and change without any comprehensive maps for guidance (Senge, 1999).

Meanwhile, Hawkins and Ordonez (2007, p.33) put forwards to a thing dealing with University Heads (Leaders) like CEOs (Chief Executive Officers). Additionally, Scott and Webber (2008, p. 762) present a NEW model to leadership development with 4L (lifelong learning leader) with eight dimensions: career stage, career aspiration, visionary capacity, boundary breaking, entrepreneurialism, professional skills, instructional design and assessment literacy, crisis management and approaches to leadership development.

Putting leadership in a specific venue, Golding (2007) with Cornell Model (Cornell University, U.S.A) posed the sustainability of leadership, by saying, "To be the leader of Sustainability in Higher Education, a university's operations must support the core mission of education, research and outreach, while promoting a

sustainable economy, society, and environment." In addition, Golding (2007) suggested some criteria for leadership in sustainability, (1) Economic criteria with economic stewardship, and regional development, (2) Social ones with Employee well-being, quality of life in communities and business ethics, and (3) Environmental ones with environmental impact minimization and natural resource protection.

In summary, it is important to acknowledge new paradigms in a changing world. In fact, how to maintain "a lifelong learning community" is the tasks of educational leaders, and new responsibilities of leaders in "transformational and transactional" periods are likely to make educational administration at any educational levels worldwide a success.

Change Management Strategies and Techniques Used in Higher Education Institutions

So far it has been witnessed that there have been strategies and techniques along with change management process.

In the first area, the term of *"quality assurance"* management, OECD (2003, p.70) (Organization for Economy, Cooperation and Development) presented the summary from national quality assessment agencies with similarities and differences as follows: by the end of the 1990s, almost every OECD country had a national agency for the assessment of quality in higher education institutions. They had important characteristics in common. Almost all operated independently from government, in principle, rather than being a direct arm of a ministry. Almost all was funded by government. Almost all relied on judgments made by external evaluation teams mostly comprising academics from other institutions, including in some cases from other countries.

However, countries have also developed some different features in their quality assessment agencies. Many are set up by governments (e.g. the Danish Evaluation Institute, EVA; the Center of Accreditation and Quality Assurance of the Swiss Universities, OAQ; the Norwegian Agency for Quality Assurance in Education, NOKUT; the Australian Universities Quality Agency, AUQA; the National Institution for Academic Degrees and University Evaluation, NIAD, in Japan; and the Swedish National Agency for Higher Education which has a new mandate to carry out quality

assurance); some are owned collectively by higher education institutions (e.g. the Foundation of Portuguese Universities); others are independently constituted (e.g. the National Evaluation Committee, CNE, in France; the Quality Assurance Agency, QAA, in the United Kingdom; and the Netherlands Accreditation Organization, NAO). Yet, regardless of how they are constituted, their reliance on the expertise of members of the academic community helps to give them legitimacy. In some countries, there is a single national quality agency, in others, more than one. An important factor is whether a single national assessment system can be identified: this tends to be the case in countries with relatively homogeneous and smaller systems like the Netherlands and Denmark, but not in Germany, a federal country where there is no single assessment system at the national level, nor in the United States or Mexico, where multiple external assessment systems exist (OECD, 2003, p.72).

In Austria, existing quality assurance arrangements applied only to Fachhochschulen and to private institutions (which together comprise about 10% of the higher education sector), but they are to be extended to all universities at the end of 2003. National quality agencies differ considerably in the level and focus of their assessment methods. They may focus on an institution (e.g. Australia), on a program (e.g. the Netherlands), or on a combination of both (in most other countries). At each of these levels they may concern themselves with teaching, research or management/ administration. In most cases, reports are made public, but not in Italy or Greece, where they are given neither only to the Ministry, nor in Austria, in the case of reports on single institutions, where they go only to the institution assessed. The assessment is mainly a form of regulation and information rather than being used for funding decisions. However, in the United Kingdom, a specific link is made between evaluation outcomes and funding (OECD, 2003, p.73).

Lillie (2003, p.4) indicated that while the characteristics of the approach of quality assurance management might differ somewhat, many countries have now established a body or national agency which is generally charged with institutional review as a whole, as well as the accreditation and evaluation of courses and programs (in some countries; however, there are a number of different bodies exercising slightly different functions but, as will be seen, there is often a move towards a national body with overall oversight or responsibility). The nature of the monitoring or validating

agency and its relationship with the state will reflect the political ethos of the country concerned. Thus, in countries where the state has traditionally played a major role in determining the content and nature of higher education structures and curricula, much of the evaluation or accreditation will be undertaken by the ministry of education or by a body very directly responsible to it. Universities have traditionally enjoyed a greater degree of autonomy, although a recent movement towards greater uniformity may be discerned. For example, the United Kingdom and France may be considered as exemplars of different approaches to accreditation and evaluation. In France; for instance, most tertiary education (as indeed most primary and secondary education l'Education Nationale), whereas in the United Kingdom, there has been a tradition of much greater autonomy for universities. Education in France is considered to be a public service, a right to which all citizens must have equal access, irrespective of social or geographical origins and the provision is also expected to be of equal quality throughout the country. University qualifications are thus for the most part national ones awarded within frameworks defined by the ministry and all new courses leading to these national qualifications have to be approved by the ministry (Toudic, 2002). Still, even in this highly centralized country, the role of the ministry is complemented by a further body, the Comité national d'évaluation (national evaluation committee), a development that was triggered by a perceived need for more rigorous assessment of performance and results. This is an independent but state-funded body composed of appointed representatives of the academic community and senior civil servants that conducts regular audits of HE institutions, looking at areas such as financial management, academic organization, human resources and buildings (Toudic, 2002). Research, on the other hand, is subject to annual assessment by ministry experts on the submission of reports by research groups or teams (Toudic, 2002). In France, there is thus an approach where ministerial control remains strong in the different areas, even when a slightly more devolved system is operated.

OEC, Thailand (2004, p.75) reported that the Office for National Education Standards and Quality Assessment (ONESQA) was responsible for developing the criteria and methods of external quality assessment of educational institutions under the supervision of local administration organizations as well as submitting the report to local administration organizations. At higher education level: Based on the standards

set by the Committee for Development of the Assessment System of Higher Education Quality and in line with the missions and varieties of higher education institutions, the system, criteria and methods for internal quality assurance of higher education institutions have been developed. There were 9 aspects relating to internal quality assurance of higher education institutions including (1) philosophy, mission, objectives and implementation plan; (2) teaching-learning provision; (3) student development activities; (4) research; (5) academic services to the community; (6) preservation of arts and culture; (7) administration and management; (8) finance and budgeting; and (9) higher education quality assurance systems and mechanisms.

In conclusion, the relevant system, criteria and methods have been established and are being implemented with considerable progress. The national educational standards, which will serve as the core standards for the educational development of the country, have also been developed. Continuing efforts and collaboration from all parties concerned are necessary in improving educational standards and quality at all levels and of all types (OEC, Thailand, 2004).

In another issue, Lenn (2005, p.3), once addressing *"sustaining quality"*, posed the questions that if any HEI had good answers; they still maintain quality in changing HE and in this changing world. For *mission*, the question was made "Is the exported program or degree in keeping with the mission of the host institution? Who at the providing institution knows that the program is being exported? Who else needs to know?" For *control*, the question was made "At the heart of quality is who is in control. Is the governance of the exported program in control by the institution offering the degree? Is the academic program, teaching staff and all other key operations within reasonable control of the providing institution?" For *academic program and teaching staff*, the inquiry was made "What language is going to be used to teach the curriculum? Are the instructors qualified to teach the curriculum? Do they have equivalent qualifications to the home institution? If tutors are used, are they qualified to supplement the teaching of the curriculum?" For *learning resources*, the matter is made "Is there the adequate provision of library resources to support the curriculum? Are there laboratories and instructional equipment available appropriate to the curriculum?" For *students*, the question was made "What is the language requirement for admitting students? If it differs from the home institution's

requirements, can that be justified? Are students being admitted which you know can successfully complete the program?" For student services, the question is put out "Is the providing institution providing appropriate services to support the academic program for the students, such as hostels, cantinas, academic advising, and other support networks?" For *physical resources*, the inquiry was posed "Unless this is an online program, is the physical plant for the educational entity appropriate and adequate for the program?" And for *financial resources*, the issue is created "Are appropriate fees, including tuition, being asked for services rendered? Are profits appropriately shared between maintaining a quality program and sending a percentage to the home institution? Is the home institution in control of the financial resources?"

Doan Dai (2005, p.3) said that in 2002 the MOET, Vietnam established the Office of Accreditation, which was a unit in the MOET's Higher Education Department. In 2004, the MOET declared the provisional regulations of HEIs with the following criteria: (1) mission and goals of HEIs, (2) organization and management, (3) curriculum, (4) trading activities, (5) managing cards, faculty and staff, (6) students, (7) research and development of technology, (8) international cooperation activities, (9) library, learning equipment and other facilities, and (10) finance and financial management. He also adds that now in Vietnam universities and colleges voluntarily participate in accreditations.

Garcia (2006, p.4) made an introduction about a new method for HE quality assurance at Northern New Mexico College, U.S.A. The university was in integration of AQIP (Academic Quality Improvement Program), Total Quality Management (TQM), and Continuous Quality Improvement (CQI) throughout the institution has and will continue to enhance our overall performance and provide the means by which we implement our strategic plans. In his ending, Gracia (2006, p.5) stated that effective strategic planning requires strong organizational support at every level of the institution. Numerous planning data sources have informed the development of the strategic plan, and AQIP has enabled an effective and efficient means by which to implement the plan. The college's commitment to Total Quality Management, Continuous Quality Improvement and its enthusiastic adoption of the Academic Quality Improvement Program throughout the institution, would further support the implementation of our strategic plans.

Assoc. Prof. Dr. Chantana Chanbanchong (2006, p.74), Faculty of Education, NU, Thailand, in her paper "The Development of Quality Assurance System in a University in Thailand: A Case Study", presented at the International Conference: Education Leadership-(University Partners of Academic Leadership) UPAL (Nov., 24-25 2006), Faculty of Education, Assumption University, Thailand, posed what NU did in the process of development of the quality assurance system at this HEI in terms of the three stages (1) the phase of awareness motivation (1996-1998), (2) the phase of systematic evaluation by CIPP model (1998-2001) and (3) the phase of conformity to National Standardization (2001 -2006). She concluded that, after a decade of striving, the quality assurance system at NU seemed to be settled down and became a vital administrative device that paved the pathway for the venue to proceed towards the international standards.

Back to the origin of "*quality assurance*," Neetens (2007, p.12) gave out a history of this issue. First, quality assurance was originated in world of manufacturing and industrial production. Before Industrial Revolution (prior to 1780): quality meant straightforward problem with production centralized in one person's hand who performed and controlled, standards for products with external inspection system (guilds, city governments, customs officials and so on, and quality assurance in the process sense poses no explicit problem. Second, Industrial Revolution (after 1780) grew with collectivization of production process leads to mass production whereby no longer one individual performs and controls the production, structural introduction of foreman, but mainly for organizational and command purposes (military-hierarchical organization of labor process). Third, throughout 19th century, mass production led to low standard products, widely diverging output, a lot of defective products with quality becomes an explicit problem linked to the organization of the production process. Fourth, at the end 19th century, in U.S.A, the 1st forms of explicit QA introduced as part of larger industrial management reforms: (1) F.W. Taylor (1856-1915): Taylorism: scientific management combined with quality departments to oversee quality of production and rectify errors, and Ford (1863-1947): Fordism: standardization of design and component standards ensure production of standard products, combined with quality departments and inspection of the output.

Also, according to Neetens (2007, p.14), in 1930s, the first application of statistical control was used as a quality assurance method. Then World War II was a very important impetus for quality assurance in U.S.A and UK, needing to raise both quantity and quality of production for war effort. After World War II, the quality and quality assurance became profession, management process and scientific discipline. Thus, it is obvious that to say that clear evolution in QA was outline as simple quality control: 1940s-1960s, quality engineering: 1970s, and quality systems engineering: 1990s. Also, Neetens (2007) states that quality assurance concepts are arisen from quality management science, which is explained, including (1) in quality management science throughout the last 50 years all kinds of concepts, methods, tools and strategies conceived, for example, SPC (Statistical Process Control), Zero Defects, Six Sigma, quality circles, Total Quality Management (TQM), Theory of Constraints (TOC), Quality Management Systems (QMS), continual improvement (Kaizen), (2) mostly originated in manufacturing but also widely applied in service provision, also in education, and (3) three concepts regularly encountered in QA world in HE: PDCA-cycle, ISO 9001 standards, and TQM.

Addressing the goals of quality assurance in higher education, Neetens (2007, p.16) listed out the following ones: (1) quality improvement, (2) quality control/consumer protection, (3) public accountability, (4) information provision, (5) international comparison/benchmarking, (6) ranking, (7) funding and (8) recognition. And the author comes with the conclusions about quality assurance as follows: First, QA is a necessary good because it guarantees that university professors deal with education in a manner as professional as they deal with research. Second, QA is a necessary good because it gives students the lever to become actively involved in the quality management of their programs while at the same time respecting the academic freedom and content expertise of their teachers. And third, the major challenge for the future is to gear QA systems more towards quality improvement because only then will they be worth their money and burden, this means widening the focus of QA: not only numerical checking but also content and policy debate and recommendations

Gutu (2007, p.3) from Växjö University, Sweden, expressed QA in Sweden, that accreditation was an external form of evaluation which was performed by The National Agency for Higher Education- an institution which was independent from the Ministry of Education, which was a political body. A peculiarity of Swedish social quality culture was resulted from the social model that existed in Sweden, which was based on very high taxes (on average 30 % from the salary), so due to this reality the external evaluation of the universities was carried out free of charge. In the Republic of Moldova the Universities were forced to pay 12,000 lei per one specialty accreditation which, in our opinion, was extremely expensive for the university budget. The Swedish Agency for Higher Education comprised various departments: informational, judicial, assessing and foreign programs assistance. The evaluation department had 36 employees, the rest of the evaluation/accreditation experts were appointed from abroad. The experts were outstanding personalities in this field, the most part of them being invited from other countries (about 60% of the assigned experts – from Finland, Denmark, and Norway). The frequency of university external evaluation was once in a 6 years' time. The evaluation duration of a study program was 18 months. The chief principle of external evaluation consisted in offering real assistance to the universities in developing their educational activities.

There are various criteria of external evaluation, among the most important ones, which are familiar to the Republic of Moldova University community also, there are: the percentage of doctors required during the University accreditation/evaluation which must constitute 100%; the transparency of the information for the students; the student key role in the evaluation process (for instance, the students are plenipotentiary members of assessing commissions, having the same salary and sharing the same responsibilities as the teachers-experts. In order to evaluate the study subjects and programs the following principle would be applied in the nearest future (already existent in Norway): if the University doesn't possess a proper system of quality management – it won't be allowed to launch new study programs (specialties) (Gutu, 2007).

When considering about the *"assuring quality and effective change management"* in international HE, Scott (2008, p.1) said that, in Australia, in early 1990s, there were national audits of every Australian University by the National Committee for Quality Assurance in Higher Education, and then appeared a National Quality Benchmarking Manual. The Quality Management "hot pots" included as follows: pre-departure contact and communication, accommodation assistance, computer support, enrolment, fees, and administrative requirements, study and skills support, counseling to students health, welfare, and staff training and others. Scott (2008) concludes that there is no universal consensus on how BEST to manage QUALITY within HE, and people adopt a variety of quality management practices within different countries and their HEIs.

In a conclusion about quality management in HE, Brookes and Becket (2008) ended that any HEIs were testing or implementing quality management models developed for industry, namely (1) EFQM (European Foundation for Quality Management) Excellence Models, (2) Balanced Scorecard (SBC), (3) Malcolm Baldridge Award, (4) ISO 9000 Series, (5) Business Process Re-engineering, and (6) SERVQUAL (originally measured on 10 aspects of service quality: reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding or knowing the customers and tangibles.)

Hung (2008, p.11) came up with the summary of the practice of quality of assurance in Vietnam so far, that the National Unit of Testing and Quality Assurance under the MOET, Vietnam (officially formed in 2003) had taken its roles in evaluating the quality of education nationwide and the national chain with the establishments of 59 centers of quality assurance. According to the MOET statistics, Hung (2008) posed that, in the academic year of 2007-2008, 114 universities and colleges were on the process of their self-evaluation, accounted for 68% the number of universities and colleges throughout the country. In particular, there are two Vietnam National Universities and some of others, which have been applying the international standards of quality assurance.

In Can Tho University (CTU), Vietnam, at the interview on February 12, 2009, Mr. Nguyen Khanh Son, vice Director of Department of Quality Assurance, said that the university was implementing EFQM (European Foundation for Quality Management) sponsored by Dutch counterparts, Hanzehogeschool and Hogeschool van Groningen. Yet, because of the shortage of the funding, the practice of CTU quality assurance is left open. And Khanh Son (2009) also remarked that the practice of this issue is not a strong job from his department because it met with the complaints from the teachers and students as well.

In the second area, the aspect of "PDCA" (Plan-Do-Check-Act), Bellamy (2000) makes overall things about Deming's philosophy, aiming at helping a team approach. Bellamy (2000) expressed that PDCA was created by W Edwards Deming in the 1950's as an easy job to follow Problem Solving Cycle. Deming was tasked with helping Japan rebuild its economy in the 1950's. His purpose was to use PDCA with a Continuous Improvement process to help rebuild Japanese industries so that they could compete in the world market in the future.

Sareen, et al. (2003, p.8) introduced the application of Deming's 14 points in their venue: Guru Nanak Dev Engineering College, Ludhiana, New Delhi, India. They said that Deming cycle could be gainfully applied to all academic activities that too without any immediate financial implications. But it would be better if this was applied to the most significant person that was who was much closer to the students. The faculty member or teacher was the more close to students and prime choice for quality initiatives because of his daily interaction with them. One of the important functions required for successful implementation of PDCA cycle is to act upon getting the feedback. But the question is how frequently or when the feedback is to be obtained. Firstly, collect the feedback as and when feasible or at appropriate checkpoints. Secondly, collect feedback at the end of the session. Hence this method gives ample opportunities to teacher to improve teaching. And they come to a conclusion that quality in technical education is very important for the success of any institution. Numbers of quality techniques are propagated to facilitate the quality improvement. One of simple and easy philosophy of Deming is revisited. Faculty members, who are in close contact with students, find several opportunities to adopt this approach and reap rich benefits. Deming's PDCA cycle is recommended for

faculty members/teachers to improve the quality of teaching.

Therefore, Deming's 14 points are also revisited in context with technical education and are emphasized that teacher should lead for whole class in the drive for ever improving quality of every single activity by providing the proper encouragement, training, facilities and time.

In the third area, the issue of "SWOT" (Strengths, Weaknesses, Opportunities, and Threats), given the change management strategies and techniques, it has been seen that, SWOT is being implemented in many fields. We all know that *Strengths* are attributes of the organization, helpful to achieving the objective. *Weaknesses* are attributes of the organization, harmful to achieving the objective. *Opportunities* are external conditions, helpful to achieving the objective. *Threats* are external conditions, harmful to achieving the objective. Anthony C. Danca (1999) in the author's journal said that SWOT analysis was a basic, straightforward model, providing direction and serving as a basis for the development of marketing plans. And in a large extent of an organizational setting, SWOT, she added, it accomplished this by assessing an organization strengths (what an organization can do), and weaknesses (what an organization cannot do), in addition to opportunities (potential favorable conditions for an organization) and threats (potential unfavorable conditions for an organization). Also, this tool would be used to deal with evaluating the administration and the practices of change management globally and nationally.

Besides, Timar and Panaitescu (2006, p.9) implemented SWOT analysis of setting up a writing center in Faculty of Economics, University of Oradea, Romania. They find out that , first, *strengths*, consisted of (1) Dramatically improving students' writing skills in academic disciplines, (2) Improving the quality of their assignments, theses and dissertations, (3) Improving students' career prospects, (4) Raising the prestige of the university, (5) Introducing / strengthening the use of written assignments for evaluating student work, (6) establishing much stronger co-operation within the university between language teachers and faculty by designing, evaluating and marking assignments together with departmental professors, (7) Giving language teachers a new challenge (protecting them from burnout), (8) Making a new and better use of the Internet (e.g. by using other writing centers' websites and pieces of academic writing available on the web) and communication technologies (e.g.

communicating with and helping students via e-mail), (9) The university with a writing center can set an example to be followed by others, (10) Writing Centers across Europe have strong cooperation, (11) and they support each other, supplying materiel, know-how, conferences and an organization (European Association for the teachers of English), and (12) With relatively little investment the returns are considerable. Second, *weaknesses* were of (1) Initial lack of professional experience and material, (2) Initial shortage of good academic writing teachers, (3) Initial worries, uncertainties and mistakes in curriculum and materials design, (4) Initial reluctance on students' part, (5) Initial resentment and reluctance towards new forms of testing, and (6) Students' knowledge on the side of professors in departments. Third, *opportunities* are recognized as follows (1) Teachers may develop publishable material, (2) Teachers may do research of international standards, (3) Teachers may publish their work locally and internationally, (4) Teachers may train undergraduate students to become writing assistants, (5) The writing center may launch courses on a national scale, and (6) The writing center may advertise and sell its services (teacher training, proofreading, translation) to the community. Fourth, *threats* are picked out as displayed below: (1) Lack of continuity in staffing, (2) Brain drain, (3) Lack of funding, and (4) Lack of faculty and university management support.

Quoc Hung (2006, p.2) from Center for Foreign Languages, Can Tho University (CTU), Vietnam, made his introduction to using SWOT analysis to the HEIs, regarded as a practical guide. He expressed that education, especially higher education, cannot stand apart from this global phenomenon. For the past decades, the educational sector has begun to recognize that planning is necessary to maintain its own responsiveness to a rapidly changing environment, and that the future of colleges and universities as organizations includes conditions of decline which require a new set of administrative and organizational responses. To survive and prosper in this hypercompetitive environment, institutional leaders are required to identify their strengths, reduce their weaknesses, take advantage of the opportunities and minimize the effect of threats. One simple, yet effective way is to conduct a SWOT analysis, a common component of most strategic plans (Cameron, 1983; Schneider and De Meyer, 1991 and Kriemadis, 1997).

Also, Quoc Hung (2006, p.3) analysed that from the whole process of strategic planning, SWOT analysis was the early but very important step in the area of strategic analysis, as Pashiardis (1996) commented, 'environmental scanning is essential for an effective planning. One needs to know the environment in which one operates before making any decisions about the organization, so as to be able to match one's capabilities with the environment in which the organization operates.' SWOT consists of two main parts: the analysis of the internal situation (strengths and weaknesses) and the analysis of the external environment (opportunities and threats). It is important to note that the external environment should be described in a dynamic sense by considering the actual situations, namely existing threats, unexploited opportunities as well as probable trends. The internal situations should also be discussed on the basis of the existing factors. In other words, the SWOT analysis should not contain speculative, future weaknesses or strengths, but real, actual ones (Horn and Niemann, et al., 1994).

What's more, Quoc Hung (2006, p.4) emphasized that, to reap the full benefits of a SWOT analysis, it was important to apply the tool properly. It was advisable that the analysis should provide the strategic planners with information relevant to make strategic decisions. That means, lists of strengths, weaknesses, opportunities and threats are not themselves helpful. It is only when the potential implications of this information on the organization are conducted that the planners can get really significant analysis. A SWOT analysis is designed to help an organization understand how it relates to its external environment. In other words, to act as a way of seeing if the organization is aligned with the world going on around it (Robinson, 2003).

When indicating about Can Tho University (CTU), Vietnam setting, he states that the University has been recently required to develop a strategic planning approach because the university has begun to recognize that 'planning is necessary to maintain its own responsiveness to a rapidly changing environment' (Kriemadis, 1997). There are mainly three levels of planning: budgeting and scheduling; short-range planning; and long-range planning. While the first two types of planning are more operational, the last involves strategic thinking. Every five years, the university creates a five-year plan, a strategic plan for an intended course of action. For CTU situation at present,

the main reason to invest time and energy in strategic plans is to analyze the institutional strategic position, raise awareness about current challenges and finds ways to overcome them (Quoc Hung, 2006).

Hao (2008, p.3) from Nha Trang University, Vietnam did his study by using SWOT analysis toward the use of ICT teaching at his workplace. He focused on using SWOT to the four categories: Installment, Administrative/professional use, Integration into the curriculum and Innovation with the contents of implementing ICT in teaching and learning, including (1) the provision of sufficient infrastructure and staff training, (2) the use of computers for routine tasks such as reporting, communicating with colleagues, (3) the use of computers for curriculum delivery by teachers (teacher-centered practices), and (4) change in teaching and learning practices (student-centered practices). From the study, Hao (2008) put forward to some solutions to improve the use of ICT. Firstly, for installation, (1) improving training or instructional material for equipment use, and (2) improving maintenance work to computers and other digital media equipment Secondly, for administrative or professional use: (1) each institution should establish mechanism or regulation on information exchange through internet and intranet, and (2) professional forums should be established at universities for teaching experience share. Thirdly, for integration into the curriculum: (1) providing professional training in software use and appropriate teaching methods, (2) setting up courseware development teams and promoting transfer of courseware across institutions, and (3) reviewing appraisal policy and quality assurance process. And finally, for innovation: (1) improving English capacity of teachers and students for better access to internet resources, (2) teachers should have more training on student/learning-centered models, and (3) setting up online forum for student-student and student-teacher interaction .

In the fourth area, the sense of *"Balanced Scorecards"* (BSC), in using strategies and techniques to evaluate an organization or education institution, BSC of Robert S. Kaplan and David P. Norton (1992) has been utilizing in the research for data so far. Robert S. Kaplan with his paper entitled, "Building Strategy-Focused Organizations with the Balanced Scorecard" (1992) at Harvard Business School presented his principles of a strategy-focused organization and he said that, to succeed, the executive leader must be engaged in the strategic change process. In the light of

this matter, let us have ideas from other authors. Ruben (1999, p.5), when talking about using BSC for HE "Excellence" indicators, introduced the five HE "dashboard indicators model": teaching/learning (programs and courses and students outcomes), scholarship/research, public service/outreach, workplace satisfaction and financial issues, at Rutgers (The State University of New Jersey) Quality and Communication Improvement (QIC). Then Ruben (1999) concluded that the "balanced scorecard" approach offered an institution the opportunity to formulate a cascade of measures to translate the mission of knowledge creation, sharing and utilization into a comprehensive, coherent, communicable and mobilizing framework- for external stakeholders, and for one another. As pressures for performance measurement and accountability mount, the need to rethink and reframe the excellence measurement frameworks has never been pressing.

In addition, Steward and Carpenter-Hubin (2000, p.45) discussed BSC with the ideas that the Kaplan and Norton balanced scorecard looked at a company from four perspectives: (1) Financial: How do we look to shareholders? (2) Internal business processes: What must we excel at? (3) Innovation and learning: Can we continue to improve and create value? And (4) Customer: How do customers see us? By viewing the company from all four perspectives, the balanced scorecard provides a more comprehensive understanding of current performance. While these perspectives are not completely inappropriate for use by colleges and universities, it is possible to adapt the balanced scorecard theory using a paradigm more traditional to higher education.

Besides, Steward and Carpenter-Hubin (2000, p.23) stated that, with BSC, performance indicators could provide substantive information for strategic decision making. Also, the balanced scorecard provided an integrated perspective on goals, targets, and measures of progress. And they gave out an example at Ohio State University, U.S.A, as displayed below: the Ohio State University-a large, Midwestern land-grant university-has the vision of becoming "internationally recognized in research, teaching and service." This had been translated into five specific organizational areas deemed necessary for achievement of the vision (1) Academic excellence: What is the university's contribution to the creation of knowledge? (2) Student learning experience: How effectively does the university transfer

knowledge to its students? (3) Diversity: How well does the university broaden and strengthen its community? (4) Outreach and engagement: How effectively does the university transfer knowledge to local, national, and international communities? And (5) Resource management: How well does the university develop and manage resources?

Based on this broadly accepted articulation of the vision, an academic scorecard could be developed by identifying long-term strategic objectives associated with each of these organizational areas. Each objective would, in turn, have specific performance measures that indicated progress toward attaining improvement in the designated performance area (Steward and Carpenter-Hubin, 2000).

Along with this, Rompho (2005, p.1) also explored the BSC issue in the case study at Thammasat University, Bangkok, Thailand. Rompho (2005, p.2) stated again the work of Kaplan and Norton (1992, 1996 and 2001) as follows: the Balanced Scorecard was a widely used method to diagnose and improve on an organization's performance. It was a management tool that translated an organization's mission and strategy into a comprehensive set of performance measures that provide a framework for a strategic management and measurement system. Developed by Robert Kaplan and David Norton in 1992 (Kaplan and Norton, 1992), the Balanced Scorecard methodology is a comprehensive approach that analyses an organization's overall performance from four perspectives: financial, customer, internal business processes, and learning and growth. As a structure, the Balanced Scorecard cascades an organization's mission and strategies into objectives, measures, targets and initiatives within each perspective. Links are established between each perspective in the Balanced Scorecard to represent causal relationships. For example, improvement in learning and growth may lead to better internal business processes, resulting in customer satisfaction, which in turn, leads to good financial performance.

The development of the Balanced Scorecard can be broken down into three distinct generations (Cobbold, Lawrie, 2002 and Romphon, 2005). The first generation Balanced Scorecard was initially described as a simple one with four perspectives. In this generation, Kaplan and Norton primarily focused on the selection of a limited number of measures in each perspective (Kaplan and Norton, 1992). The concept of strategic objectives and causality was highlighted in the 2nd generation Balanced

Scorecard. In this generation, the Balanced Scorecard was described as an element of a strategic management system (Kaplan and Norton, 1996). The concept of the "strategy map" was also introduced in this generation (Kaplan and Norton, 2001). The concept of the destination statement was introduced in the 3rd generation Balanced Scorecard. The destination statement describes the consequences of implementing the strategic objectives at a particular future date (Cobbold, Lawrie, 2002 and Romphon, 2005). It assists in the process of selecting strategic objectives, the design of causality between those objectives, and the setting of the targets. Although the concept of the Balanced Scorecard is very popular in the business world, it is applied less frequently to higher education, particularly in Thailand. Here most management techniques used in state universities are based on the government budgeting system. However a de-bureaucratization process is underway for state universities and it is worth investigating the benefits the Balanced Scorecard as a management tool could achieve should it be applied.

Also, Romphon (2005, p.4) offered an example at the university study, Thammasat University, one of the Thailand's largest and most highly thought of universities was chosen as a case study. It was chosen because it was able to represent a typical public university in Thailand. It was also the place where the author worked as a lecturer, making the process of data collection more convenient. The quality of the data collected was believed to be higher than that available from other universities. Thammasat University is also searching for a new performance measurement system, making implementation of the Balanced Scorecard more likely. The objectives of this study were first to explore the uses of the Balanced Scorecard in other foreign universities, then to design the Balanced Scorecard based on the perception of Thammasat University's stakeholders and to investigate the perception of management staff in the university based on the designed Balanced Scorecard. These initial activities would under gird the main contribution of this study, which was, the creation of a Balanced Scorecard and a strategy map of the university. The scorecard and the map would thus be based on input from stakeholders, a practice rarely reported in the literature, and this should ease the aspects of change involved in its application.

And the results of the study of Romphon (2005, p.6) was that the survey on the uses of the Balanced Scorecard for a university obtained by submitting questionnaires to management staff in twenty-nine universities that used or were mentioned in connection with the Balanced Scorecard showed that only nine universities confirmed its use; of the remainder, two denied implementing the Balanced Scorecard, one said that the Balanced Scorecard had been used previously but was not now in use, one respondent seemed unclear as to whether the university had implemented the Balanced Scorecard or not. Of the universities for which questionnaires were not returned, thirteen presented their Balanced Scorecard in their websites, but another three universities gave no evidence of its use in their websites. In total there are twenty-two universities using the Balanced Scorecard. Seventeen of these universities are located in the United States, two are in the United Kingdom, two are in Australia, and one in Canada. Eleven universities apply the Balanced Scorecard only to their supporting units such as business and administration service division or campus auxiliary service. Eight universities apply the Balanced Scorecard for the whole university. Three universities apply it to the library. The list of twenty-two universities that apply the Balanced Scorecard based on responses to the questionnaires and evidence found in individual websites.

Meanwhile, Barnes (2008, p.4) put down again the origin of SBC (Balanced Scorecard). Developed in the early 1990s by Dr. Robert Kaplan (Harvard Business School) and David Norton (Balanced Scorecard Collaborative), a new approach to strategic management was termed the "balanced scorecard" approach. In an attempt to address some of the weaknesses and vagueness of previous management approaches, the balanced scorecard approach provides a clear prescription as to what companies or institutions should measure in order to "balance" a number of perspectives. Initially designed for use in the corporate arena, the approach has taken on further application to other organization and institutions. The balanced scorecard is a management system (not only a measurement system) that enables organizations to clarify their vision and strategy and translate them into action. It provides feedback around both the internal business processes and external outcomes in order to continuously improve strategic performance and results. When fully deployed, the balanced scorecard transforms strategic planning from an academic exercise into the nerve centre of an enterprise.

Historically, in business, financial results were the only thing that mattered. Kaplan and Norton argued that this traditional focus on only financial results was inadequate for companies striving to succeed in the information age. There was a need to 'balance' the financial aspect with other aspects of the business such as investment in suppliers, employees, processes, technology and innovation. Kaplan and Norton describe the innovation of the balanced scorecard as follows:

> ...The balanced scorecard retains traditional financial measures. But financial measures tell the story of past events, an adequate story for industrial age companies for which investments in long□term capabilities and customer relationships were not critical or success. These financial measures are inadequate, however, for guiding and evaluating the journey that information age companies must make to create future value through investment in customers, suppliers, employees, processes, technology, and innovation
>
> (Meanwhile, Barnes, 2008, p.4)

Let us take an example at UKZN (University of KwaZulu Natal South Africa) towards SBC. This simple concept has formed the basis of the development of the BSC system, but some fundamental changes have been included. The main change is to move away from the spreadsheet environment and to develop the system into fully fledged web application. Using some innovative display methods, Pis (Performance Indicators) are not restricted in number, but are grouped and categorized for display purposes. Another fundamental change is to introduce a method of assessment that considers two areas of performance. Each PI is rated in terms of its position to the benchmark, as well as its movement towards or away from the benchmark since the last assessment.

In the fifth area, the regard of "*School- Based Management*" (SBM), School-Based Management (also called Site-Based Management) is being talked about else where in the era of school autonomy and decentralization. In this sense, Seyfarth (1996, p.71) expressed that SBM created a significant departure from the bureaucratized, centralized system of school governance emerged during the

Progressive Era in the United States of America. The author also pointed out the features of this phenomenon. They were listed as follows: site-based budgeting to permit alternative uses of resources, getting governance committees consisted of teachers, parents and community members, increasing autonomy in choice of staffing configuration and selection of personnel, having power in order to modify the school's curriculum serving particular needs of students, getting a process for achieving waivers of local or state regulations and having an expectation for a yearly report on progress and school improvement. Seyfarth (1996, p.77) also made out a list of the advantages of SBM. First, for students, they got better curriculum and higher achievements. Second, for the school, administrators made full use of human resources, develop staff leadership skills, improve communication to teachers and students, parents and community members and enhance fiscal accountability. The teachers and staff got job satisfaction.

In addition, Briggs and Wohlstette (1999, p.5), from University of Texas at Austin and University of Southern California, U.S.A, both had a review about SBM as follows

Since the 1960s, school-based management has been a popular reform adopted by states and school districts across the country as a vehicle for improving schools. SBM has been used by states to increase school accountability; by local school boards to boost student achievement; by central offices to improve administrative efficiency; by teacher unions to empower teachers; and by community groups to involve parents. In one review of the SBM literature, researchers concluded that SBM was "a generic term" for diverse activities. Indeed, today we see school-based management as a standard feature of many current reforms (Bryk, 1993).

Briggs and Wohlstette (1999, p.7) added that although its popularity had been steady across the decades, there had been some notable changes in reformers' views of the usefulness of SBM. Up until the late 1980s, SBM was most often adopted and implemented as a stand-alone reform to remedy a variety of ills of the school system. The implementation of SBM typically was in response to crises in the system or trends in management theories, and the expectation was that SBM was uniquely designed to bring about improvements. SBM was frequently adopted as a political reform that shifted the balance of power from the central office to the school community. SBM,

from this perspective, helped generate ownership and commitment to school reform from the local community, reflecting the idea that a redistribution of power would increase energy for school improvement and force change, (Bryk, 1993; Murphy, et al., 1995).

According to them, there are eight key elements of a successful school-based management strategy, including: (1) Successful SBM schools have an active, living vision focused on teaching and learning that is coordinated with district and state standards for student performance. (2) Successful SBM schools have decision-making authority in the areas of budget, curriculum, and personnel, and they use that authority to create meaningful change in teaching and learning. (3) Successful SBM schools disperse power broadly throughout the school organization by creating networks of decision-making teams. (4) In successful SBM schools, the development of knowledge and skills is an ongoing process oriented toward building a school-wide capacity for change, creating a professional learning community and developing a shared knowledge base. (5) Successful SBM schools have multiple mechanisms for collecting information related to school priorities and for communicating information to all school stakeholders. (6) Successful SBM schools use both monetary and non-monetary rewards to acknowledge individual and group progress toward school goals. (7) In successful SBM schools, school leadership is shared among administrators and teachers. Principals often take on the role of manager and facilitator of change, while teacher leaders often take on responsibilities around issues of teaching and learning. And (8) Successful SBM schools cultivate resources from outside the school through involvement in professional networks and through entrepreneurial activity in the local business community.

What's more, Rodriguez and Slate (2000, p.3) from Anthony Middle School and University of Missouri, Kansas City, U.S.A, pointed out the backgrounds of SBM participation of school members in the decision-making process, which closely accompanied the tenets of critical theory. Administrators agree that all stakeholders must be involved in decision-making if the school is to be successful and that teachers possess expertise that is needed to make important decisions about the school (Livingston, et al., 1999). In addition, site-based management assumes a multiplicity of educational goals, a complex and changing educational environment, need for

educational reforms, school effectiveness, and the pursuit of quality (Cheng, 1996).

Rodriguez and Slate (2000, p.18) also emphasized the needs for SBM (1) theoretical reflections regarding educational reform, (2) systems theory and schools, (3) the nature of school reform, (4) modern school reform reflections, (5) systemic and inclusive restructuring, (6) reform through collaboration, (7) rationales and stimuli for educational change, (8) impact of erroneous beliefs on school reform, (9) initiating change, (10) implementing change, (11) maintenance of change, (12) restructuring, to what degree, (13) recent school research, restructuring themes and (14) restructuring success related to the change process and school organization.

In their conclusion, Rodriguez and Slate (2000, p.25) said that *systems theory* and the nature of school reform, particularly reform efforts through collaboration, were examined as well components involved in implementing and maintaining changes such as would be required in site-based management. Site-based management has been in the educational background for a number of years across districts and schools in the United States; however, only since the early 1990s did site-based management become of significance to administrators, teachers, and other stakeholders. Built upon what is known about effective schools, site-based management makes use of historical contexts in creating provisions to avoid mistakes made during past reforms that have failed. Site –based management focuses on changing systemic thinking and emphasizes the need for the decentralization of decision-making from the upper echelon of the school district to the local campus level. With sufficient autonomy, flexibility, and ownership of school functions, site-based management can provide the needed conditions for achieving multiple goals and maximizing school effectiveness over an extended period of time.

Referring to organizational restructuring, which is a school-based management (SBM), and Total Quality Management, SBM is known as the decentralization of decision-making authority to the school site. Lunenburg, et al. (2001, p.36) indicated, "School districts accomplish this new structure in two ways (1) increasing autonomy through some types of relief from constraining rules and regulations and (2) sharing the authority to make decisions with the school's major stakeholder group, including teachers, parents, students and other community members."

Shoraku (2008) from Kagawa University, Japan, working for UNESCO wrote about SBM in Asia as well. The author said that SBM had been viewed as a means to deepen local participation in decision-making that was relevant to schools, and as a way to expand access to education and improve its quality. The idea of SBM has its base in educational decentralization. Decentralization means "the transfer of planning, decision-making, or administrative authority from the central government to its field organizations, local administrative units, semi-autonomous and parasitical organizations, local governments, or nongovernmental organizations" (Rondinelli and Cheema, 1983, p.18). The decentralization of authority from the central government to schools is popularly known as SBM. SBM is the transfer of decision-making and/or authority over school governance from the government to the school level (World Bank, 2007).

One of the common features of SBM reforms in East Asia is that the vehicles of school governance and management are, in most cases, school committees and community councils consisting of community members (King and Guerra, 2005). School committees are given part of decision-making authority over day-to-day school operations. Despite this commonality, even across the countries in the region, the levels and types of SBM vary from one country to another, partly according to the motivations behind the reforms. For example, SBM reforms in Hong Kong aim to increase accountability and participatory decision-making at the school level; schools in Hong Kong have been given a high degree of autonomy over budgeting and staffing, receiving lump sum funds and grants from the government. On the other hand, schools in Cambodia and Thailand have less autonomy regarding finances and control of resources (World Bank, 2007).

In the sixth area, the issue of *"Knowledge Management"* (KM), Kidwell, Vander Linde and Johnson (2001, p.17) stated that colleges and universities had significant opportunities to apply knowledge management practices to support every part of their mission. They all put their ideas in the definition of KM. Knowledge management is the process of transforming information and intellectual assets into enduring value. It connected people with the knowledge that they needed to take action, when they need it. In the corporate sector, managing knowledge was considered key to achieving breakthrough competitive advantage.

And Kidwell, Vander Linde and Johnson (2001) also defined *"Knowledge"* as follows: Knowledge starts as data-raw facts and numbers-for example, the market value of an institution's endowment. Information is data put into context-in the same example, the endowment per student at a particular institution. Information is readily captured in documents or in databases; even large amounts are fairly easy to retrieve with modern information technology systems. They then add new trends in KM. Several trends will shape the field of knowledge management in the not-too distant future: (1) Emerging technology solutions, (2) The convergence of knowledge management with e-business, (3) The movement from limited knowledge management projects to more enterprise wide projects, (4) Increasing use of knowledge management to enhance innovation, and (5) Increasing use of tacit knowledge (rather than explicit knowledge).

Using knowledge management techniques and technologies in higher education is as vital as it is in the corporate sector. If it is done effectively, it can lead to better decision-making capabilities, reduced "product" development cycle time (for example, curriculum development and research), improved academic administrative services, and reduced costs. And an institution wide approach to knowledge management can lead to exponential improvements in sharing knowledge (Kidwell, Vander Linde and Johnson, 2001). Additionally, Kidwell, Vander Linde and Johnson (2001 suggest that as institutions launch knowledge management initiatives, they can learn lessons from their counterparts in the corporate sector. Some key points to remember are: (1) Start with strategy. Before doing anything else, determine what you want to accomplish with knowledge management. (2) Organizational infrastructure-human resources, financial measurements of success, and information technology-should support knowledge management. Think of technology as an enabler, and measure the impact of KM in financial terms, such as cost reductions, customer satisfaction, and speed to market. (3) Seek a high-level champion for the initiative-someone who believes in its benefits and who can advocate as needed. (4) Select a pilot project for knowledge management- ideally one with high impact on the organization but of low risk to build credibility for knowledge management. If possible, make the pilot one that participants will enjoy and find rewarding. (5) Develop a detailed action plan for the pilot that defines the process, the IT

infrastructure, and the roles and incentives of the pilot project team. And (vi) after the pilot, assess the results and refine the action plan.

The authors came up with a conclusion that colleges and universities have significant opportunities to apply knowledge management practices to support every part of their mission-from education to public service to research. Knowledge management should not strike higher education institutions as a radically new idea; rather, it is a new spin on their raison d'être. But implementing knowledge management practices wisely is a lesson that the smartest organizations in the corporate and not-for-profit sectors are learning all over again.

Parallel with this, given KM benefits, Vander Linde and Johnson (2001, p.34) drew out some of KM advantages. First, *in the research process*, KM had (1) increased competitiveness and responsiveness for research grants, contracts, and commercial opportunities, (2) reduced turnaround time for research, (3) minimized devotion of research resources to administrative tasks, (4) facilitation of interdisciplinary research, (5) leveraging of previous research and proposal efforts, (6) improved internal and external services and effectiveness, and (7) reduced administrative costs. Second, *in the curriculum development process*, KM has (1) enhanced quality of curriculum and programs by identifying and leveraging best practices and monitoring outcomes, (2) improved speed of curriculum revision and updating, (3) enhanced faculty development efforts, especially for new faculty, (4) improved administrative services related to teaching and learning with technology, (5) improved responsiveness by monitoring and incorporating lessons learned from the experiences of colleagues, student evaluations, and corporate or other constituent input, and (6) interdisciplinary curriculum design and development facilitated by navigating across departmental boundaries.

Third, *in the student and alumni services,* KM had (1) improved services for students, (2) improved service capability of faculty and staff, (3) improved services for alumni and other external constituents, and (4) improved effectiveness and efficiency of advising efforts (to integrate fragmented efforts currently undertaken by faculty, academic transfer. Both explicit knowledge and tacit knowledge are the intangible assets any organization holds to provide excellent service to their customers. Knowledge has become the driving force in our economy today. It powers the ability

of professionals to be their best, and to deliver value service to customers. Also, in HE, universities are the main instruments of society for the constant pursuit of knowledge. Knowledge management in educational settings should provide a set of designs for linking people, processes, and technologies and discuss how organizations can promote policies and practices that help people share and manage knowledge (Petrides and Nodine, 2003; Chou Yeh, 2005). There are two types of knowledge involved in higher education settings: academic knowledge and organizational knowledge. Academic knowledge is the primary purpose of universities and colleges. Organizational knowledge refers to knowledge of the overall business of an institution: its strength and weaknesses, the markets it serves, and the factors critical to organizational success (Coukos-Semmel, 2003; Chou Yeh, 2005).

Meanwhile, Milam (2005, p.12), from University of Virginia, U.S.A, expressed her ideas about KM that Knowledge Management (KM) principles recognize that it was important for organizations to "know what they know." All institutions inherently store, access, and deliver knowledge in some manner. The question is what value is added to the products and services they deliver by the effective use of that knowledge capital. And Milam (2005) adds that higher education institutions have "significant opportunities to apply knowledge management practices to support every part of their mission." (Kidwell, et al., 2001, p.24). And the author stated, "Knowledge management should not strike higher education institutions as a radically new idea; rather it is a new spin on their raison d'etre." The problem is that it is such a "wide open area of study that it is difficult to understand the implications of knowledge management for an educational setting" (Thorn, 2001, p.25). This digest offers a basic introduction to the potential of KM for higher education.

In this context, Milam (2005, p.25) also talked about the relationship between ICT and KM that E-learning is one of the most important KM practices, something which one would expect higher education institutions to have as an advantage. Yet these e-learning opportunities are geared most often to students as online customers, not to employees as part of capitalizing on their knowledge as an intellectual asset. The e-learning focus in KM is on "just-in-time knowledge," delivered anytime and anywhere, with the traditional "course" disaggregated into "knowledge chunks." Two-thirds of 700 companies polled in a Delphi Group study use online resources for

training employees (Survey Tracks, 2001).

Then, Milam (2005, p.30) wrote down about the reasons for adopting KM in HE that as public, private, and for-profit higher education institutions alike respond to the phenomenal growth of online courses, cyber colleges, and virtual universities, these same reasons to adopt KM apply. It is with KM that colleges will be better able to increase student retention and graduation rates; retain a technology workforce in the face of severe employee shortages; expand new web-based offerings; work to analyze the cost effective use of technology to meet more enrollment; transform existing transaction-based systems to provide information, not just data, for management; and compete in an environment where institutions cross state and national borders to meet student needs anytime/anywhere.

Also, while addressing KM leadership, Milam (2005, p.43) said that there was support in top management for a project, the KM leader was "not a top dog in the organization." And she came out with another activity of KM techniques; dealing with the greatest benefit of using storytelling in KM may come from its ability to capture tacit knowledge, which many observers call the most valuable knowledge asset of an organization. Unlike explicit knowledge, which is written down in documents, manuals and other accessible sources, tacit knowledge is implicit in the minds of people, many of whom literally don't know how much their experience has taught them (Gill, 2001, p.27).

Then in the case of Yung Ta Institute of Technology and Commerce (YTIT), Taiwan, Chou Yeh (2005, p.2) revealed that leaders of YTIT recognized the need for organizational change to reposition strategically in the competitive higher education industry. With the support from high-level management and the board of directors, YTIT begins her journey for implementation. At this point of time, knowledge management is a new idea to most members of the college. Knowledge is a valuable resource and it is natural for members to hoard knowledge from others. Sharing is not a phenomenon on campus. Organization culture can inhibit or enhance organizational change efforts in knowledge management initiatives. Proper procedures are taken to ensure the concept of KM is correctly understood and thus creates a culture of sharing using organization-wide vocabulary. An outside KM specialty team is brought in as mediator for KM implementation. To ensure successful implementation of KMS, the

Institute selects 50 representatives from faculty and staff of various departments to attend 14 brainstorming sessions.

Chou Yeh (2005, p.12) concluded that higher education institutions had come to face pressures similar to the private sector. Private colleges were experiencing huge challenges due to the structural change in the higher education industry in Taiwan. In order to deal with the cutting edge competition, management had to adopt new models in search for excellence. It seems reasonable to propose management techniques such as KM and related strategies to enhance quality and performance. Knowledge Management helps an entity making the collective information and experience available to individual workers.

In the context of views from a survey by Ajiferuke (2005, p.12), (1) KM is a new term for what information professionals were already doing [50/50 split], (2) Information management is just another aspect of KM, i.e. information management involves management of explicit knowledge (e.g. documents) while KM involves the management of both explicit knowledge and tacit knowledge, (3) Unanimous agreement that information professionals have important roles to play in KM programs, and (4) KM is the systematic management and use of the knowledge in an organization to increase responsiveness and innovation. It is different from information management in its concern with sharing and mapping the information and experience of many individuals towards the betterment of an organization, rather than information remaining with different individuals working separately towards the same goal (R. Eden, 2004).

At the same token, Aggestam (2006, p.3), from University of Skoevde, Sweden, introduced KM and its relationships with LO and OL. Knowledge Management (KM) is about managing knowledge. KM includes activities such as creating, organizing, sharing and using knowledge IT is a prerequisite for effective KM, which means that IT supported KM is an important part of KM (Schreiber, et al., 2000; Loerman, 2002; Wong, et al., 2004). In addition, Aggestam (2006), puts down the definition of KM, from the literature on the LO, that learning in organizations requires individual personal knowledge to transform into information that other members of the organization can use KM refers to the process in which organizations assess the data and information that exist within them, and is a response to the concern

that people must be able to translate their learning into usable knowledge. During the KM process the knowledge goes through different changes, and there are knowledge losses, both desirable and undesirable, where undesirable losses should be minimized as much as possible (Kezar, 2005).

Researching the relationships with LO and OL, Aggestam (2006, p.6) expressed that a LO could be regarded as the system, which included the subsystem KM. This was in accordance with Senge's idea that system's thinking had to be the conceptual cornerstone. Consequently, a change in KM affects the organization, and a change in the organization, e.g. the culture, affects KM. As a result, the process to become a Learning Organization must take place on both levels. Enabling organizations to become learning organizations therefore requires introducing LO as well as KM. A LO has a climate and a culture which sees knowledge sharing and learning as something necessary and positive. On an individual level, everybody wants to contribute with their knowledge, and also to take part of other people's knowledge. In the daily work, this knowledge work must be an integrated part. KM aims to support this, and is in a way a concrete connection between the individual and organizational level. The analysis shows that most keywords appear in both domains. This is not surprising considering the fact that a LO requires KM, and KM in turn assumes a LO. There are four factors that only appear explicit in one domain: (1) Factors only in LO: External factors and System's thinking, and (2) Factors only in KM: Organizational Memory and Technical. This phenomenon indicates that LO and KM is on different levels of abstraction with different focus and purpose. People first discuss why they assume this in the perspective of External factors and System's thinking, and then in the perspective of Organizational memory and Technical.

In addition, knowledge when organizations function as holding environments for knowledge, and when organizations directly represent knowledge in the sense that they embody strategies for performing complex tasks that might have been performed in other ways. One part of organizational knowledge is stored in IT-supported repositories, organizational memories. When stored knowledge is shared and used it gives rise to learning and possible new knowledge. KM is concerned with new knowledge. It supports organizational learning by both taking care of the result, the knowledge, and making the result reachable for individuals in the organization.

Therefore, it stimulates learning and the creation of new knowledge. KM is a prerequisite for a LO, the learning culture must assume that accurate and relevant information must be capable of flowing freely in a fully connected network, but KM's efficiency is in turn dependent on the LO (Schon, 1996; Schein, 2004).

Ubogu (2008, p.6) from University of the Witwatersrand, Johannesburg, South Africa, expressed KM ideas (general) as presented below: (1) KM is a recent phenomenon in HE with the first publication appearing in 1997 (Hafstad, 1997), (2) KM is increasingly emphasized under the Information Services umbrella, (3) KM promises to lead to better decision making capabilities, improve academic and administrative services, and reduce costs (Kidwell, Vander Linde and Johnson, 2001), and (4) Central purpose of KM: "transforming information and intellectual assets into enduring value" (Kidwell, et al., 2001).

In mentioning about KM in the HE institution, Ubogu (2008, p.8) summarized that, first, internal tacit knowledge – embedded in the minds of individuals, gained through working experience, including research, teaching, and operational activities. Senior and experienced employees as well as university teachers and researchers have a sound knowledge of work procedures, rules and regulations, etc. Second, internal explicit knowledge – reports, guidelines, course syllabi, theses, databases, minutes of meetings and any type of tangible knowledge containers generated within the university. University employees who provide support functions generate significant explicit knowledge in different areas such as student services, international relations, enrolment management, computer services, research support, and physical plant, among others. Third, External explicit knowledge – tangible material in the form of books, journals, reports, CD/ROMs and any other media, produced outside the university. This type of information and knowledge is generally available in the university library system. And fourth, external tacit knowledge – personnel external to the university with expertise knowledge, i.e. service personnel, subject experts, and any other person who provides expertise to the university (P. Wijetunge, 2002).

Also, Ubogu (2008, p.9) showed out his ideas about KM in the international trends: (1) many universities have combined their libraries and information technology departments to create 'Information Services Departments," (2) in the US, mergers are happening at small liberal colleges, (3) in China, Australia and the UK, mergers have happened in big universities, (4) Library and IT services report to the Chief Information Officer (CIO) / Vice-Principal/Deputy Vice-Chancellor for KM, (5) sometimes, the position of University Librarian (Director of Libraries) is eliminated, (6) new organization structures have been developed. But (7) the blended model is said to have failed in research universities in the U.S.A. (A. Foster, 2008).

However, Ubogu (2008, p.11) revealed some conflicting perceptions of KM in the following issues: (1) KM is a fad just like the TQM of years gone by. Knowledge cannot be managed. (Wastawy, 2008 – verbal communication), (2) KM has seen limited impact in the private sector due to over emphasis on technological hardware and software (Hammer, et al., 2004), (3) KM is not just another fad like total quality management (Ajiferuke, 2003), (4)Recent global economic downturn has prompted many companies to scrap knowledge management posts or to reduce the scope of their knowledge management programs (Pringle, 2003), (5) KM is at least lasting longer than typical fads and, perhaps, is in the process of establishing itself as a new aspect of management (Ponzi and Koenig, 2002), and (6) Successful KM practitioners come from a wide variety of academic and professional backgrounds without any apparent common denominator (Tulloch, 2002).

Given the matter of roles of librarians/Information professionals in KM, Ubogu (2008, p.17) ended with his viewpoints as follows: Firstly, it was Information and Communication Technology (ICT) relating to (1) proxy access to electronic resources for on-campus and remote users, internal and remote database support, library's digital content management system, library system e.g. Millennium, resource discovery tools (link resolver, meta-data and federated search services), (2) institutional repositories as knowledge base which includes internal explicit knowledge items (theses, reports, guidelines, minutes of meetings), and (3) library IT extended/supported by the university IT. Secondly, KM processed, in which the required paradigm shift was for librarians/information professional to become facilitators/content managers of institutional communities of practice, as well as

identified processes/services: (1) create knowledge repositories, portals, "hubs" of information in identified areas of institutional processes to enhance quality and efficiency (tacit and explicit knowledge), (2) engage in knowledge networks and discussions (tacit knowledge), and (3) use knowledge management as a way to expand the library's role to areas such as administration or support services where libraries have had little impact in the past (T. Townley, 2001).

In terms of KM in Strategic Plans of HE in South Africa, Ubogu (2008, p.22) unveiled (1) unlike some of the Research Councils in South Africa which have KM strategies in their strategic plans, few, if any, HE institutions have articulated coherent framework for KM., and (2) for example, the Medical Research Council has articulated a informatics and knowledge management strategy in its Strategic plan, 2005 – 2010.

Meanwhile, Stueart (2008, p.4) said that three concepts were required for knowledge management to succeed, namely: (1) Cooperation – information sharing, serving on committees together, while allowing participants to remain separate and continue to function in a more-or-less autonomous manner, (2) Coordination – actual resource sharing, filling in the gaps that participants would not be able to accommodate individually, while adapting and accommodating differences in order to achieve a common goal, and (3) Collaboration – actual commitment and investment of resources, based on a shared vision that can develop. Also, Stueart (2008) talks about the roles of librarians in KM: Librarians as Knowledge Intermediaries with the following roles: (1) negotiators – identifying needs (2) facilitators – providing effective search strategies, (3) educators – familiar with the literature and information in many formats, (4) information intermediaries – providing current awareness services and liaison between the seekers of information and that information itself, and (5) information advocates

In the seventh area, the matter of "*decentralization*", ADB (2001, p.5) wrote about technical assistance to Indonesia for supporting decentralized education management, in which the Government of Indonesia requested the Asian Development Bank (ADB) to provide technical assistance (TA) to support decentralization of education management. The Fact- Finding Mission (24 January to 7 February 2001) and a follow-up mission in March 2001 reached understanding with the Government

on the components, objectives, scope, budget, and implementation arrangements of the TA. The TA aims to support the initial steps of decentralizing education management and to prepare the ground for more efficient, equitable, and effective delivery of education services. The TA's immediate objectives are to (1) support the creation and capacity building of the transition management and monitoring unit at MONE (Ministry of National Education), (2) develop a coherent management framework and manage change through a shared strategic framework for the education sector, (3) support monitoring of the decentralization process and its effects, (4) establish a foundation for district-level information-based education sector planning and management, and (5) analyze and prioritize capacity-building requirements (integrating organization, system, process, and staff development) for district-level education management.

Besides, EQ Review (2005, p.3) reported that education decentralization efforts are under way in every region of the developing world. The precise design of this policy reform varies by country, but most decentralization initiatives fall into one of two types: (1) the devolution of service delivery responsibilities from national to local or regional governments, and (2) the delegation of many service delivery decisions and functions to the level of the school. Some countries attempt both types of decentralization simultaneously. Under the first, devolution to sub-national governments, education is added to those government's other service delivery responsibilities, and the sub-national government may be partly or entirely responsible for funding education. Under the second, school autonomy, a school board or school management committee is usually formed to provide oversight and is made up of elected community representatives in addition to teachers and the school director. Usually, the school director is given new management powers and responsibilities and almost all of the school funding is provided by the government doing the decentralization.

Decentralization moves decision-making closer to the people and may give them greater say in schooling decisions as well as greater ability to hold service providers accountable. Whether it leads to improved education is more debatable. In principle, schools are empowered to determine their own priorities and to develop their own school reforms to improve teaching and learning. In practice, weak

management capacity, insufficient funding, inadequately trained teachers, and weak system support make it difficult to realize the positive potential of decentralization. The empirical research evidence on education decentralization is mixed but frequently shows that increasing parental participation in school governance, giving teachers the right to select their own textbooks, and granting school directors the authority to recruit teachers contribute positively to education quality (EQ Review, 2005). In reality, many countries adopt education decentralization policies for reasons which have little to do with improving schooling; for example, Argentina decentralized education to provincial governments in order to reduce the federal government's fiscal deficit, and Spain decentralized education to regional governments to accommodate the demands of different ethnic/language groups. The challenge facing education ministries and donors is how to implement these policies to facilitate improved service delivery and to avoid some of the dangers which could worsen both the quality and equity of public education (EQ Review, 2005).

Additionally, EQ Review (2005, p.7) summarized some projects with specific activities across the world about the practice of educational decentralization, First, in Mali, EQ Review (2005, p.8) wrote that in the context of education in Mali, the term "deconcentration" was the devolution of decision making power, and human and financial resources to the regional and district level MOE's operation units. "Decentralization" was the transfer of competencies and means (financial and human resources) from central MOE to the regional and communal elected bodies so that they can fully implement their roles and responsibilities – as defined by law – in the education sector. Second, in Senegal, Africa, with the project called CLASS (Children's Learning Access Sustained in Senegal); a main goal of the CLASS project is to improve decentralization and community management. This would be achieved by strengthening decentralization procedures at the regional and district levels and strengthening the capacity of the project's targeted schools and communities to plan and implement school improvement activities that affect education quality. Specific activities include: (1) strengthening the capacity of regional and departmental entities in three regions to support schools in improving educational quality, (2) training school management committees (SMCs) to become active and effective in their regions, and (3) training targeted middle schools in the regions to develop, implement,

and refine school development plans. Third, in Peru, since 2003, the Innovations in Decentralization and Active Schools project has supported the Peruvian government through assistance for the 2003 Education Law and its focus on decentralization, local management, improved education quality, and democratic practices in the schools and school communities in rural areas of the San Martin region. USAID (the U.S Agency for International Development) in Peru and the Ministry of Education are project partners, while the Academy for Educational Development is in charge of implementation. By combining active learning in the classroom, improved local management, and decentralization activities and at the national, regional, local and school level the project aims to improve the quality of rural education from the bottom up as well as the top down.

Fourth, in Egypt and Namibia projects in participating in a decentralization workshop, the workshop's primary objectives were to: (i) share a common vision of the education sector's decentralization objectives; (ii) facilitate understanding of the link between decentralization and the quality of teaching and learning; (iii) communicate lessons learned from international experience with decentralization; (iv) explain the complexity and detail required to design and implement decentralization; (v) identify the principal constraints to implementation of education decentralization; and (vi) set priorities for moving forward. EQ Review (2005) put down a conclusion that decentralization is not a magical solution to the real problems facing education in poor countries, but the introduction of decentralization policies provides an opportunity for change to improve schooling.

Also in this respect, Rong Liu (2008, p.11) gave out an example of decentralization in Chinese HE institutions in China touches upon broader issues which include efforts to redefine the government and university relationship, the granting of more academic, financial and operational autonomy to the lower level, measures to enable universities to quickly respond to the new demands of economic development and the labor market, and potential conflict between business-centered management and academically oriented traditions. These trended of decentralization and marketisation had reshaped the adult and continuing education sector in China's universities, and there were both benefits to be realized and risks to be avoided in this development. This research; therefore, explored the strategies and approaches adopted

by Tsinghua University to restructure its adult and continuing education provision, and its implications for China's higher educational institutions.

In brief, strategies and techniques used in educational administration in general and in change management in particular at HEIs worldwide have been recognized so far. They have helped to set up standards and a wide variety of "ingredients" in managing HEIs as well.

Change Implementation with Forces

In this part of the research, the issues about change management principles, stages, interventions, and evaluations would be deployed in change management forces and agents.

Van de Ven and Poole (1995, p.3) identified four IDEAL theories of change: (1) teleological change, (2) dialectic change, (3) life cycle change, and (4) evolutionary change. These theories represented fundamentally bases for change. First, each theory focused on a different set of generating mechanism and casual cycles to explain the change processes that unfold. And second, these four ideal theories of change could be used to understand how change was "driven" by underlying MOTORS or generating mechanism. These MOTORS determined the scope and nature of change and could be inferred from a systematic analysis of the sequence of events underlying the development of phenomena.

According to Walker (1999, p.123) ideas, a key challenge for leaders responsible for change in HE was managing the complex roles and relationships between the university and its diverse constituencies, particularly when these relationships are changing rapidly. Also, Speck (1999, p.177) in her Change Process Model (CPM), proposed the involvement of all the stakeholders in the learning community. Her process started from shared vision, managing transition in individuals from the organization with skills/capacities, incentives/motivation, resources, time, and politics (school board, teachers, and classified unions). The process was the results of collaborative efforts and leadership team coordinates. Then it came up with action plans. And the evaluation was the end of the process.

Along with this, Herbst (1999, p.125), when expressing about change management in HEIs, said that HE systems, like others, had experienced a proliferation of management approaches, including tools designed to induce and manage change: strategic planning and reporting, planning and budgeting systems, peer review and self-evaluation, TQM, reengineering, the art and practice of learning organizations and ect. He explained that (1) the change in the fabric of modern, Western societies had been an ongoing process, and (2) the impact of this process has been dramatic, not only for the service industries but for all sectors of the economy and –by implication-for HE: HE moved from an elite to a mass system (Trow, 1970; Herbst, 1999), in which new academic programs were found, and new professions introduced; existing curricula adapted or expanded; professional societies were found; communication technologies spread; the gradual move away from labor intensive knowledge-transfer fostered distance learning; and the general discussion on management issues intensified.

Once addressing the historical development of change, Herbst (1999, p.126) concluded that change approaches or change techniques which proved beneficial in the field of business or public administration were found to be of value and were integrated into the practice of HE management. And at another idea, Herbst (1999, p.128) stated that change processes are closely related to Problem solving. He explains that, at the outset/beginning, we perceive a problem situation; we would like to change or solve. Offering some suggestions about change management, Herbst (1999, p.137) said that (1) life span of particular theories is limited, and (2) that change processes appear to be selected more on the basis of their popularity than on the basis of analyzed merit. While our environments or worlds, indeed do change, change approaches designed to respond to these environments appear to change even faster frequently, we observe them as fads.

Meanwhile, Razin (2001, p.6) defined *"change agent"* as a person, group or an organization seeking to produce change in a system. The author also indicated the characteristics of effective change agents, who knew about the task at hand, understand the cultural context in which task had to be performed, also knew their followers and know themselves. And the functions of effective change agents were recruitment, development and control.

Also, referring to *change agents* in the management of change, Hall and Hord (2001, p.114) mentioned about change facilitators engaged in change, having responsibilities to assist in facilitating the process. And there were certain change facilitators types named as, first, the Initiator who had clear and strongly-held visions about what their school should be. Second, it was the manager that approaches the leadership with a different set of behaviors and emphases. They were skilled at making their school run like a well-oiled machine. And the last one was the Responder, who approached leadership with a primary focus on what was happening in the school

Besides, Hall, et al. (2001, p.128), when addressing the principles of change, put down twelve ones, including (1) Change was a process, not an event; (2) There were significant differences in what was entailed in development and implementation of an innovation; (3) An organization did not change until the individual within its change; (4) Innovations came in different sizes; (5) Interventions were the actions and events. That was the key to the success of the change process and (6) Although both top-down and bottom-up could work, a horizontal perspective is best; (7) Administrator leadership was essential to long-term success, (8) Mandates could work; (9) The school was the primary unit for change, (10) Facilitating change was a team effort, (11) Appropriate interventions reduced the challenges of change, and (12) The context of the school influenced the process of change.

Walker, et al. (2004, p.373), once mentioning about change in HEIs, said that significant change at our era in the evolution of HE appeared eminent due to environmental forces related to Technology, Completion and the workplace/workforce. These new forces were causing significant directly impacting HE goals, processes and decision-making. Then, Walker, et al. (2004, p.811) used Shepard's 1960 model (The Action Research Model of Planned Change) with four steps, namely (1) identify the objectives, (2) plan the change process, (3) take action and (4) evaluate. In change with HE perspectives, Walker, et al. (2004, p.812) state that several unique factors permeate (influence) HE environment which are integral to the nature and purpose of HE: (1) Organizational leadership and governance structures; (2) diverse stakeholders and constituents of HE; and (3) institutional culture (Dudersadt, et al., 2003; Walker, 2004). They also remarked that the shared governance in HE allocated the tasks of leading and managing the institution to the administration, academic matters to the

faculty, and public accountability and stewardship to the governing board, and that the dynamics of change in HE were inevitably influenced by its diverse array of internal and external constituents: Besides, internal constituencies of HEIs included students, faclty, staff, adminsitrators, and governing board, and external stakeholders are parents, the public and their elected leaders in government, business, labor, the press and other media, foundations, and other public and private institutions in the community.

Along with this, the three main forces for change, in the idea of Walker (2004, p.813), were of (1) fiscal and budgetary constraints, (2) the growth of information technology (IT), and (3) market forces with the resulting increased competition for students. He explains that the rising cost of HE during a period of stagnant economic growth and declining public support has raised concern about both the access to and quality of HE. During the past 20 years, state appropriations as a proportion of the total revenue of public colleges and universities declined by nearly 25%, despite continued growth in college enrollments. Such as that time, the net tuition per full-time student increased by over 60%. Efforts to balance rising costs with the availability of educational services by increasing tuition continue to meet with public resistance. And while HE is exploring ways to reduce its dependence on the government appropriations and to diversify its sources based through new, entrepreneurial and market-driven strategies, change on college and university campuses across the nation continues to be driven by fiscal constraints.

Walker (2004, p.545) also added that among the most compelling forces for change in HE today was IT and the rapid growth in its usages to transform learning. Several noted (famous) that HE leaders and observers recently have proclaimed the importance of recognizing the significant impact that IT is having on basic processes of teaching and learning that are so fundamental to HE (Brown, et al., 1995; Pittinsky, 2003; Walker, 2004, p. 813). And the author indicated that reflecting a more market-driven environment in HE, students were exercising more discretion in selecting educational programs and there is an increasing competition for students among HEIs. The monopolies over advanced education that universities once enjoyed due to geographical location and credentialing through the awarding of degrees are now being challenged by greater dependence on market forces and less on regulations.

Parallel with this, Tomlinson (2004, p.132) identified change agents were those needed to be selected, who were committed, enthusiastic and command respect. They were trained and used as champions and cascade the change program.

Back to the meanings of "*change management*" issue, Balassanian (2006, p.5) stated that change management refers to the task of managing change with two meanings: Firstly, managing change refers to making changes in a planned and managed or systematic fashion. External events may also necessitate organizational change. And secondly, managing change means the response to changes over which an organization exercises little or no control (e.g., a rapid rise in the price of oil, devaluation of the national currency, civil unrest, new legislation and so on). The recognition of the need for timely adjustment to external events has given rise the concept of the "learning organization," one capable of continuous adaptation to the changing external environment. Also, change management relates to an area of professional practice and the related body of knowledge that has grown up within and around this subject, mainly as a result of experience in the private sector.

In another view, change management with its typologies, Balassanian (2006, p.5) expressed that (1) top-down change management was based on the assumption that if managers planned things properly, change could be executed smoothly. The only obstacle came from resistance of some employees: therefore, the focus was on changing the culture of an organization or the way we did things around here, (2) that transformational change management relied on transformation leaders setting a personal example and challenging people to think "outside the box" and innovate, while providing a safe environment for doing so and (3) that strategic change management was based on a certain recipe and was in contrast with the top-down models in that they aimed to introduce new behaviors at work, allowing people to witness the benefit for the organization and, thus, on the evidence, internalized the change in their ways of working.

In an ending, Balassanian (2006, p.6) drew out a conclusion that each of these approaches could be effective, depending on the situation although it was generally accepted that the first category was often the category that fails the most. All approached highlight the importance of leadership, communication and involving people in the change process. Thus, the key challenge for organization was to match

the model to the context.

Drawing some experiences in the form of lessons, Balassanian (2006, p.7) UNDP wrote down that (1) change management in development must be understood. In this respect, Balassanian (2006, p.8) concluded that insufficient understanding of the development context, in particular, the constraints embedded in bureaucratic system, organizational culture and the structure of human interactions could be a stumbling to change management processes, and (2) that change management had to be supported. From this context, failure to motivate or convince leadership and middle management of the need for change often leads to the unraveling (separating/confusing) of a change process, and certainly does not enable to sustainability of even early results. A key result could be one that requires a cross-departmental response that needs the buy-in of all, and (3) that change management results had to be sustained. Here in this regard, developing leadership skills, clarifying roles and getting stakeholders on board are all necessary for successful change interventions. However, paying attention to soft aspects of organization such as culture is also indeed as these factors are often paramount (chief, important) determinants of the real direction and pace of change.

Given out the four STAGES of change management process, Balassanian (2006, p.9) showed out (1) managing the environment of change with (a) creating the momentum for change: making the case, visioning, empowerment and voicing activities by definition (leadership/principal's job), and (b) analysis of the change context: diagnosing issues of who wins, who loses, social, cultural, legal and policy issues, data collection and analysis, and operations research on problems, and (2) executing the change process with (a) facilitation of change: building change coalitions and harnessing champions, process consultation, decision-making methods, consensus building and brainstorming (all informed by factual information and analysis), and (b) communications about change: public meeting, various other forms of two-way communications and information dissemination.

In addressing the principles of change management, Scott (2008, p.6) pointed out the four key things. First of all, change was a complex learning and unlearning process for all people concerned. It was not an event. Secondly, he also adds that organizational and individual capacities to manage change are directly linked. Thirdly, there was a profound difference between change and process. And lastly, strategic change (setting out in new directions) and continuous quality improvement of current provision were two sides of the same thing. They needed to be evidence-based and to focus only on key improvement priorities, not every change option coming along.

From the lessons from the quality management system for learning and teaching at University of Technology Sydney (UTS), Scott (2008, p.6) put down his summaries from change management, namely (1) Change was learning and motivation in its engine, (2) Change priorities had to be set using robust, consolidated evidence, (3) Collaborative cultures focused on action learning produce practical results, (4) Leaders should look both outside and inside for change solutions, (5) University committee had to have alignment and mutual reinforcement and (6) Change did not happen, it had to be led accountably.

In his closing remarks, Scott (2008, p.7) concluded that higher education was at a watershed, worldwide. The institutions that would thrive in the new more competitive, quality-focused, scrutinized and continuously shifting operating environment would be those which could successfully combine the "what" of change (a good idea like a well-conceived, relevant, desirable, feasible quality management system) and the "how" (a capacity to effectively manage it into successful daily practice. Also, Scott (2008, p.64) stated that in recent years in HE, there had been a powerful combination of change forces, which had beer bearing down as follows: (1) a rapid increase in competition from colleges and universities, both publicly and privately, (2) a significant decrease in funding from government sources, (3) greater government scrutiny like national quality assurance agency, (4) a growing consumer (student) rights' movement like the complaint about the quality of what is delivered when the fees rise, and (5) the rapid spread of communications and information technology into every aspect of people's lives, including education and training with high quality and updated knowledge.

The two developments to respond to "what" of change: identifying good ideas, from the Australian HE settings, are moving into "flexible learning" (good teaching with being responsive and contingent with dozens of learning approaches in the unique context of a particular course) and using more "online learning" (interactivity and active learning of using IT) And as for the "How" of change : implementing good ideas, that means a potentially relevant, desirable and feasible change ideas are made it work in practice by far the hardest part of the quality improvement and innovation process (Scott, 2008, p.64).

According to Scott (2008, p.88), the lessons from UTS (Australia) were (1) There were far more options for improvement or innovation that there was time or resources to address them, (2) Change was not an event, but is a complex and subjective learning/unlearning process for all concerned, (3) Enhancements in learning programs generated a need for improvements in the systems and infrastructure that underpin them, (4) The most successful changes were the result of a team effort in which the most appropriate and best-positioned people were involved in a process of action learning, (5) The change process was cyclical, not linear, (6) Change did not just happen-it had to be led, (7) Change was a mix of external forces and individual action, and (8) Change agents had to look outside as well as inside for variable change ideas and solutions.

In short, while a change is being implemented at an educational unit, one has to think about a process with the "start" and the "finish" like a race. And indeed, in carrying out a change in HE or at any levels of educational sector, all the stakeholders have to consider principles to work out, stages to follow, interventions to have a treatment and evaluations to check the entire process.

Important Factors Enhancing Effective Change Management in Higher Education Institutions

The following issues would be covered with the factors, helping enhance the effectiveness of change management in higher education level, namely organization development, Total Quality Management (TQM), budget development, standard-based curriculum and instruction, ICT and capacity-building in change process.

Mentioning about "*educational administration or management,*" Glatter's (1979, p.16) definition remains helpful because it serves to identify the scope of the subject. He argued that management studies were concerned with 'the internal operation of educational institutions, and also with their relationships with their environment, that was, the communities in which they were set, and with the governing bodies to which they were formally responsible." In other words, managers in schools and colleges had to engage with both internal and external audiences in leading their institutions. This statement delineated the boundaries of educational management but left open questions about the nature of the subject.

Bolam (1999, p.194; Bush, 2003) defined *educational management* as "an executive function for carrying out agreed policy." He differentiated management from educational leadership which had "at its core the responsibility for policy formulation and, where appropriate, organizational transformation" (ibid, p.194). Writing from an Indian perspective, Sapre (2002, p.102) stated that "management is a set of activities directed towards efficient and effective utilization of organizational resources in order to achieve organizational goals." The present author has argued consistently (Bush, 1986; 1995 and 1999) that educational management has to be centrally concerned with the purpose or aims of education. These are the subject of continuing debate and disagreement but the principle of linking management activities and tasks to school or college aims and objectives remains vital. These purposes or goals provide the crucial sense of direction which should underpin the management of educational institutions. Management is directed at the achievement of certain educational objectives. Unless this link between purpose and management is clear and close, there is a danger of "managerialism," "a stress on procedures at the expense of educational purpose and values" (Bush, 1999, p.240). The emphasis is on managerial efficiency rather than the aims and purposes of education (Newman and Clarke, 1994; and Gunter, 1997). "Management possesses no super-ordinate goals or values of its own. The pursuit of efficiency may be the mission statement of management – but this is efficiency in the achievement of objectives which others define." (Newman and Clarke, 1994, p.29; Bush, 2000).

In addition, Bush (2003, p.12) said that *educational management* was a field of study and practice concerned with the operation of educational organizations. There was no single generally accepted definition of the subject because its development had drawn heavily on several more firmly established disciplines including sociology, political science, economics and general management.

Firstly, in the context of "*organizational restructure,*" an administrative process, consists of motivation, leadership, decision-making, communication and organizational change were suggested by Lunenburg, et al. (2001). In discussion of motivation, the authors displayed three content theories from Maslow's need hierarchy theory- physiology, safety, social, esteem and self-actualization, Herzberg's motivation-hygiene theory- hygiene and motivators, and Alderfer's ERG theory with Existence, Relatedness and Growth. Then, in the aspect of leadership, which is the process of influencing followers through the use of the power. From the presentation of Lunenburg, et al. (2001, p.234) in their book, leadership was classified as trait, behavior and contingency. Given the same topic, Deal, et al. (Fullan, 2007) showed out eight roles of symbolic leaders when they were shaping a school culture: (1) as historians, (2) anthropological sleuths, (3) visionaries, (4) symbols, (5) potters, (6) poets, (7) actors and (8) healers.

And for the decision-making, which is a process of choosing from among alternative, there are a wide variety of models and techniques. One of the famous models known is from Herbet Simon, the Nobel Prize-winning decision making, describing its process in three stages; (1) intelligence activity, (2) design activity and (3) choice activity. With techniques listed in the media, site-based decision making techniques are widely used, including (1) braining, (2) nominal group, (3) Delphi, (4) Devil's advocacy and (5) dialectical inquiry presented by Lunenburg, et al. (2001).

Communication is regarded as an important skill to school administrators for they spend daily over 70% their time communicating. It deals with external and external communication. Lunenburg, et al. (2001, p.254) said that communication was continuous and it passed six steps: ideating, encoding, transmitting, receiving, decoding and acting. And when mentioning about organizational change, Lunenburg, et al. (2001, p.257) pointed out that there were surely pressures for change in the organization such as government intervention in schools, society's values,

technological change and knowledge explosion and processes and people. And they also suggested some methods to reduce the resistance for school administrators, which were participation, communication, support, rewards, planning and coercion.

Trader-Leigh (2002; Van Schoor, 2003, p.3) pointed out major factors to change resistance such as (1) self interest, (2) psychological impact, (3) tyranny of custom, (4) the redistributive factor, (5) the destabilizations effect, (6) culture incompatibility, and (7) the political effect. And Van Schoor (2003, p.5) presented some measures toward overcoming resistance to change. Firstly, traditional change management intervention: top-down approach focusing on management control, rationality and structure. These types were very painful because they often imply a loss of security and jobs. Secondly, bottom-up models focused on the social and political issues at work in organizations. Individuals used political behaviors to achieve their own ends. In these models, environments were created in which individuals or departments adapt to change at their own pace. Thirdly, a systematic – approach required a collaborative relationship, which found expression in a new psychological contract (Maguire, 2002; Van Schoor, 2003). The new psychological contract was characterized by the protean career in which employees' values and needs a higher level of recognition than before. In return, the organization could lay claim to the skills, knowledge and experience of individuals but only in proportion to what the work environment contributes to the employees' quality of work life. And another model was also created to this matter called Transformational Intelligence (TQ) Model to overcoming resistance to change: The inner triangle consists of three elements; each represents by a unique COLOR. They are Motivational Intelligence (MQ: Yellow), Process Intelligence (PQ: Blue), and Relational Intelligence (RQ: Red). The outer triangle, which shares a porous boundary with the inner triangle, is Creative Intelligence (CQ: Green). In short, TQ will prepare individuals to participate meaningfully in shaping an uncertain future.

Secondly, in the light of *"Organization Development" (OD)*, Schnuck, et al. (1971, p.7) indicated that OD was a planned and sustained effort to implement behavioral science for system improvement, which used reflective, self-analytic methods Meanwhile, French, et al. (2005, p.23) defined OD as a powerful set of concepts and techniques for improving organizational effectiveness and individual

well-being that had its genesis in the behavioral sciences and was tested in the laboratory of real-world organizations. In this context, French, et al. (2005, p.25) also quoted some definitions from the early OD literature. For example, OD is an effort (1) planned, (2) organized, (3) managed from top, (4) to increase organizational effectiveness and health through, and (5) planned intervention in the organization's processes, using behavioral science knowledge (Beckhard, 1969; French, et al., 2005).

Along with this, Van Schoor (2003, p.23) posed a model of forms of organizational change, consisting of (1) there was change in organizational processes, which may result from technological innovations like internet, (2) the grouping or regrouping of processes might result from external demands (e.g. the political imperative to restructure HE in South Africa), (3) there were changes in values, beliefs and human behaviors, resulting from a new organizational vision (e.g. the University of South Africa's decision to expand into Africa), and (4) a change focus might bring about a change in power relationships, which usually happens in organizational restructuring

Additionally, Andricius (2007, p.2) put down the easy way in understanding an effective organization through a non or profit organization was similar to "*a ship*": (1) It had its destination (the goal of the organization), (2) It had its own structure and capacity (small fright or long cruise), (3) It had leadership, crew (staff) and beneficiaries (passengers), (4) It sailed the sea which can be friendly or rough, (5) It had to obey the rules of the sea (legal environment), (6) It needed energy and dedication, (7) It related to other "ships," (8) It related to its own passengers (as they pay for the journey), and (9) It needed lights and signals to be seen and considered. For life cycle of an organization, the organization needed (1) a group within a community becomes aware of itself and its actual status, (2) through an act of will an official structure is registered - vision of a desired status is developed, (3) using limited resources (human, financial, material) and processes, the organization acts towards reaching its goal, (4) impact of the activities is evaluated against the vision and adjustments are made, and (5) the organization stops functioning: as it reached its vision; it exhausted its resources or the environment changes drastically.

Meanwhile, Andricius (2007, p.8) also constructed six box models for essential structures and functions of organizations: (1) Driving force/Governance with strategic decision body, mission, legal status, membership, (2) Human resources with staff and volunteers, task management, performance and development, and conflict resolution, (3) Material and Financial resources with accountancy and property management, budgeting / planning, controls and audits, and financial and other material (re)sources, (4) Internal functions – operations and management, with information and documents, activities and operations, planning, communication, and project development and implementation, (5) External functions / relations with representation, public relations, cooperation with local governments, cooperation with private businesses, cooperation with peer organizations, resource mobilization, and Monitoring, lobby and advocacy; and (6) Outcomes / Service delivery with sectoral expertise, outcomes/ services offered, and impact and feed back Moreover, she puts forwards to some other factors to an effective organization namely, ties with the constituency, motivation, and compliance, symbiosis, and complementarities with the local environment.

Balassanian (2006, p.6) displayed that changes promoted by development assistance might focus not only on an individual organization or a group of related organizations, but also on the larger development environment. Along with this, Brookes and Becket (2008, p.27) said that drivers of change in HE environment were : (1) political factors: Government initiatives to widen access, governmental development of more HEIs, Strict governmental control over HE curriculum and management, (2) economic factors: Reduced or limited funding per student, Reliance on private sector funding, reliance on tuition or international students fees, rising costs per student, increase in number of private HEIs and greater emphasis on internationalization, and (3) socio-cultural factors, driving change in International HE environments: Greater demand for student places, greater diversity of student populations, greater diversity of provision and consumer pressure for greater accountability or value for money.

Let us have some examples. First, in Asia Pacific Region, there is much commonality in environmental factors; government initiatives to widen access are extensive, increasing competitive environment in HE (India and Malaysia have new HEIs). Second, in Europe, Middle East and Africa Regions, there are considerable changes regarding sources and levels of funding across the whole region, maybe, in relation to an increased number of private institutions or reliance on private sector funding; there is a commonality in terms of government drives to increase access to HE, and a significantly diversified student market, and in conjunction with the Asia – Pacific arena, there are increased concerns regarding the quality of provision in HE. And third, in American zones, there contains more concern with the competitive nature of the environment and the sources and relative costs of provision; and there is some differences in the region dependent on the degree of broader economic development of the individual countries.

In an initiative idea from the networking model, Anucha (2009, p.78) wrote in his article "The strategy for creating educational management network CARP model" that Faculty of Education, NU, Thailand, introduced a proposed model in educational management, called "CARP" model (Cyber, Academics, Research and Publication) on October, 2008 with the participations of administrators, teaching staff and graduates from faculties of education throughout Thailand. This is a practical model related to a network to be implemented in an education organization such as at an office, center and institute (piloted early in the HEIs with faculties of education in North Thailand). Then this model may be linked with the larger group in a faculty. And there may be the links among faculties and even colleges and universities. Or even colleges and universities in another country can join the network. Hopefully, the upcoming time the results from this implemented model will be reported with promising data.

Thirdly, in the respect of *"Total Quality Management"* (TQM), these co-authors, Winn and Green (1998, p.24), pointed out that TQM was based upon the assumption that people wanted to do the best and that it was management's work to enable them to do so by constantly improving the system in which they work. Also, Winn and Green (1998, p.25) said that TQM was first espoused by Dr. W. Edwards Deming in the late 1950s. His ideas were not accepted by the US industry, but were heartily endorsed by Japan in their recovery from World War II. Largely, as a result of

the implementation of TQM, "Made in Japan" has changed from a derogatory term to high praise.

Winn and Green (1998, p.27) added that in 1980s, the US industry began to see the value of a TQM approach. Such companies as Motorola and Federal Express have turned failing companies into world leaders. UNIVERSITIES; however, have been slower to see the value of using TQM in their business, although several schools are now using TQM to improve the administration of the university. Here is an example, in 1990, Oregon State University endorsed TQM as its management philosophy and has experienced outstanding success in improving the operations of the university. Winn, et al. (1998) cite TQM with Deming's 14 Points: (1) Create constancy of purpose (develop a mission….), (2) Adopt a new philosophy (insist on quality in everything..), (3) Cease dependence on mass inspection (focus on the product or service process, don't depend on audits, tests, or inspections to build quality…), (4) End the practice of conducting business on cost alone (focus on long term cost and benefits….), (5) Constantly improve processes (more satisfied students/customers…), (6) Institute training, (7) Institute leadership, (8) Drive our fear, (9) Break down barriers (cooperation), (10) Avoid obsession with goals and slogans, (11) Eliminate numerical quotas, (12) Remove barriers to pride of workmanship, (13) Organization-wide involvement, and (14) Define management's responsibilities to make it happen.

In their suggestions, Winn and Green (1998, p.28) referring to TQM, indicated that the 14 points of Deming are very general. When TQM is successfully applied, it is a result of a careful study of each point and a clear determination of how each applies to the situation at hand. They add that no two applications of TQM will be the same. The form that a particular implementation takes is dependent on many factors such as the size of the institution, whether the institution is PRIVATE or PUBLIC, and the strengths of the people involved, but the most important variables are the maturity of the students and the involvement of the employer. And careful consideration of all aspects of the educational system will help determine just how the TQM implementation will ultimately look.

In their conclusion, Winn and Green (1998, p.30) said that TQM could be a powerful tool in the educational setting even though it was developed with manufacturing processes in mind. The key elements to a successful implementation are (1) gain the support of everyone in the chain of supervision, (2) identify your customers, (3) focus on the refining the process, and (4) use Deming's 14 points as a GUIDE and CHECKLISTS during the implementation effort. The final result will be a more efficient operation and a TEAMWORK attitude rather that an "us" versus "them" attitude between faculty and students.

Fourthly, in the spirit of *"budget development"* in change management, OECD report (2003, p.66) presented that in the United Kingdom there was a dual support system for funding higher education research: The Higher Education Funding Council for England (HEFCE) and the Scottish Higher Education Funding Council in Scotland distributed funds selectively to higher education institutions with reference to the quality of research as assessed in a Research Assessment Exercise (RAE). The RAE was conducted every four or five years; the most recent was in 2001 and informed funding decisions from 2002-2003. Each institution was awarded a rating, on a scale of 1 to 5* (five star), for the quality of its research in each unit of assessment (academic department) in which it was active. Only the highest rated departments attract funding, and a quality rating of 5* attracts almost three times as much funding as a rating of 4 for the same volume of research activity. As a result, funding for research was highly concentrated by institution and department. In 2002-2003, 75% of HEFCE research funds were allocated to 25 institutions out of a total of around 135 higher education institutions in England. A second stream of government funding allocated by the Research Councils for specific projects covers the direct costs of those projects awarded. The quality-related funding supported the infrastructure and indirect costs and also provided institutions some flexible resources for their own research. The UK funding councils are currently consulting on a review of research assessment.

In Australia in 1998, statistics (OECD (2003, p.66), commonwealth (federal) government funding (around 60% of total revenue in 2001) had two main components: (i) a general operating grant largely based on a specified number of student places in the context of an educational profile of the institution concerned; and (ii) funds for research and research training allocated primarily on a competitive basis. Resources

are allocated in the context of a rolling triennium which ensures that institutions have a secure level of funding on which to base their planning for at least three years.

In the Netherlands in 2000, statistics (OECD (2003, p.66), universities were funded on the "performance funding model." Thus, 50% of the total teaching budget in 2000 was based on the number of degrees awarded in 1999; 13% was based on the number of first year enrolments; and the remainder was a fixed allocation per university. Universities receive separate funding for research programs. Universities of professional education (HBOs: Hoger Beroepsonderwijs) are allocated teaching funds by a formula taking into account program characteristics and teaching output (enrolment and completion rates). And the government has foreshadowed plans to merge these two systems from 2005.

In Norway in 2002, statistics (OECD, 2003, p.66), granted to institutions now consist of three main components: (1) a basic component (on average approximately 60% of the total allocation in 2002) associated with unit cost; (2) an education component (approximately 25%) based on results: the number of completed student credits, the number of graduates (scheduled to begin in 2005), and the number of international exchange students (incoming and outgoing); and (3) a research element (approximately 15%) dependent on performance and quality criteria including: (i) ability to attract external funding; (ii) number and qualifications of academic staff; (iii) number of postgraduate students; (iv) regional and professional policy priorities; and (v) total student numbers.

Also, in this respect, Fielden (2004, p.3) indicated that when HEIs got their full autonomy and accountability, this was the picture of their approaches to financial controls upon comparing with the government sponsors.: (1) In the government support, there were (i) detailed budgets agreed with Ministry of Education (MOE), (ii) line item control over budget, (iii) surrender of any under-spending, (iv) surrender of any income generated, and (v) inability to manage assets or to borrow money externally, whereas (2) in the spirit of fall autonomy, there are (i) block grants agreed, (ii) no detailed controls over sub heads, (iii) earnings can be retained, (iv) under-spending retained, (v) freedom to switch or sell assets and borrow funds, and (vi) accountability for overall budget and performance. That means, one can find out that there are two income profile (opposite) (1) in the state controlled HEIs , (i) MOE

grant 95%, (ii) Fees 3%, and (iii) Others 2%., and (2) in the autonomous one: (i) MOE grant 40%, (ii) Tuition fees 25%, (iii) Research 20%, (iv) Trading 5%, (v) Donation 5%, and (vi) Interest from endowments 5%.

In his suggestions, Fielden (2004, p.9) stated that there would be new ways of funding: Firstly, there would be per capita grants for each student enrolled (using tariffs by subject, level and mode). Secondly, there might be performance related funding – payment by credits achieved or numbers graduated not enrolments. Thirdly, there may be research funding based on peer reviews or research assessment or impact (Performance-Based Research Fund-PBRF) And lastly, there should be extra funding for policy-related activity (eg; poor students, e-learning), which may be competitive.

Meanwhile, Phu (2004, p.125; Hung, 2008, p.15) also gave out the figures of the financial distribution to public and private universities and colleges in the U.S.A to percentage as shown below: teaching accounts for 32,3% to public and 27% to private; research 10,1% public and 7,7% private; public services 4,5% public and 2,4% private; students' services 4,9% public and 10,6% private; university supports 9% public and 10,6% private; facility operation and maintenance 6,7% public and 6,1% private; scholarships and awards 4,3% public and 11,4% private; health care, enterprise support and independent activities 19,4% public and 17,4% private; and research and development (R&D) 0,2% public and 4,6% private. Here in this respect, the budget to the private universities and colleges in students' services, university supports and scholarships and awards is higher than public counterparts with the hope of fostering the development of the education in the private sector in America.

Also, Hung (2008, p.17) showed out the figures of the financial distribution from the French government as follows: 54,3% to Ministry of Education, other ministries 5,5%, administrative organizations 0,8%, communities and territories 21,7%, companies and factories 6,5% and learners' families 11,2%. This implies that the budget to educational in France is over 50% of the total national budget. And, Fielden and Hung (2008), when addressing the control and management of finance to higher education from the government and related authorities, list out the items such as annual budget, spending,, incomes from non-government projects, and tuition fees from local and foreign students. What's more, when talking about the distribution of national budget to HE from the government, Hung (2008) points out that the financial

distribution toward higher education institutions has revealed differences ranked from levels of administration, types of schools, national universities, regional universities, and "best practices" universities.

In this sense, Rong Liu (2008, p.26) posed his ideas about budget development in HE, by taking an example in China as follows: dilemmas of higher education reform in China had been the financing of universities. There had been a remarkably consistent worldwide reform agenda in this area despite different political and socioeconomic systems and dissimilar higher education traditions (Johnstone, 1998). It had been a major objective in the reform of the financing of higher education to shift financial responsibilities from the central government to local governments, higher education institutions, and even to individuals. When Tsinghua University launched its reform of adult and continuing education, it was made clear that the university would not allocate any funding for professional development programs, and the school was required to rely on self-financing to support its operation and expansion. This policy forced the staff in the School to be much more market-oriented, and provided them with the bargaining power to take control of their own finances. However, in the recent restructuring, Tsinghua only transferred limited autonomy in the above four areas to the School of Continuing Education. While decentralizing some power to the School of Continuing Education, Tsinghua also established the Administrative Office of Professional Training to monitor all executive and professional programs. This clearly shows that the processes of centralization and decentralization are dynamic. Bray (1999; Rong Liu,2008) break decentralization into three major types- de-concentration, delegation, and devolution. The decentralization at Tsinghua falls under the model of delegation-the internal transfer of authority from higher to lower levels-but this authority can be withdrawn at the discretion of the delegating unit.

Fifthly, given the context of "*standard- based curriculum and instructions*" (SBC), Dorch and Jackman (2004, p.46) from Northern Illinois University, U.S.A. pointed out their ideas about the politics of standards-based curriculum in a course-based environment that how a standards-based curriculum in teacher education could coexist with a higher education system based on department subject categories and course-based programs. And the coalition (team work) under a committee happened in

the ways as follows: The committee also identified four areas of work as a vehicle for the initial organization of the curriculum design and development process: (1) Structures, exploring models used by other institutions' elementary education programs, particularly in the area of clinical experiences, (2) Competencies, identifying distinctive program foci consistent with the standards, (3) Connection/communication, developing channels for collaboration across departments and among program components, and (4) Methods, examining integration of elementary and special education programs

Furthermore, Dorch and Jackman (2004, p.47) focused on the team work for the coalition curriculum, in which the team discussed potential points of connection and communication for all four semesters following formal admission to the program as well as pre-admission course work. Seizing the initiative in this committee's discussions, a member from the service course area of educational psychology proposed using essential questions grounded in educational psychology and a problem-based format as a vehicle for curriculum coherence. The team's recommendation embedded this approach in advocating use of standards-based portfolio development across the program. For each of the professional semester, faculty teaching the courses within the "block" of courses would meet regularly (pre-, mid-, and post- semester) to communicate and coordinate course assignments. Like the structures team, the connection/communication team advocated a field experience in every professional semester as well as a pre-admissions clinical experience.

From this point, Dorch and Jackman (2004, p.49) drew out a conclusion that from the perspective of the political frame, externally initiated changes such as standards-based curriculum "becomes the site as well as the stakes of internal dispute" (Ball, 1987, p.263). In an education program revision process, the internal dispute arose as demands for standards-based teacher education clashed with university systems. Coalitions emerged to compete for places in the elementary education program. Those coalitions were rooted in the university environment of identity based on department affiliation and area of expertise and course status (in particular, service versus major courses). Coalition claims were grounded in the power forms of legitimate authority and expertise, and those claims were strengthened by claims of connection between those power forms and the standards. In essence, the standards

served to legitimate existing power forms based on the university environment. During the curriculum design process, negotiations and bargaining dissolved coalition distinctions when discussions focused on visions of the ideal. Coalitions solidified when those visions were translated into the implementation language of the university environment.

OEC, Thailand (2004, p. 75) summed up that during 2002-2003, several actions were taken to reform higher education curricula as follows: (1) A project that included a cooperative education system in higher education had been initiated by several public universities including the Rajamangala Institute of Technology (RIT). The objectives of the project were to enhance students' working skills through direct experience; to lessen unemployment; and to update the curricula in line with the recommendations of entrepreneurs. In this cooperative education, third- and fourth-year students would actually work in offices and factories that had joined the project. After working as temporary employees for at least 16 weeks, students would gain hands-on experience and three credits. There were 596 students, studying in four fields from 17 universities, participated in hands-on training in 274 companies in the academic year 2002. With 30 million baht budget, the project in 2003 was separated into 2 phases. In phase I, there were 873 students, from 24 universities studying in 13 fields. In phase II, there were 2,500 students from 25 universities. (2) Each higher education institution also develops its own curricula under the condition that they are commensurate with specified structures and standards. These include: The RIT: Several curricula at various levels (certificate, diploma and degree) in the fields of science and technology and social sciences developed by the RIT focus on improving students' critical thinking and skills as well as in providing them with hands-on experience. Examples of curricula that were improved by the RIT include Curriculum for Vocational Education in the fields of industry, agriculture, business administration (commerce), home economics and fine arts.

Howard (2007) from Elton University, U.S.A. pictures out the history of curriculum development. Probably the biggest objection to Tyler's approach, and the cause of its demise in the 1970's, was its perceived mechanistic orientation to curriculum. As the theory was implemented in the 1950's and 60's, behavioral objectives provided the underpinning of its design, and the success or failure of the

curriculum was based on pre-defined changes in student behavior. The assumption was that student outcomes – at least those that matter – could and should be measured. The result was that in order to measure the behaviors, tasks were broken down into smaller and smaller parts, resulting in tasks that lost their authenticity or meaningfulness. Tyler was a product of his time, and his ideas were written and interpreted in light of current educational perspective, which was behavioral in nature. His theory of curriculum development was simple, logical, and rational, but it fell out of favor as educators began to view learning experiences more holistically and assess outcomes that are not so easily measured. In response to the curriculum approach advocated by Tyler, often called the product approach, came what is known as the process approach. This approach is most associated with the work of Lawrence Stenhouse (1974), who advocated principles for selecting content, developing teaching strategies, sequencing learning experiences, and assessing student strengths and weaknesses with an emphasis on empiricism. A process curriculum was designed to be not an outline to be followed but a proposal to be tested. Gone were the behavioral objectives and tight hierarchical learning tasks.

The process approach to curriculum development was extended after Stenhouse originally laid it out, morphing into the praxis approach, which added the element of commitment to curriculum development. This approach advocates a shared idea of the common good and the goal of informed and committed action to the model of curriculum development. Even more recently there has been an emphasis on the context of curriculum and the notion of curriculum as a social process in which personal interactions within the learning environment take on considerable significance. And lastly, it should be mentioned that developmental theorists continue to have a strong influence on how curriculum should be structured. Wildman (2007), for example, advocates curriculum built around what is known about development and the Vygotskian concept of scaffolding, or what Wildman calls "assisted performance."

Hansrajh (2007, p.4), from University of KwaZulu-Natal, South Africa, put forward to steps in curriculum evaluation as follows: (1) Specify the Objectives of the evaluation, (2) Choose an appropriate evaluation Design / method, (3) Identify the sources of information / data, (4) Construct instruments for data collection, (5) Select or develop strategies for data collection, (6) Conduct pilot scale evaluation,

(7) Conduct large-scale evaluation, (8) Analyze the data, and (9) Prepare reports and feedback to decision makers. And there are some areas of evaluation: (i) Total Curriculum of a Program, (ii) Curriculum of a single subject, (iii) Curriculum content, (iv) Time estimates and allocations, (v) Teaching-Learning strategies, (vi) Instructional materials / media, (vii) Procedures used to evaluate the performance of learners, and (vii) Institutional resources.

Cretu (2008, p.15), from University Alexandru Cuza (Universitatea Alexandru Ioan Cuza-AICU) Romania, laid down some proposals for developing the academic research program on global curriculum through networking universities from different regions and cultures of the world. Cretu (2000, p.28) mentioned about; first, the global education and the global curriculum. The global education and the global curriculum could be addressed as emerging new fields of research and practice. As an academic field of endeavor, the theory of curriculum has to analyze the innovations of curriculum development in connection with political, ideological, economic, technological, ecological, ect, global evolutions. Second, it is internationalization and globalization of education and curriculum: historical approaches. The origins of globalization of education and, especially of curriculum, are historically related to complex processes which were determined by economic, political and technological factors. Globalization of HE means the integration of an international dimension inside of fundamental functions of academic institutions. Third, they are differences between internationalization and globalization of academic curriculum. The discourses on the phenomenon of the internationalization of education are usually imbibed with the so-called, "internationalism ideology," which has been focused mainly on the inoffensive issues of multi-advantages emerged from communication and cooperation transnational networks.

In terms of curriculum development, the internationalism or the internationalization of education underlines the international dimensions of curriculum (Rogan and Luckowski, 1990; Shubert, 1991; Beazley, 1992). It is devoted, positively only, to the process of extending and enriching curriculum, of building bridges between cultures. Both ideologies reflect the same evolutions of the nowadays global internationalized world but their perspectives are very much different. Fourth, it is the globalization of curriculum in the frame of HE. In this point, it is the curriculum

globalization from the Cologne Charter of G8 (1998) (Group 8, advanced countries), in which the G8 heads of state identified several general objectives and strategies that are effective to modernize education and to raise curriculum standards at all levels, including HE. In the light of a European study case on globalization of curriculum (the Lisbon Summit 2000), the paper analyzed the impact of Lisbon report on developing academic curriculum, in terms of objectives of education, better quality, equitable access for all, and the relevance to the outside world.

Fifth, it is the critics on global curriculum with (1) global education characteristics: commercialization, privatization, capitalization, and (2) the World Trade Organization (WTO) "education agenda" based on the General Agreement on Trade Services (GATS), and (3) critics from different ideological and spirituals groups. And sixth, it is the overall effects for education of global curriculum implementing and developing.

Sixthly, in the sense of *"ICT"* in change, Kimberling (2002, p.4) said that IT professionals often overlooked the impacts of technology changes on people. Almost any change to technology would have an impact on business processes, which would directly impact the day-to-day jobs of individual employs. As a result, changes to technology required attention to the impacts that they had on both process and people.

Then, Menchaca, et al. (2003, p.5) ICT introduced an *eLearning Adoption Systematic Change Model*. They expressed that basing on an understanding of systems thinking (Senge 1999) as practiced by successful learning organizations and derived from large-scale projects in technology-assisted teaching and learning in Mexico and Germany, they have developed a model that offers guidance to educational institutions and organizations to support their transition from lecture-based, face-to-face teaching to interactive learner-centered eLearning. According to these authors, in change process, the adoption of eLearning changes the educational system in a way that requires a transformation not only of the teaching process through a new medium but also of the system itself (Banathy, 1991). According to systems theorists such as Banathy (1991, and 1992), to change any part of an educational system requires knowledge and understanding of how the parts of the educational system are interrelated. The adoption of eLearning and the transformation of the teaching and learning process to a learner-centered model constitute fundamental changes in the

educational system, starting with specific goals, values, and beliefs about learning and elements that support the learning process, such as curriculum, instruction, assessment, and policy (Fullan, 1991 and 1993).

Systemic Change Management in Education, (Menchaca, et al., 2003) was explained with its meanings: Systemic change could; thus, be viewed as a democratic decision-oriented approach to changing fundamental values and beliefs about schools and education within the changing environment of an increasingly complex interconnected global society. Or systemic change is a cyclical process that considers the impact of change on all parts of the whole and their relationships to one another. And systemic change suggests a change of the system rather than within the system. Both inner (personal- psychological) learning and outer (social-psychological) learning are required for the systemic change process to occur. Thus, learning to change is a necessary part of the process for change in complex systems to occur. This process of learning to change is, in turn, connected with systems thinking, generative learning, higher levels of conscious awareness, and the development of an evolutionary consciousness (Banathy, 1991; Fullan, 1993; and Senge, 1990). Reconnecting stakeholders and the educational systems in which they are involved, systems design thus becomes a creative and generative learning process for all involved in the educational system (Banathy, 1991 and 1992).

Soutsas, Andreopoulou and Ipsilandis (2004, p.7) from Technological Institute of Larissa, Greece, did their research about the help of ICT in distance education in 15 HEIs in Greece by stating that Distance learning applications in Greece was still in pilot level, hence, it was already achieved the minimum presupposition for at least one fully equipped virtual classroom for every academic unit. Distance learning environments usually function through the network operation centers in every University, which co-support a number of advanced telematics services in order to diffuse the acquired knowledge, such as the development of multimedia software, guidelines for the design and implementation of virtual tele-classrooms, Video on Demand services, Mbone, advanced communication services, access for remote information libraries, databases, etc. There were also found rich material on distance learning issues. Distance learning provided in higher education could be an effective tool in upgrading the educational level, the rendered services and

the quality of life in our country. The on going projects in the universities in Greece aim to contribute in the effective exploitation of human resources in our country and, consequently, in the evolvement of competitiveness in all production sectors in Greece. These projects also help to materialize the successful achievement of the objectives of the 3rd community support framework for the INFORMATION SOCIETY and the equal participation of the country in the new elearning environment.

They [Soutsas, Andreopoulou and Ipsilandis (2004, p.45)] came to a conclusion that Greece is a country, with many remote areas, such as islands and mountainous areas, and the contemporary infrastructure for distance learning applications could be exploited for local development programs. Computer based education is designed to provide total access in higher education in more citizens in our country for both graduate and post-graduate level. Knowledge, new technology, innovations and ICT services can be effectively diffused in our country with the implementation of various programs for distance education, remote seminars, professional training, corporate training and the support of new professional horizons for graduates. Furthermore, Greek universities will be able to reinforce continuing life education for human resources, a basic presupposition for the materialization of the "Society of Information" and consequently, for the development of our national economy.

OEC, Thailand (2004, p.125) put down a couple of models. Model ICT Schools were schools that apply ICT in developing the body of knowledge as well as integrating ICT into the teaching-learning process and the learners' development activities. So far, there are 12 model ICT schools. All these schools will be supervised by one of the following universities/institutions: Chulalongkorn University, Kasetsart University, Silpakorn University (Sanamchandra Palace Campus), King Mongkut's University of Technology Thonburi (KMUTT), and King Mongkut's Institute of Technology North Bangkok (KMITNB). In this regard, the Constructionism theory will also be applied in the teaching-learning process. Personnel responsible for model ICT schools are also seeking participation from the private sector in terms of equipment and facilities, personnel and innovative ideas in the teaching-learning process. In cooperating with the private sector, related criteria; measures; procedures

and incentive measures such as tax reduction will be specified.

In conclusion about ICT in Thailand, as a crucial factor in the transformation of Thai society into a knowledge-based society, effective utilization of technologies for education can help improve the quality of teaching and learning as well as make lifelong education for all Thai people more promising. In this regard, continuous and concrete actions must be taken to deal with the priority tasks. These include development of materials and other technologies for education and bridging the digital divide between Thailand and other countries as well as between Thai people living in urban areas and those living in rural areas (OEC, Thailand, 2004, p.128).

Meanwhile, Kanchanasut, et al. (2004, p.5) presented more details about ASEAN Vision 2020, a long-term goal for science and technology development in order to improve "a technologically competitive ASEAN competent in strategic and enabling technologies, with an adequate pool of technologically qualified and trained manpower, and strong networks of scientific and technological institutions. Additionally, Kanchanasut, et al. (2004) reveal that ASEAN Vision 2020 is operated by the ASEAN Virtual Institute of Science and Technology (AVIST), endorsed by the ASEAN Sub-Committee on Infrastructure and Resource Development and the ASEAN Committee on Science and Technology in 1999 with Asian Institute of Technology (AIT) and Thailand Graduate Institute of Science and Technology, National Science and Technology Development Agency as AVIST Core Unit and AIT as technical core center. Thus, AVIST is to contribute to the development of science and technology human resource in ASEAN countries through the provision of vocational training and continuing professional educational opportunities to various science and technology sectors by leveraging on the innovative use of information and communication technologies such as satellites internet as well as web-based course and programs.

Apart from this, Goolnik (2006, p. 9), when addressing about effective change management strategies for embedding ONLINE learning within HE and enabling the effective CPD (Continuing Professional Development) to Academic Staffs, posed that, in UK, universities were being encouraged to be more entrepreneurial and innovative in their activities and less reliant on public funding; they are being urged to adopt the very technology that has brought about the explosion

of the knowledge economy to deliver and support learning flexibility and cost-effectively. Goolnik (2006, p.12) added that until recently ICT had had only a modest impact on teaching in and learning within UK higher education; and most universities have seemingly offered little training regarding this or pedagogical skills for those seeking involvement with open and online learning. This has left academic staff inadequately skilled in the potential of these approaches.

Marmolejo (OECD, 2007, p.67) said that "insufficient facilities" were also considered among the top threats to the success of higher education. The following are the to ten critical HE facilities issues: (1) Resource scarcity and affordability, (2) Performance measurement and accountability, (3) Customer service., (4) Information technology, (5) Developing the laboratory and classroom of the future, (6) Facility reinvestment and total cost of ownership, (7) Workforce issues, (8) Sustainability, (9) Energy resource management, and (10) Safety, security and business continuity.

Hao (2008, p.4) from Nha Trang University, Vietnam did his study about the use of ICT teaching at his workplace. He presented a theory of action for the implementation of ICT in educational institutions from the upward steps, including: Infrastructure and Professional Development – Integration of ICT- Strengthening of current practice and/or Pedagogical change- Improved student outcomes. He details that this theory, however, does not sufficiently take into account the complexity of the institution environment and many interacting factors that impact on classroom practice, such as national/institutional policy and teaching/learning expectations. That is not to deny that without a sufficient level of installation there can be no integration. In addition, institutional practices have proved that only the provision of infrastructure and professional development does not guarantee change in teaching and student learning. It requires active strengthening of teaching practices and/or pedagogy change.

With his suggestions, Goolnik (2009, p.11) advised that resistance to change was; therefore, likely to be overcome if: these and the previous issues could be adequately addressed; academic staffs are fully involved / have full ownership in the design, development and carrying out of these changes; they have to be an understanding of their new roles; and the results eventually produced are truly

ascertainable. And in the development and implementation of an effective ONLINE teaching and learning strategy, existing academic staffs concerns need to be acknowledged by management and channels found for these to have a real input. Indeed, if staffs efforts are truly appreciated, then there are a number of practical issues that they would like to see satisfactorily addressed. It is suggested that a coordinating body representative of all the main stakeholders is established to take on board such matters, including the vitally important: one of CPD. Also, a deeper and sustained learning experience for students can only be made available: If academic staffs can become familiar with the pedagogical skills and ICT expertise needed here through a systematic, pro-active and accessible professional development program.

Seventhly, *"capacity building"* of staffs and teachers (CB) should be considered along with change process. When talking about sharing knowledge, Fullan (2000) suggests that leaders in a culture of change need to realized that it was vital to access tacit knowledge, and they have to create many mechanisms for people to take part in sharing knowledge. In the regard of change with human resource development (HRD) perspectives, McLagan, (1989; Walker, 2004) pointed out that the components of HRD were usually understood to include training and development, organization development and career development. And organization development in this value, Walker (2004, p.813) said that three variables from 10 key dependent variables of Egan (2000) are the most relevant to his research, namely (1) initiating and managing change, (2) supporting adaptation to change, and (3) engaging organization culture change, which is critical for successful planned change.

Here in this context, knowledge management (KM), knowledge base, knowledge transformation and knowledge transfer processes, have been implemented around the world. Dr. Paul M. Newton (2003, p.66), in his doctoral thesis, said that it was the school board that plays a vital role in it. He suggested, "One of the recommendations of a Canadian School Association (1991, p.2) study of school board effectiveness was better training development for board members."

Also, Walker (2004, p.225) concluded that professionals were understood to be guided by a normative-re educative philosophy when working to facilitate change and focus on creating collaborative decision making environment during times of change. And the effective change began at the individual level; individual

transformative learning is required for organizational change. If an organization did not place a high priority (with appropriate resources) on individual transformation, then organizational change intervention might fail.

Chilundo (2006, p.6) at a UNESCO forum gave out an example about capacity-building in HE in Mozambique, Africa, dealing with the Strategic Plan for Higher Education in Mozambique 2000-2010 (PEES) as follows: The Strategic Plan was divided into three main chapters: (1) putting the focus on vision; (2) on strategy and (3) strategic issues and actions. Essential background statistics and projections are appended to the plan. The vision stresses the following objectives and principles: (i) Equitable access (by region and gender), (ii) Response to the needs of the Mozambican society, (iii) Quality and relevance of teaching and research, (iv) Partnership between public and private sectors, (v) Institutional autonomy combined with accountability, (vi) Efficient use of resources, (vii) Diversity and flexibility in response to changing demands, (viii) Cost-sharing between all stakeholders, (ix) Financial support to needy students, (x) Democracy, intellectual independence and academic freedom and (xi) Co-operation with other parts of the National Education System.

And this plan got success with the things like important lessons could be drawn, on the one hand, from this quick and successful process, namely: (1) Strong commitment of the political leadership at the highest level, (2) High level of motivation of the members of the Commission, and (3) Strong support from the World Bank, both financially and intellectually. World Bank officials assisted the Commission at all levels, including helping to identify the pool of international consultants, from which the aforementioned three consultants were chosen to fill up the skills gap amongst the members of the Commission in the areas of financial management and education economy (Chilundo, 2006).

Moreover, Chilundo (2006, p.22) came with a conclusion that to channel money. Thanks to PEES, it had been possible to build new educational infrastructures for higher education in Mozambique. The most important reforms, however, had been in the new higher education legislation, in the: (1) Promotion of quality assurance and accreditation mechanisms, (2) Introduction of credit accumulation and transfer (underway), (3) Expansion of equity in access to higher education – through

geographical expansion of higher education to all provinces, and (4) Introduction of a pilot provincial scholarship program that has led to a wider National Scholarship Program in the making.

Meanwhile, Doherty and Cooper (2007, p.15) from University of Auckland, New Zealand, did their research about capacity-building for sustainable e-learning development Learning Technology Unit (LTU). Since being appointed as Director of the Learning Technology Unit (LTU) in 2004, the LTU has operated 3 project rounds: October 04 – October 05; October 05 – October 06; October 06 – October 07. The number of projects accepted by the LTU across the three project rounds is as follows: 15 Projects accepted from 17 submissions in the October 04 project round; 18 projects accepted from 21 submissions in the October 05 round; and 11 projects accepted from 11 submissions in the October 06 round.

Also, Doherty and Cooper (2007, p.18) stated that the unsayable truths at the heart of eLearning point were of three key institutional issues. Firstly, there had to be a clear vision for eLearning within institutes of Higher Education and this requires giving serious consideration to the question whether the goal was improved learning outcomes or a more flexible approach to teaching and learning. Secondly, the institution must have a picture of the current state of processes that support eLearning (Marshall, 2006b). These processes needed to be considered in terms of the idea that "the ability of an institution to be effective in a particular area of work is dependent on their capability to engage in high quality processes that are reproducible and able to be sustained and built upon" (Marshall, 2006a). And thirdly, the focus on processes was inextricably linked with the question of organizational capacity for eLearning where capacity is understood in terms of "the staff complement and resources, as well as its structure, management system and linkages with other organizations" (Horton, 2002, p.4).

Additionally, Doherty and Cooper (2007, p.77) made some suggestions on using ICT in capacity-building by saying, "We would suggest that if we focus on vision, quality and capacity then we will be forced to ask penetrating questions that will reveal some unsayable truths to do with the quality of eLearning within higher education. In short, the problem with eLearning is not a lack of theory or a lack of potential technologies. The real problem is that universities do not have sufficient

eLearning capacity to engage in high quality replicable and sustainable eLearning processes."

Meanwhile, Martin (2007, p.12) when speaking out about capacity-building for the knowledge of quality assurance management, put forwards to an idea that HE systems are undergoing major transformations, and many struggle to increase access in a context of scarce public resources. This has led to rapidly developing private provision, new sets of cross-border providers, and growing levels of student mobility. In turn, these forces challenge the system for regulation and recognition of credentials. It is estimated that, at present, some 70 countries have created External Quality Assurance (EQA) system. In 2006, International Institute for Educational

Planning, UNESCO (IIEP) developed a website as follows:

a training course (five modules) for decision makers and managers in charge of quality assurance in ministries of education, national buffer organizations for HE, and/or agencies for quality assurance.

In a nutshell, the above-motioned things, namely organization development, Total Quality Management (TQM), budget development, standard-based curriculum and instruction, ICT and capacity-building in change, reveal needy factors, which help to enhance the affective change management in educational aspects worldwide.

Change Management in Education for Sustainable Development

Getting into the matter of education for sustainable development (ESD), one can know that UNESCO (2005) details the origins of SED as follows: Education for sustainable development (ESD) has its roots in the history of two distinct areas of interest of the United Nations – education and sustainable development.

In 1948, the Declaration of Human Rights stated, "Everyone has the right to education." This right to an education was reinforced by the Convention on the Right of the Child (CRC) in 1989, which declares that primary education should be compulsory and available free to all. The CRC further states that children may not be excluded from any right, including education, based on race, sex, disability, economic status.

In 1990, the Jomtine Declaration on Education for All (EFA) declared, "Basic education should be provided to all children, youth and adults. To this end, basic education services of quality should be expanded and consistent measures must be taken to reduce disparities."(World Declaration Education for All, 1990, Article II-Shaping the Vision). The Declaration also points out gender disparity and how to address it. "The most urgent priority is to ensure access to, and improve the quality of, education for girls and women, and to remove every obstacle that hampers their active participation. All gender stereotyping in education should be eliminated." (World Declaration Education for All, 1990, Article III – Universalizing access and promoting equity).

Furthermore, international development targets (IDT) have been developed related to quality education. The Dakar Framework for Action lists six important educational goals. The sixth is "Improving all aspects of the quality of education so that recognized and measurable learning outcomes are achieved, especially, in literacy, innumeracy and essential life skills." The Millennium Development Goals (MDGs) also address education. MDG 2 is to "Achieve universal primary education." The corresponding IDT states "Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling." MDG 3 is to "Promote gender equality and empower women." The corresponding IDT states, "Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015" (United Nations Millennium Project, 2005). Furthermore, the UNGA declared 2003 to 2012 to be the United Nations Decade of Literacy (UNLD). Obviously, the importance of education for all has been addressed by the United Nations repeatedly over its entire history.

Sustainable development has its roots in United Nations history in the environmental movement. Much of today's work in sustainable development can be traced back for several decades. Many milestones have marked the journey towards sustainable development including the landmark 1972 United Nations Conference on Human Environment in Stockholm, which led to the establishing of many environmental protection agencies and the United Nations Environment Program (UNEP). Nations realized that the widespread growth of environmental degradation needed international attention and collaboration rather than national approaches and

solutions. While some attention was attached to the social and economic issues inherent in these environmental issues the focus was largely on addressing the ecological impact of ever increasing unrestricted development. Within 10 years of Stockholm the world was realizing that treating environmental concerns in isolation of development needs, such as grinding poverty for a large segment of humanity, was not going to serve either the environment or people. Hence, by the mid 1980's the United Nations launched a search for a larger strategy to address both the needs of society and the environment. In 1987 with Our Common Future, the Report of the Brundtland Commission, sustainable development was endorsed as an overarching framework or construct for future development policy at all levels of government.

From the time sustainable development was first endorsed in 1987, the United Nations General Assembly explored the parallel concept of education to support sustainable development. From 1987 to 1992, the concept of sustainable development matured as committees discussed, negotiated, and wrote the 40 chapters of Agenda 21. Thoughts concerning education and sustainability were initially captured in Chapter 36 of Agenda 21, "Promoting Education, Public Awareness, and Training." In addition, education as an enabling or implementation strategy was embedded in each of the 40 chapters of Agenda 21 and each of the negotiated Conventions arising from the Earth Summit. As well, every one of the nine major United Nations Conferences of the 1990s that further addressed and refined sustainability issues, identified education in its broadest terms as crucial in implementing the Conference action strategies.

The Johannesburg World Summit on Sustainable Development (WSSD) in 2002, helped in deepening the commitments towards sustainable development at all levels, from the local to the global. The Summit proposed the Decade of Education for Sustainable Development (DESD), signaling that education and learning lie at the heart of approaches to sustainable development.

Then there contains four major thrusts of Education for Sustainable Development as displayed below: (1) Improving access to quality basic education, in this sense, the first priority of ESD is improving the access to and quality of basic education. The content and years of basic education differ greatly around the world. In some countries, for instance, primary school is considered basic education. In others eight or 12 years is mandatory. Access to basic education remains a problem for many,

especially girls and illiterate adults. Over 100 million primary-school children have never attended school and about 800 million adults are illiterate (EFA Global Monitoring Report, 2004), (2) Reorienting existing education programs, from this issue, more basic education as it is currently taught will not create more sustainable societies. The conundrum remains, that it is educated nations that leave the deepest ecological footprints, using large amounts of resources and energy to support their lifestyles. Creating a more sustainable future will not occur simply by increasing the amount of education; instead, it is an issue of content and relevance. Questioning, rethinking, and revising education from pre-school through university to include more principles, knowledge, skills, perspectives and values related to sustainability in each of the three realms – environment, society, and economy – is important to our current and future societies. This should be done in a holistic and interdisciplinary context, engaging society at large, but carried out by individual nations in a locally relevant and culturally appropriate manner, (3) Developing public understanding and awareness of sustainability, with this question, to make progress towards more sustainable societies requires a population that is aware of the goals of sustainability and has the knowledge and the skills to contribute towards those goals.

A knowledgeable citizenry supports a more sustainable society in several ways. First, citizens through their daily behaviors support government policy related to resource management and civic conduct. Second, citizens can support measures related to sustainable development and politicians who introduce and support enlightened legislation. Third, citizens can become knowledgeable consumers who purchase goods with low lifecycle impacts and who use their purchasing power to support corporate social and environmental responsibility and sustainable business practices. An informed citizenry can help communities and governments enact sustainability measures and move towards more sustainable societies, and (4) Providing training, in this value, all sectors – including business, industry, higher education, governments, non-governmental organizations and community organizations – should be encouraged to train their leaders in sustainability issues such as environmental management, equity policies, etc., and to provide training to their workers in sustainable practices. The development of specialized training programs to ensure that all sectors of the workforce have the knowledge and skills necessary to

perform their work in a sustainable manner is a critical component of education for sustainable development. Currently the larger corporations, especially manufacturers, are reaping huge financial benefits from training measures introduced to address energy, water and waste management issues. Addressing other environmental, social and human resources issues are proving to be rewarding (UNESCO, 2005).

Besides, there reveals certain key characteristics of education for sustainable development one might guess that no universal models of ESD exist. While there is overall agreement on principles of sustainability and supporting concepts, there will be nuanced differences according to local contexts, priorities, and approaches. Each country has to define its own sustainability and education priorities and actions. The goals, emphases and processes must, therefore, be locally defined to meet the local environmental, social and economic conditions in culturally appropriate ways. Education for sustainable development is equally relevant and important for both developed and developing countries. ESD has essential characteristics that can be implemented in many culturally appropriate forms. Education for sustainable development, (1) is based on the principles and values that underlie sustainable development, (2) deals with the well being of all three realms of sustainability – environment, society and economy, (3) promotes life-long learning, (4) is locally relevant and culturally appropriate, (5) is based on local needs, perceptions and conditions, but acknowledges that fulfilling local needs often has international effects and consequences, (6) engages formal, non-formal and informal education, (7) accommodates the evolving nature of the concept of sustainability, (8) addresses content, taking into account context, global issues and local priorities, (9) builds civil capacity for community-based decision-making, social tolerance, environmental stewardship, adaptable workforce and quality of life, (10) is interdisciplinary. No one discipline can claim ESD for its own, but all disciplines can contribute to ESD, and (11) uses a variety of pedagogical techniques that promote participatory learning and higher-order thinking skills (UNESCO, 2005).

Detailing the aspects of ESD, first of all, from the belief of "environment-based education," SEER (2000, p.2) (State Environmental Education Training Foundation, U.S.A) wrote down the definitions and meanings of environment-based education or environmental education as follows: First, environmental education was the study of the relationships and interactions between natural and human systems. It was interdisciplinary, combining aspects of natural sciences such as ecology and geography with aspects of social sciences such as economics, law, and public health. It was hands-on, student-centered, inquiry-driven, and relevant to students' everyday lives, the three important key reasons for teaching this issue at the learning community. Secondly, it had a positive impact on student achievement in core subjects. When integrated into the core curricula or used as an integrating theme across the curriculum, environmental education has a measurably positive impact not only on student achievement in science but also in reading, math, and social studies. Moreover, outdoor activities increased student engagement and interest in science and in all core subjects. It helped improve the health of children. Field experiences and related programs as part of the regular school curriculum contribute to healthy lifestyles through outdoor recreation and sound nutrition. Getting students outdoors to exercise, play and experience their natural world is an important tool in the battle to prevent obesity, alleviate attention deficit disorder and address other related health problems (SEER, 2000). And thirdly, it provided critical tools for a 21st century workforce. We would be passing on complicated environmental problems to future generations. We had to give the next generation a solid understanding of these problems and the basic tools to overcome them and make informed choices in their own lives. Business leaders also increasingly believe that an environmentally literate workforce is critical to their long –term success. Finally, environmental education helped prepare students for real-world challenges (SEER, 2000).

In its ending, SEER (2000, p.3) summaried that several studies had found that, when environmental education is incorporated into the curriculum or used as an integrating context for learning, students perform better on standardized tests in reading, math, writing, social studies, and science. Other studies have documented that environmental education achieves the following: improves critical thinking skills; motivates students to become more engaged in the classroom and achieve more

strongly in their schoolwork; reduces discipline and classroom management problems; encourages civic engagement and environmental stewardship; and better problem-solving skills. The following were the studies so far:

1. National Environmental Education Training Foundation (NEETF) in 2000 did a research on "Environment-based education: Creating high performance schools and students."

2. Ernst, Julie Athman and Monroe, Martha, in 2004 did a research about "The effect of environment-based education on students' critical thinking skills and disposition toward critical thinking."

3. Falco, Edward H. also in 2004, carried out a research about "Environment-based education: Improving attitudes and academics for adolescents" in evaluation report for South Carolina Department of Education.

NAAEE and NEETF (2001, p.3) put down the definition of EE (environmental education) that environment-based education – using the environment as a tool for achieving broader educational goals – has the potential to dramatically increase the overall amount of time teacher spend on the environment each school year. Environment-based education is consistent with the EE goals of deeper understanding, investigation, and decision-making skills. The unquenchable enthusiasm that students bring to environmental subjects will only expand with further education and lead them to become effective environmental stewards, regardless of their place on the political spectrum. They also report that environmental education is a process that aims to develop an environmentally literate citizenry that can compete in our global economy; has the skills, knowledge, and inclinations to make well – informed choices; and exercises the rights and responsibilities of members of a community.

Furthermore, NAAEE and NEETF (2001, p.6) made some suggestions for lifelong learning after-school programming involves more than just keeping young people off the streets. It provides opportunities for parent involvement, mentoring, community service, service learning, and independent, student – centered learning. The environment offers opportunities to strengthen after-school programming by involving a wide range of non – school, community-based resources that have enormous expertise and educational re sources but that may be under-engaged in public education. These include parks and other public lands, nature centers,

museums, zoos, aquariums and botanical gardens, among many others. Education may lie at the heart of their missions, but they –and the schools – often lack the resources to overcome obstacles such as transportation costs. With a requirement for community involvement and flexible use of funding, the 21st Century Community Learning Centers are facilitation g these connections.

Moreover, NAAEE and NEETF (2001, p.15) concluded that environment-based education (EBE) helped teachers meet standards across multiple disciplines. Its emphasis on higher order thinking increased academic achievement in language arts, math, science, social studies, and the arts. Its focus on the immediate environment and the local community makes learning relevant, interesting, and compelling. Students involved in EBE develop advanced lifelong learning skills, stronger workplace and community service and leadership skills, and develop confidence and higher self-esteem. Environment-based education enabled teachers to produce environmentally literate young adults who are prepared to take their place in the complex and challenging society of the 21st century, and who can compete in a global economy with the skills, knowledge, and inclinations to make well – informed choices and exercise the rights and responsibilities of members of a community. Broader adoption of environment-based education can help produce high-performance lifelong learners , effective future workers and problem solvers, thoughtful community leaders and participants, and people who care about the people, creatures, and places around them

Archie, et al. (2003, p.4) in their article, unveiled that "Environmental Education" (EE) was often lauded by educators as an ideal way to integrate classroom curricula, stimulate the academic and social growth of young people, and promote the conservation of the natural environment. And studying EE brings with it some following benefits: (1) Studying EE Creates Enthusiastic Students, Innovative Teacher-Leaders.: In a world where it is increasingly challenging to get students interested in classroom lessons, EE offers an enriching way for both students and teachers to connect their appreciation of the natural world to academics, (2) EE Helps Build Critical Thinking, and Relationship Skills: Environment-based education emphasizes specific critical thinking skills central to "good science"-questioning, investigating, forming hypotheses, interpreting data, analyzing, developing conclusions, and solving problems, (3) EE Instructional Strategies Help Foster

Leadership Qualities: Environmental education emphasizes cooperative learning (i.e., working in teams or with partners), critical thinking and discussion, hands-on activities, and a focus on action strategies with real-world applications. As a result, students who study EE develop and practice the following leadership skills: Working in teams, Listening to and accepting diverse opinions, Solving real-world problems, Taking the long-term view, Promoting actions that serve the larger good, Connecting with the community, and Making a difference in the world, (4) EE Makes Other School Subjects Rich and Relevant: Using outdoor settings like wetlands, schoolyard habitats, or even national parks can infuse a sense of richness and relevance into a traditional school curriculum.

Archie, et al. (2003, p.7) went on with (5) EE Teaches Students to be Real-World Problem-Solvers skills: Environment-based education employs these key strategies for teaching creative and successful problem solving: introducing inquiry-based instructional activities with real-world applications, encouraging critical thinking about these activities, allowing individual choice about and engagement in the particular problem to be solved, helping students make connections between disciplines, and fostering independent and cooperative group learning. For example, students at the Zoo School spend ten days each trimester investigating an independent study topic of their choice. Projects include anything from designing a Web page for the Jane Goodall Institute's Roots and Shoots program to teaching local fourth graders about ecosystems, (6) EE Helps Students Become Self-Directed Learners: Sometimes traditional instruction, such as lecturing, is the most practical approach to covering broad content. But when students learn through a problem- or project-based approach-a key strategy in environment-based education-they gain a better understanding of what they learn, they retain it longer, and they take charge of their own learning-key skills for success in our data-driven, rapidly changing world, (7) EE Gets Apathetic Students Excited About Learning: Even bright students can be uninterested in learning-especially if they think that what they're learning is not relevant to their everyday lives. But tap into their interests-for example, as environmental education does, with its emphasis on the living world and hands-on activities-and students suddenly get excited.

Then, Archie, et al. (2003, p.9) directly came to (8) EE Schools Demonstrate Better Academic Performance across the Curriculum: Schools that adopt environmental education as the central focus of their academic programs frequently demonstrate the following results: Reading, science, social studies, and mathematics scores improve, Students develop the ability to transfer their knowledge from familiar to unfamiliar contexts, Students "learn to do science" rather than "just learn about science," Classroom discipline problems decline, and All students have the opportunity to learn at a higher level, (9) EE Is a Perfect Match for Community Service Learning Requirements: Many schools require students, especially middle and high school students, to participate in service learning. Environmental projects are a leading choice for service learning nationwide and (10) EE Offers All Students Equal Chances for Academic Success: Environmental educators often find that students who fail in traditional school settings can succeed when the natural outdoor environment becomes the students' classroom.

Second, within the value of "*entrepreneurship-based education,*" Bernardo (2002, p.5) introduced his open market transnational education of seven models and activities. He explained that the models and activities are specifically designed to capitalize on the opportunities afforded by the changing demands of a globalized world economy: (1) Distance Education, (2) Locally Supported Distance Education, (3) Twinning Programs, (4) Articulation Programs, (5) Branch Program, (6) Franchising Arrangements and (7) Internationalizing Curricula: Quality Assurance and Standards.

Also, Von Kopp (2002, p.7) showed out his points that "economization" as an aspect of "liberalization" was complemented by transforming former non-corporate organizations into corporations either by changing their character via introducing corporate management models and other mixed forms of corporatization, or by outsourcing or selling them. Originally this process started in general service sectors of public administration but extended also to the field of education and research. The word "corporatization" thus sometimes is used in its double meaning of introducing corporate management and accountancy principles into public educational and research institutions and also in respect to setting up (or re-founding existing) institutions within a new legal framework – presently mainly universities – which, for example, in Germany are called Körperschafts- " or "Stiftungsuniversitäten," in Japan

"Independent Administrative institutions." In Germany and in Japan, for example, there are plans to incorporate representatives from the industry into the boards of those universities, which is another measure to bring them "nearer to the market." These trends change the character of public institutions substantially and provide them increasingly with a character of private enterprises and as such they have moved into a status, in which they can become much more vulnerable against external, also unwanted or not foreseen, liberalization pressure in the sense of GATS (General Agreements on Trade Services) principles, no matter what national exemptions in former agreements say, because these formulations do not relate to the new form of "corporate" enterprises. Another aspect of this kind of "privatization" is to be seen in the growth of the private schooling sector.

Adding to this, Von Kopp (2002, p.22) cited that on average, 13.5% of primary and secondary students [in OECD countries] are now enrolled in private education institutions, 10.6% in schools that are still predominantly government financed but privately managed. In Belgium, 58% of primary and secondary students attend privately managed but government-funded schools, while in the Netherlands this ratio rises to 76%. In Australia, Korea and Spain more than 20% of students attend private schools.

At the same belief, Walker (2004, p.813) also expressed that technology was allowing new competitors to bypass the traditional barriers to entering the HE marketplace such as large capital costs and accreditation. As a result, HE is evolving from a loosely federated system of colleges and universities serving traditional students from local communities to a GLOBAL knowledge and learning industry driven by strong market forces. In the issues of change: economic perspectives, in today's environment, economic theory and concepts are increasingly impacting educational providers, Walker (2004, p.815) poses (1) Market differences (for- profit vs non-profit) with resulting information differences (perfect information vs. asymmetric information), (2) The huge impact of "customer-input technology" (e.g. Students are INPUT, a component of the quality process, and an OUTPUT), and (3) Wealth differences impact HE providers differently than the wealth differences of for-profit enterprises, including (i) Change, from the economic perspectives, is understood as response to MARKET conditions., and (ii) The economic literature

suggests that change is not really the focal area of greatest interest; rather, the meaning and application of economic concepts and analysis is under debate.

With his experiences, Walker (2004, p.221) came to a conclusion that the changes facing HE providers were transformational in scope and impacts every level of the organization. HE providers themselves, of course, worked towards implementing and managing change. Change in HE was typically characterized by collegiality, extended dialogue, consensus, an emphasis on educative excellence, and respect for academic tradition. Also, change was EVOLUTIONARY, deliberate, and incremental rather than revolutionary and quantum in nature. The complex governance structure, diverse constituencies, and cultures of HE contributed to a pace of change that is considerably slower that what is typical in the private sector.

In Taiwan HE model, Lin (2007, p.4) strongly said that marketization in Taiwan's national universities were of (1) Offering courses that can appeal to emerging market needs, (2) Establishing more research projects and collaboration with the industrial and business sectors, (3) Strengthening alumni associations to raise, (4) Renting out facilities or amenities for profit- making purposes, and (5) Increasing the tuition and fees.

In Cornell University Model, U.S.A., Golding (2007, p.3) put the university setting into a "Higher Education Business Model" with (1) Private sector refocusing on core business, (2) Outsourced, off-shored, downsized to increase stockholder value, (3) Universities have stakeholders not stockholders, (4) Tripartite mission – teaching, research and service, (5) Great research universities are like cities with all their complexities and challenges and (6) Great universities expand as knowledge, technologies and the needs of their communities change. In the 21st Century Business Model Characteristics of Cornell University Model, Golding (2007), summaries the key points, including: (1) administrations that are nimble, flexible, adaptive, (2) Deliver highest quality services, at the most efficient cost, in the timeliest manner, (3) Universities have adapted historically – investment management practices, financial services, technology, (4) Articulate a clear vision, mission and values, (5) Clearly defined roles and responsibilities, (6) Communicate a coherent institutional stewardship philosophy, (7) Promote an environment of innovation and creativity, (8) Values people and rewards them, (9) Promotes personal development, (10) Values

a culture that have measurable goals and objectives – outcome oriented, (11) Promotes intra-campus cooperation and teamwork and (12) Rewards execution. And the roles of the university are (1) Cornell has a unique stature in American higher education, (2) Private university with public mission, (3) Land grant mission, and (4) Very different. Institutional DNA (Deoxyribonucleic acid) structure.

Hung Phong and Phuong Hoa (2007, p.5) from Vietnamese values said that structure and model of the economic system was determined by politic system. At the same time, the economy had a great effect on the politics and other components. It influenced the social environment and then the education system indirectly. On the other hand, the economic system did directly influence on the education. Economy literally was the investor and customer of the education. Moreover, within the economic environment, there were transactions of purchasing and using "education products." Saying about poor quality of education we meant the fact that graduates were unable to meet the requirements and demands of the economy. There were many examples of direct and indirect influences of the economy on the education. For instance, transforming from the planned economy to market economy has changed social perception (i.e. measurement system of evaluation), relationships between students and teachers. To the Vietnamese, these changes have been recognized noticeably for the last two decades. In the past, knowledge was thought to be the most valuable asset of the society and the government had the responsibility to sponsor the education. Nowadays, it is also an asset and a means for an individual to earn his living. Hence, apart from government supports, people have to contribute and spend their own money to pay for education.

In the same context, Rong Liu (2008, p.78) expressed his ideas about HE and economy-oriented education that the marketisation of higher education has also affected the governance of universities and brought changes in state–education relationships. The internal belief was that once a market culture had been created in the university sector, the role of state would be changed from the ''state control model'' to the ''state supervision model'' (Neave and Van Vught, 1994). This new model has changed the role of the state from carrying out most of the work of education itself to determining where the work will be done and by whom (Dale, 1997). In the university sector, ''centralized decentralization'' is therefore becoming

common, especially when the governance model of universities is oriented towards new management strategies along the lines of new managerialism (Mok, 2003). However, despite the fact that decentralization has potential benefits, Brown (1993) cautions against making inferences concerning the effects of decentralization in education on the basis of experiences in industry. Additionally, Rong Liu (2008) also states that thee modes of collaboration were commonly used in the school to develop partnerships with privately run education agencies, and industries. First, the School was directly involved in running professional development programs, while the privately run agencies helped to market them. Second, the School franchised privately run agencies to run the programs. Third, industry–university or government agencies–university collaboration was based on the needs of both industries and government agencies to develop and retain a skilled and competent workforce.

Then, Rong Liu (2008, p.79), upon addressing about market-driven program development in HE, assumed that marketing the professional development programs was the second important step in the process of market-driven program development and management. Marketing, which hardly existed in traditional higher education, became an important tool in adult and continuing education to make the public aware of the existence of the institution and its various programs. Thus, different channels to marketing programs were employed. To facilitate the different requirements of the different businesses, the school developed various cooperative modes with private businesses to offer training programs and short courses. Marketing approaches adopted from the business world gained a more important role in promoting the programs directly to potential learners, and various marketing communication tools became major techniques to implement the marketing strategies. The school tended to encourage all staff to establish long-term relationships with learners. It created a web page and regularly updated the program offerings, and set up the learners' club in order to build their loyalty. It considered word-of-mouth as one of the key factors to enhance the reputation of the programs. Thus, relationship marketing was regarded as a very important tactic to promote the programs.

And as addressing "learners as customers," Rong Liu (2008, p.80) pointed out that adult and continuing education had entered into the ''Customer Century and it is going through one of its biggest challenges: the traditional sellers' market has been shifted into the buyers' market. The increased ''consumer sovereignty'' (Meadmore, 1998) has shifted the power balance between the university and its clients. In the field of adult and continuing education, it is even more visible that a student/client-centered rather than provider-centered approach has been adopted to facilitate this change. And Rong Liu (2008) comes to a conclusion that the market thus plays a less dominant role in the Chinese context than it does in Western neo-liberal influenced systems. This case study therefore helps illuminate how local conditions may be decisive in mediating global policy trends, and in shaping the nature and quality of educational change. It also helps to improve our theoretical understanding of the fact that the globalization of neo-liberal policies relating to decentralization and marketisation does not necessarily imply or lead to homogenization in policy or practice.

Third, from the spirit of *"community-based education,"* Doeden (2001, p.3), with her case study of many site visits at the rural areas in Nebraska, U.S.A, stated that community-based education fostered youth leadership and development, engaging students in community planning, economic and cultural development. She adds that the young people are collaborating with elders, advocacy groups, teachers, farmers/ ranchers, bankers/ civic leaders, and other residents in joint strategies for community development.

Grauwe (2007, p.11) when mentioning about *decentralization in education*, said that "At the school level, the development of a relationship between the school and its community is crucial as it turns the community into a genuine force of accountability and support." He added that this relation was true for schools which receive little support from national authorities when the state is weak or if they are situated in remote areas. Grauwe (2007, p.11) added that the obstacles to building up of the relationship between schools and communities were partly STRUCTURAL and CULTURAL. He suggested that all PARENTS should be well informed of their rights and there should be an EXTERNAL mechanism to control the functioning of community structure such as PARENT-TEACHER Association.

Also, Ndoye (2007, p.13) addressing about ESD, in the sample of African context, said that "Schools and universities need to maintain interactive relationships with their economic and social environments, in order to link skills development with the search for solutions to the problems, both within communities and in the country in general." Higher education and research also have a decisive contribution to make through producing and disseminating relevant knowledge to the areas under consideration.

At the same matter, Sinlarat (2008, p.3) when presenting a new model to promote sustainable development in Thailand, said that HE was considered to be a significant tool to develop the country and the communities because it created knowledge for the country development, produces people to develop the country and helps the country to solve various problems. She drew out a Creative and Productive Higher Education Model with 4 factors: Critical Mind, Creative Mind, Productive Mind and Responsible Mind, which will be the foundations to the curriculum design related to respectively: Criticality-based instruction, Creativity-based instruction, Productivity-based instruction and responsibility-based instruction (Sinlarat, 2008, p.5). She adds new ideas to UNESCO's 4 main pillars of learning: Learning to learn critically, Learning to do creatively, Learning to work together constructively, and Learning to be wisely.

Meanwhile, when addressing communities and Sustainable Education and research, Waring (2009, p.6) put down its definition: "Communities were different from each other had different cultures, had different histories, different power dynamics, different ways of working with, and uses for their natural environments. And they were EXPERTS on all this information. Field methods evolved to reflect this reality, and to change the dynamic of the research."

Fourth, within the value of "*politics-related education*," Khati (2000, p.4) expressed that higher educational organization, established, maintained and aided by the government in socio-economically and educationally least developed country, had come under the direct scrutiny and supervision of government. It was often argued that universities, created by Acts passed by the legislature and supported by government funds, are often financially and politically controlled by the government. Besides, appointing the chief executive of the university, the government controls the

administrative and decision-making power of the university. There are some views that support this practice of political control over the administrative and decision-making affairs of the institutions of higher education. These views are based on the argument that the organizations with some type of political control can progress more easily toward the achievement of their goals (Livingstone, 1974). One of the goals of university officials is the establishment of a positive relationship between the university and the outside political world. This relationship, as Livingstone argued, determines the degree of political control over the universities. He attached political influence in the decision-making of the university into two sources: political figures and the government. The former consisting of elected officials, educated politicians and boards of education, and the latter containing central and local government bodies. The former has the power and influence to set institutional goals, policies, and overall guidelines; whereas the latter influences the means and resources of the institutions (Livingstone, 1974; Khati, 2000)

And Khati (2000, p.9) added that politicians and bureaucrats in the government make policies and laws with regard to the formation and the proper functioning of the university. The role of politicians in making university policy decisions had been described by Baldrige, 1971, and Khati, 2000. The author also stated that different interest groups, within the university organization, working as faculty, students, and the administrative staff, were often divided among themselves by their political beliefs and the formal or informal affiliations with the respective political parties. In many developing countries, higher education institutions became a field where politicians play their games of dispute. Conflicting political parties found it easy to mobilize their own groups of students or teachers at a university in order to affect their political objectives. In playing these political games at the university, they tried to influence the intellectual sector of the country. It has further been argued that power by the politicians over the domain of education means power over the minds, talents, and opinions of the people, and that this is far more significant than power over their purse, their commerce, or their bodies (MacKinnon, 1965; Khati, 2000). Therefore, there is no other area of operation, which MacKinnon considers to be of great importance for the politicians to exercise their influence, than education.

Indeed, there are opposing views regarding political control over and influence in the decision-making at the university. The argument that political influence in the decision-making at the university differs from country to country (Karol and Ginsburg, 1980; Massialas, 1969), and from time to time (Kogan, 1984; Rudolph and Rudolph, 1972), is not so unconvincing. The direct regulatory control over higher education institutions by the government was seen by Gore (1982) to be justifiable. This is one of the ways how larger national society influences the organization like a university. But, depending on the politics of the country, the mechanisms to control and influence such organizations differ from place to place and time to time (Kogan, 1984).

In a conclusion, Khati (2000, p.16) on the university decision-making to be something necessary if the government thinks the decisions and the working procedures of the university are irreparably damaging, or if the university shows a disregard to the proper norms of its own. This could be either, for example, in the decisions regarding handling of university finances, or the appointment and the promotion of faculty, or the admission of students. Thus, the university organization works more like a bureaucratic organization than a political one, where central administrative authority is more powerful and influential. Therefore, even if there is a role of politics in the decision-making at the university, this role is due to the very nature of the university itself, which is tightly coupled bureaucratically inside and loosely coupled to the politics externally (Bergquist, 1992). All this is because, often times, university creates such an environment by itself where it becomes convenient or even necessary for outside politics to influence, control, or intervene in university decisions. Therefore, the university, that teaches every generation of students how to address the challenges in building the nation, is now in a position to learn how best it could perform its job in shaping the builder of a nation.

In conclusion, ultimately, as Jenkins (2004, p.7) and her colleagues pointed out, the view had tot be reaffirmed that "education be regarded as a collective act, with individual schools existing as part of a wider social and political community."

In this sense, Lewis and Schnupp-Harris (2006, p.12) showed out the relationship between education and politics, including that education's role in a democracy was to train citizens who were active and informed voters and who understood that free exercise of religion is guaranteed by the constitution, with tolerance and respect for diversity critical to that guarantee. And they pointed out the opposite ideas of this issue that while most would agree that education is well-positioned to positively shape the intellects and the ethics of the youth-and consequently strengthen democracy itself, the ideals of education have been lost in the noisy political battles raging over who should be allowed to influence education. In addition, raising the question "how much is too much" the influence of politics on education, Lewis and Schnupp-Harris (2006) put down the answer that as society becomes ever more diverse and complex, it is increasingly essential that the youth are educated to be active and informed voters who understand that tolerance and respect for diversity are key to a successful democracy. And when addressing this matter, Lewis and Schnupp-Harris (2006) link this relationship towards the American president's ideas with politics and education, containing that in spite of the fracturing of the movement, there has been a tremendous influence on the American president who has taken their issues as his and who has begun to shape the landscape through Executive Order and political influence. New Labour in Britain has been involved in some of the same issues. This is the antithesis.

What's more, Lewis and Schnupp-Harris (2006, p.17) revealed the British experiences in teaching "political issues" at schools by the Council of Europe, in which there are (1) Teach tolerance and social justice in community schools, while focusing on moral education required for citizens in democratic societies., and (2) Require that faith-based institutions teach tolerance and social justice and all curricular areas such as science.

Hung Phong and Phuong Hoa (2007, p.4) gave out their ideas about politics affecting Vietnamese education system by saying that politics was a significant system which was one of three main systems that created the social environment (psychology, social consciousness, regulation, economy, culture and so on). Politics played a crucial role in establishing "format" and main characteristics of an education system. Apart from its direct influence on the process of setting objectives, positioning, designing an

education system model (at schools and universities), educational management system and its subsidiaries, politics also has impact on the economy and the culture, creating a social environment in which the education system is affected. Without exaggeration, politics is a crucial factor that creates the model of the education system. Changes in politics may lead to changes in education (as well as the economy and socio-culture).

Along with this context, Cotte, et al. (2008, p.2), since citing the American – elected Barack Obama's ideas about education, wrote down their thinking as follows:

> …So because the GOP (Grand Old Party- U.S Republican Party) will do anything and everything to maintain power and enact discriminatory policies that benefit only the GOP and their monied benefactors, they discourage Federal dollars for higher education and thus we effectively have a brain drain in the US. Foreign students stop coming here to be educated by one of the greatest gifts the US has given the world. American students are subtly discouraged from the sciences because they realize that our government leaders would edit and scrub scientific findings to suit ideological positions, that this GOP administration and previous GOP administrations have continually under funded and undercut Federal dollars for sciences in all sectors except for those that might directly benefit their precious interests versus funding for the betterment of the US and world as a whole
>
> (Cotte, et al., 2008, p.2)

And Cotte, et al. (2008, p.3) went on saying, "In fact, I would argue that our education is dropping the ball on things like civics, teaching students to understand how our democracy works, that as citizens they need to vote, what the Constitution says and what it means. Maybe then we'd have more than a pittance actually participating in our elections, legislation and governance."

And fifth, from the viewpoints of "*culture-based education*," Smart, et al. (1997), and Walker (2004, p. 813) examined the influence of institutional culture, mission, preferred decision-making approaches and collective bargaining status on institutional effectiveness in two-year colleges. They found that institutions violated their institutional culture during the change process experienced difficulty.

Accordingly, they recommended that campuses conduct audits of their institutional cultures before engaging in the change process.

Parallel with this, Sonn, et al. (2000, p.3) from Edith Cowan University and Curtin University of Technology, Australia, joined their efforts to create a curriculum about indigenous and cross-cultural issues at their workplaces, which stemmed from the needs of psychology curricula. Reactions to the task of incorporating and implementing Indigenous and cross-cultural studies into undergraduate psychology curricula have been varied, and the process of incorporating concerns into psychology curricula has been characterized by trials and triumphs, difficulties and successes. They describe their experiences so far in developing and delivering a unit that attempts to deal with both Indigenous psychology and cross-cultural psychology, highlighting the history, guiding framework, content of the unit and evaluation plans and strategies. After three years of teaching a unit of Indigenous and cross-cultural psychology, they continue to experience their fair share of ups and downs. While it is tempting to focus solely on the successes (and there have been many), we intend to share our experience of the difficulties and questions that developing and delivering the unit have posed. Indeed, it has been our confrontation by these questions that has fuelled the revision and reworking of the unit, and to a large extent, their own development as facilitators in this process.

In addition, Sonn, et al. (2000, p.7) expressed that n other countries similar concerns had stimulated efforts to incorporate psychological knowledge into programs to educate about multiculturalism, anti-racism and social change. In New Zealand, for example, some education programs have been developed that concentrate on developing culturally safe practitioners (Tamasese, and Waldegrave, 1993). Cultural safety means practice that promotes, empowers, and strengthens identities rather than demeans and dilutes them (Ramsden, 1993). The New Zealand models are impressive in that they go beyond teaching generic multicultural skills, and emphasize the importance of self and cultural knowledge in the process of developing culturally safe practitioners. According to Ramsden (1993), teaching generic cross-cultural skills do not require students to examine their own cultural assumptions and this can be damaging. In fact, this has been the predominant model for teaching cross-cultural awareness (Brislin and Yoshida, 1994; Singelis, 1998). Instead, Ramsden (1993, p.8)

promotes a model that teaches students to reflect on their own cultural reality and place in the world and to understand "the poverty cycle and the various histories and socio-political conditions which maintain it." This approach takes the focus away from a superficial understanding of other cultures to a deeper understanding of one's own culture in relation to other cultural groups. In a sense this is akin to Freire's (1970 and 1972) process of consciousness rising for increased cultural sensitivity.

Then, Sonn, et al. (2000, p.8) put downs the objectives to this curriculum as follow: The core objectives for the unit were for students to: (1) be familiar with frameworks for understanding and working with people from different cultural backgrounds; (2) have an understanding of the interplay between social, cultural, and sociopolitical factors, in our own and other people's experiences of psychological reality in different contexts; (3) be sensitive to the attitudes and values of people from differing cultures; and (4) have increased awareness about their own cultural values. These objectives are not exhaustive and will continue to be developed in the future.

And Sonn, et al. (2000, p.9) showed out techniques that a range of teaching and learning processes were used including lectures, seminars, videos, small group discussions and set readings. In line with Ramsden's (1993) ideas, a central feature of the teaching and learning process has been to move beyond generic multicultural skills training to emphasize the importance of self and cultural knowledge in the process of developing culturally sensitive practitioner's ideas. In order to encourage the process of critical reflection, aspects of the learning tasks were designed to provide students with opportunities to examine their own cultural assumptions and biases, and their place in the world.

Hung Phong and Phuong Hoa (2007, p.6) revealed that socio-cultural system was one of the systems that had vital influence on the education. Probably, it is because culture is a soul of the society and the cradle that cultivates the education. It has both direct and indirect (through economy and politics) effect on the education. Two sides should be considered, while talking about culture. One of them is traditional characteristics, which have underwent the test of the time and absorbed deeply into the mind of people as well as the education system. Another side of the culture is new features, which are the results of the development process of the society, and exchange and integration with the world culture. Nowadays, with the strong power of

international integration and globalization, especially influenced by appearance of the Internet and advancement of information technology, people are becoming closer and understand each other more.

Meanwhile, Waring (2009, p.7) mentioned about meanings of CULTURE: the meanings of culture are multiple, whether used to define deference's by ethnicity, age, religion, disabilities or a range of other characteristics. All of us belong to a number of different cultural communities. Culture transmits values, norms and behaviors and other aspects that cannot be overly described or measured, only evidenced through patterns and social regularities.

In sum up, education for sustainable development (ESD), a strong move from UNESCO, has been implemented at any levels of educational sector so far in terms of curricula, school activities, social campaigns and community daily jobs worldwide. It is ESD that is likely to spread out the messages from UNESCO for all learners in a 'lifelong learning' climate.

Contexts of Higher Education Institutions in Vietnam towards Can Tho University Administration Practices of Change Management

Higher education on earth is exercising its functions on the ways to fulfill its educational goals. And all happens in this sphere collected as useful references towards Vietnam (Figure 2, p.136) HE in general and Can Tho University (CTU) as well.

HE Worldwide Affecting Vietnamese Counterpart

Putting higher education in the Asian settings, Chapman (2000, p.33) with "Trends in Educational Administration in Developing Asia" had an introduction that at no time in history in no region of the world had education systems expanded as fast or as effectively as have those in Asia, particularly East Asia, in the past 30 years. Enrollment rates in many countries have now reached nearly 100%. Some East Asian countries lead the world in cross-national comparisons of student achievement. Although the successes of the region have fueled enormous world interest in how such accomplishments were achieved in such a relatively short time, the concern within the region itself is how those successes can be sustained and extended. Indeed, countries are now caught in a convergence of trends that pose a serious challenge to the

continued development of education systems in the region.

Then, while writing about Investment in Education, Chapman (2000, p.34) summarized that the success of education in Asia was due to more than the good economy; it reflects a longstanding public commitment to basic education in many countries of the region. One of the defining differences between the high performing and underperforming Asia economies is their investment in basic education over the past three decades. Early investment in human resource development in general and education in particular is widely credited as a key component in fueling the economic take-off that in turn allowed countries to finance the continued expansion of access (ADB, 1997; Lewin, 1996, and 1998). The decision to invest in basic education was not a foregone conclusion and was not uniform across the region. However, those countries that made the investment are now the economic and education leaders in the region. Investment in HE by countries to (UNESCO 1998; Chapman, 2000, p.36) comes out with the figures, consisting of Bangladesh 7.9%, Bhutan 22.3, China, People's Republic 19.1%, Hong Kong, China 30.0%, India 14.7%, Korea, Republic 6.9%, Lao, People's Democratic Republic 3.9%, Malaysia 16.1%, Nepal 28.1%, Philippines 22.5%, Solomon Islands 13.7%, Sri Lanka 13.7%, Thailand 16.3%, Tonga 7.3%, Vanuatu 3.2%, and Vietnam 16 %.

And in the sphere of educational administration in Asia, again Chapman (2000, p.40) unveiled that education management in virtually all developing countries of Asia follows a pyramid model in which national policy, programs, and logistics are formulated by a central ministry of education organized into a set of divisions, bureaus, and units. This central ministry then works through a network of provincial, regional, and district education offices that largely duplicate the structure of the central Ministry of Education (MOE) and are responsible for ensuring that central policies are communicated and implemented in the schools. Individual schools are managed by headmasters whose authority and responsibility differ by country but usually involve some combination of school management, school-ministry communications, school-community relations, and instructional supervision. The administrative and management issues at the various levels of the pyramid differ, and given the new pressures for decentralization and community participation, are changing dramatically.

Addressing HE in change in Europe, Sporn (2003, p.4) stated that European higher education has been facing fundamental changes. Triggered by a new relationship between the market, the state and the institution, post-secondary education has been moving towards diversification, decentralization and deregulation (Gumport and Sporn 1999; Rhoades and Sporn, 2002a; and Sporn, 1999c). At the same time, principles of public accountability, evaluation, quality control and the use of management instruments have been designed to provide necessary surveillance and supervision. Academic performances in teaching, research and service have become publicly scrutinized. Universities are expected to respond to the demands from the labor market for highly qualified graduates (Clark, 1998a).

The changes within Europe relating to its higher education systems stem from four major areas in society: economy, demography, globalization and telecommunication. Countries need to develop competitive advantage in response to the effects of globalization. The new knowledge-based economy emphasizes modern technology, lifelong learning and graduate training, and calls for flexible institutions and companies. The demand for education comes from people of all age groups and ethnic backgrounds. Modern day research places its emphasis on an interdisciplinary approach to problems, enhanced through industry partnerships. These trends place colleges and universities in a new and uncomfortable situation, necessitating them to reform their structures and processes.

Higher education reform in Europe is an ongoing process. Organizational restructuring in universities is still under way. Particular trends that are driving this process include: privatization, diversity of provision, state supervision and the effects of information technology. In many European countries, private universities already exist or are now being accredited. Additionally, many US-based universities have entered the European market for higher education offering educational goods for market prices. Teaching and research is also being offered by other bodies, such as consultancies, the media or IT companies. As a consequence, competition among institutions, the discussion of the relevance and accountability of academic services, and the need for strategic positioning of traditional public universities in Europe will increase in conclusion; environmental dynamics have changed the face of higher education in Europe. Economic, demographic, technological and global shifts have

triggered higher education reform in Europe. The whole academy is affected – administration, teaching, research. Certain factors can help to ease the problem of adaptation ranging from structural remedies like differentiation to behavioral factors like committed leadership. European higher education is in the process of reform and difficult times are still ahead. The result, hopefully, will be a more competitive system, but one that remains uniquely European, one that combines the values of the market with that of a social institution devoted to individual learning, the preservation of knowledge and the socialization of citizens.

Additionally, Marginson (2003, p.5) addressed about HE reform in Australia as follows: After the mid-1980s Australian higher education shared the common global experience of reform, shaped by neo-liberal approaches to government and American educational models. The most nationally distinctive element was the policy of deferred charges through the HECS (Higher Education Contribution Scheme) in place of the direct fee charging of undergraduates, which modified the socially regressive effects of marketization. National policies implemented in 1987–92 largely achieved their specific objectives, especially the policies concerning the size, structure and economic character of higher education. Participation was substantially expanded, though there was limited success in improving socially defined access. The national system was re-ordered as a competitive market of institutions part responsible for their own funding, in which the competitive economic position of individual institutions (rather than knowledge, or the pastoral formation of students) became the principal raison d'être. At the same time the government used accountability requirements, output definition, annual negotiations over institutional "profiles" and the centralization and standardization of research to shape the internal life of universities. This was not a deregulated market pure and simple, but a government-steered quasi-market. The state used its power to position itself as de facto universal consumer, transferring financial power over the "product" from the universities to itself and the purchasers of private knowledge goods. As in other OECD countries the government increased its steering power while reducing unit fiscal costs.

Floud (2004, p.6) said that the United Kingdom (UK) wanted her HE to integrate into its European HE counterparts with (1) Principles of regulation, (2) University staff as knights, students as queens, (3) Financial regulation, (4) Quality assurance and research, (5) Reward, (6) Subsidiary, and (7) Students.

As for the sense of the meanings of higher education itself, Eckel and King (2006, p.3) jotted down the definition of "higher education" as referring to universities and other tertiary institutions that award degrees and advanced research qualifications. Such programs normally involve at least three years of full-time study and are designed to provide sufficient qualifications for entry to professions with high skill requirements and to research programs. In some countries, universities and other higher education institutions also provide programs that would be classified at a lower level than a degree. Some of the data presented in the chapter relate to tertiary education as a whole in the absence of internationally comparable data relating to higher education. The fact that the concept of higher education is not clear-cut is itself an indication of the complexity of the issues.

OEC, Thailand (2004, p.57) gave out an overall picture of this context. Via the 1999 National Education Act, in order to meet the requirements of section 81 of the 1997Constitution, the first National Education Act was promulgated in August 1999 to serve as the fundamental law for the administration and provision of education and training. For several decades, the Ministry of Education also supervised issues relating to religion and culture in addition to education. The 1999 National Education Act was drafted in that spirit. It includes 9 chapters prescribing the objectives and principles; educational rights and duties; educational system; national education guidelines; educational administration and management; teachers, faculty staff and educational personnel; resources and investment for education and technologies for education. Since the bureaucratic reform in 2002, however, religious affairs have been under the supervision of the Office of the Prime Minister and the Ministry of Culture while cultural affairs have been under the supervision of the Ministry of Culture. To reflect the revision, the National Education Act was amended in 2002. In general, Thailand's educational reform increases efficiency in educational management. Continuing efforts and collaboration from all parties concerned are needed to push forward decentralization of authority and the increase of people's participation in

educational administration and management.

Also, Eckel and King (2006, p.3) when describing the size and composition of U.S. Higher Education, expresseed that, in addition to diversity, autonomy, competition, and accessibility, size is a distinguishing feature of U.S. higher education. The U.S. Department of Education counts 6,500 postsecondary institutions that participate in its student financial aid programs, including 4,200 colleges and universities that award degrees and 2,300 institutions that award vocational certificates. These 6,500 institutions enrolled approximately 16 million full- and part-time students, including 14 million undergraduates and 2 million graduate and professional students, in fall 2001. The 4,200 colleges and universities awarded more than 2.4 million degrees in academic year 2000-2001. In addition, an untold number of other institutions offer post-secondary instruction of some type but do not choose to participate in the federal student aid programs and; therefore, are not counted by the federal government (U.S. Department of Education, 2003). Degree-granting institutions are typically divided into four major groups, and a considerable amount of diversity exists within each group.

In the HE model of Lithuania (former Russian bloc) Lazutka (2006, p.4) generalized Lithuanian system of higher education as follows (1) On 15 February 2000, the Lithuanian parliament adopted the Law on Higher Education, which established a binary system of higher education, (2) The system is made up of university and college sectors, which embrace both state and private institutions, and (3) Since it came into force on 1 September 2000, the Law on Higher Education has been amended 6 times. He also mentions about the key governing HE institutions and their basic responsibilities, including (i) The Ministry of Education and Science is responsible for the preparation and implementation of government policy in the field of HE, the co-ordination and initiation of international R&D programs and the submission of proposals to establish, reorganize or liquidate scientific or study institutions, (ii) The Higher Education Council operates alongside the Ministry of Education and Science. Its main functions are to analyze and evaluate strategy for the development of Lithuania's higher education institutions and to prepare suggestions for the development and strengthening of the higher education system, (iii) The Lithuanian Universities Rectors' Conference is non-governmental organization that

co-ordinate relationships between HE institutions and is expert on questions of HE policy and (iv) The Lithuanian Science Council is an advisory body to the Seimas and the government on R&D policy. Its mandate and terms of reference are con firmed by the Seimas. The board consists of scientists and organizations representing economic and business sector interests, as well as representatives of state R&D institutions.

Gutu (2007, p.11) from Växjö University, Sweden, introduced that Sweden was one of the most active countries in elaborating and promoting the regulatory documents of the European Chairmen of the Ministry of Education meetings, including the Bergen meeting from Norway where the Guide Standards in European Higher education Quality assurance has been adopted. Since 2003, Sweden has passed to three university levels system, Bachelor, Master and Doctorate. Master is viewed as something qualitative new, where qualitative studies are offered, able to assure students' way into the labor market. Now there are two types of master in Swedish higher education system –academic and professional. Bologna Process is viewed as a phenomenon which is based on three fundamental dimensions: politics (because the initiative belonged to the Ministries of Education from France, Italy, Germany and Great Britain), education, and students. Swedish experts on Bologna process qualify this pan-European reform on higher education system as an incontestable success. Swedish Universities benefit from autonomy and academic freedom at a very high level, they are completely financed by the state, and the partition of the allocated money is performed by the university (for instance, Växjö University receives 4, 7 million Euro for the educational process, and 1, 5 million. Euro for research). The finance is performed on the basis of a contract with the state which is renewed every year. The main principle in re-signing the agreement between the universities and state consists in en masse accessibility to studies; internationalization of university studies, initiation of co-diplomacy programs.

Rong Liu (2008, p.11) from the University of Hong Kong said that China had experienced rapid economic growth in the last two decades, and alongside this there has been an ever-increasing demand for talent. China's education policy makers and educators have adopted the concepts of lifelong learning and continuing education to address the needs of economic growth and increased productivity. It is apparent that the ongoing process of economic reform in China has created a new human capital

market, and generated the possibility for the adult and continuing education sector to steer a new course. Thus, Chinese universities have begun to transform traditional adult higher education with a focus on offering degree programs into continuing education with a focus on developing professional programs for adults.

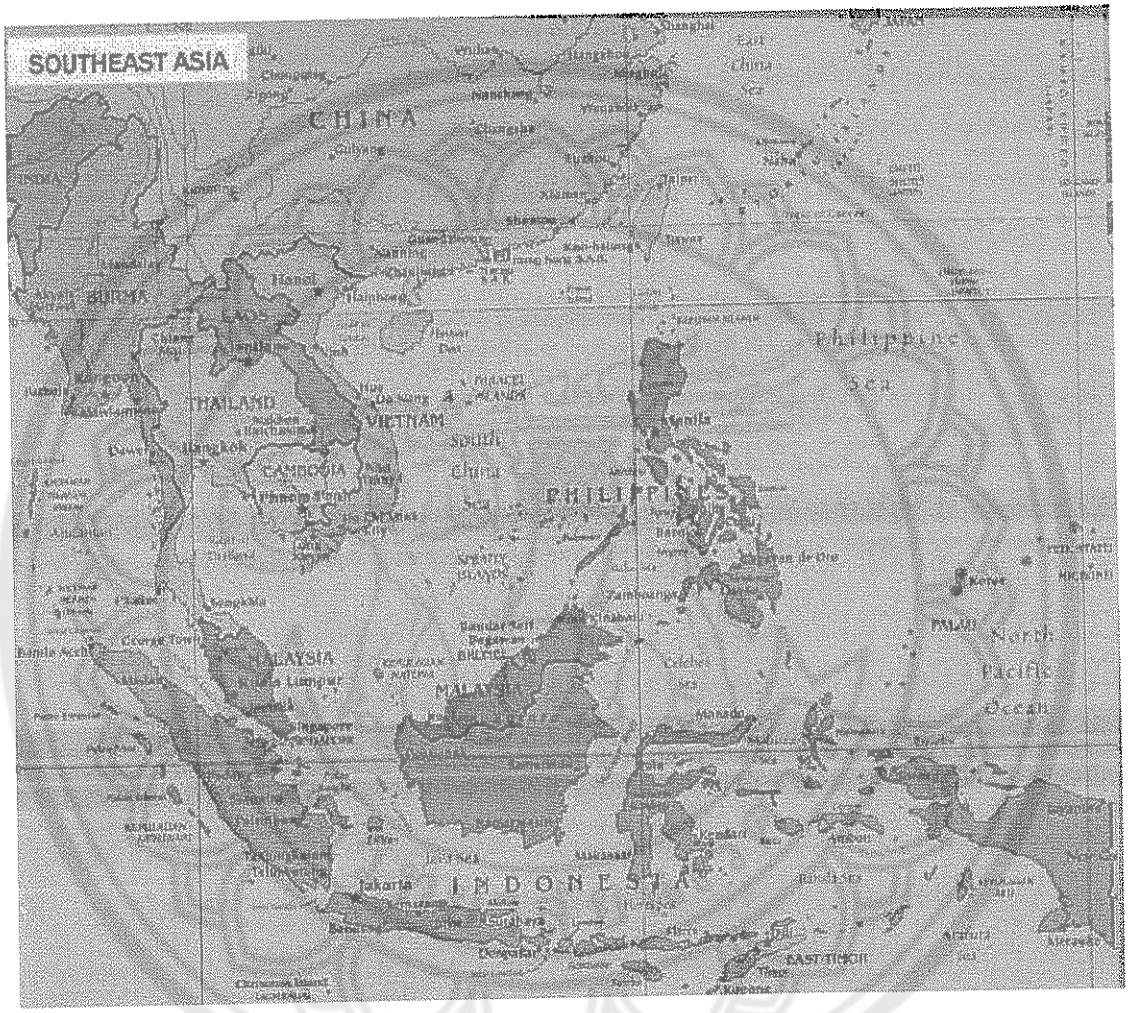

Figure 2 Map of Southeast Asia

Sources: Kate Thirolf, University of Michigan, USA, and Jack Thirolf, Princeton-in-Asia Fellow (2006-2008), Vietnam

Let us take some examples of the results of the central level management-growth and elaboration. So dramatic has been the growth in the size of education systems over the past 20 years that across much of Asia, education is the largest public sector employer (after the military) and often commands one of the largest shares of government resources That elaboration resulted in a proliferation of administration. For example, in Cambodia, 75,000 employees, half the public employees, are employed in the education sector. Within that, administration often consumes a high percentage of the positions. More than one fifth of the education service consists of administrators (ADB, 1995a). In Lao People's Democratic Republic the number of staff in no teaching positions in 1994-1995 represents more than 20% of the number of teachers (Mingat, 1996). Besides, in this country, the administration of different sub sectors, levels of education, and institutions rests with different ministries. The administrative functions are divided between different levels of government (e.g., national, provincial, district, and village) with the absence of essential linkages and coordinating mechanisms.

Along with HE in Asia, Kim (2007, p.9) saw a rapid change in Asia with his ideas that the Asia-Pacific zone was the largest of the UNESCO regions, containing over THREE billion people or 60% of the world's population. Its diverse geography, population, income, and culture are reflected in the size and types of HEIs operating in the region. And then, Kim (2007, p.9) adds that the demand for HE is rising nearly everywhere regardless of INCOME or CULTURE. Growing affluence in the region and the increasing number of 18-23 year olds were fuelling this demand, with the exception of Australia, Korea and Japan. The writer stated that in China recent growth in the number of HE enrolments and institutions has been spectacular. "The past decade has been a decade of HE expansion in China." The gross enrolment ratio of HE has increased from 9% in 19998 to 23% in 2007 (6.23 million to 27 million) (Dr. Libing Wang, 2005; Kim, 2007). In Japan, government deregulation has given universities greater flexibility to offer new types of education (e.g. a rapidly increasing number of CROSS-BORDER or IT-driven HEIs).

Lin (2007, p.9), in his report about HE in Taiwan, presented that before the mid-1980s, the Taiwan's higher higher-education was under tight government control, that policy change and reform were introduced in the late 1980s and that governance from nationalization to a marketization-oriented model. The writer unties the reasons that there was a rapid change in HE: (1) University was very selective institutions before the 1980 (an elite group of elite group of students), (2) Policy change and reform were introduced the late 1980s, (3) Students enrolled in higher education institutions was 191,752 in 1985 and 1,115,672 in 2005, and (4) Near 90% of graduate from high school advance to higher education institution.

Drawing out a contextual factors driving reforms in Taiwan's higher education, Lin (2007, p.10) synthesized that there were of (1) External factors: the changing socioeconomic context and the growing impact of globalization , (2) Internal factors: the changing sociopolitical and socioeconomic contexts, and (3) Government attempts to improve the efficiency and effectiveness of its education system. He also reveals that the rapid expansion of higher education in Taiwan because the number of universities and college increase from 28 to 147, and in 2006, there were a total of 1,160,015 university students., and as more Taiwan citizens become rich, they are willing and have ability to pay for higher education.

In addition, Hawkins and Ordonez (2007, p.7) found out that HE in ASIA had experienced that (1) the rapid expansion due to higher requirements from world of work, increasing social demand and diploma devaluation. They give out the figures to illustrate, namely six-fold increase of enrolments from 13 million in 1960 to 82 million in 1995 and dramatic increase to 280 million by 2006. In this increase in 1990, Southern Asia got 9 million, Eastern Asia 7 million, West Asia 5,5 million, Southeast Asia 4,5 million and the Oceania island just nearly 1 million. In addition, when mentioning about the Quantitative expansion of HE (GER: Gross Enrollment Ration Hawkins and Ordonez (2007) show out the figures in 2000 as follows: Republic of Korea got 72%, Australia 63%, Japan 46%, Thailand 32%, Philippines 30%, Malaysia 23%, Vietnam 10% and China 7%. And (2) New form of knowledge in HE in Asia in the current era, they express that the new learning society demands new configurations of knowledge and new definitions of quality: accreditation: (1) assessing quality; the evolving nature of accreditation, (2) quality teaching-academic freedom, the

challenges to the professoriate and tenure, (3) quality research- publications, research facilities, exchange programs, and (4) quality service-outreach programs, service to community, service to larger society. And new delivery mechanism: emergence of alternative Knowledge Providers, there are needs for closer collaboration and new mechanism must suit new clientele s (clients/customers).

Hawkins and Ordonez (2007, p.6) drew a conclusion that universities had to cater to the learning society. Their clients are no longer just early adults' pre-work secondary school graduates; they must serve learning needs of individuals of all ages in a knowledge society.

In the climate of Vietnam (Figure 3, p.142; Tien Long, 2006, p.8) Deputy Minister of Education and Training, in a talk with Vietnamese university rectors about the country's integration plan for education from 2006 to 2010, said that the overall objective of tertiary reform in the next 15 years is to achieve basic changes in the quality and scope of the system in order that it could respond to the country's socio-economic development and the people's demands for further studies. He adds that Vietnam hope that by early 2020 foreign students will enroll at 20 Vietnamese universities with pilot advanced programs.

Moreover, Quoc Hung (2007, p.7), addressing the opportunities and challenges to HE in Vietnam prior to the era of globalization, pointed out that, first for the opportunity, in Vietnam students could take many online programs for postgraduate studies without traveling abroad. And second for challenges, he named the five most potential ones: (1) the comparability of quality and standards because the MOET, Vietnam has not agreed on the common standards of QA among universities and colleges, (2) multi-nationalization (different programs of cross-border) like 'twinning ones, (3) the problem of "brain drain" (many Vietnamese students do not come back after their studies because of may reasons: better working conditions, better jobs with high salary, access to better living conditions ect), (4) intellectual property (online courses and research), (5) maintaining the HEIs a learning organization.

Indeed, higher education in Vietnam system (Figure 3, p.142) has gone through different phases: feudalism, French and American colonization, socialism and at present free market-based economy with socialism-oriented goals, Quoc Hung (2007). He concluded that (1) after nearly 15 years of educational reforms since 1986,

the Vietnamese higher education has still been in the "try-outs stage," experiencing many unexpected changes the curriculum framework, the institutional scale and size, the lecturer and the student ratio, levels of management among institutions, the choice of centralization or decentralization in management, measures of training quality, and administration and implementation of the university's entrance examination, (2) lack of autonomy and accountability in management also causes difficulties in enhancing educational quality and competitiveness of Vietnam universities, which makes them unable to join the ranking list with other regional or international counterparts, (3) outdated models of teaching and learning are also big obstacles, hindering students' independence, creativity and problem-solving capacity, (4) Vietnamese universities are very concerned about changing methodologies, encouraging the shift from teacher-centered to learner-centered approach of teaching and learning, (5) lack of qualified lecturers, facilities and teaching and learning materials, and (6) ineffective utilization of education technology.

Additionally, once talking about the transformation of Vietnamese higher education with roles of leaders, Quoc Hung (2007, p.10) mentioned, first to the Vietnamese leaders and educational ones, that one important task was to have adequate investment and long-term strategic plans to fulfill the goals of HE in the hope of developing human resources, meeting with the social requirements in this new era in order to enhance competitiveness of universities to integrate into the regional and international environments. Second, school leaders had to be the key "agents of change" in their efforts to create necessary transformation (Fullan 1993; Quoc Hung, 2007).

Hung Phong and Phuong Hoa (2007, p.1) expressed, while talking about Vietnamese education system, that the renovation process has enabled Vietnam to achieve a remarkable economic growth. However, this growth is quantitative rather than qualitative. In order to achieve significant changes in quality, the economy should be based on intellect. It is not possible to rely only on cheap labor resources or goods processing type of work. Well developed, advanced education is a requisite factor, which is a foundation of a knowledge economy. Therefore, we are now facing the challenge of preventing the deterioration; and making the education prosper, so its "products" would be able to meet demanding requirements of the period of integration

into the world economy.

In addition, Deputy Minister Tien Long (2009, p.7) announced that at present, in Vietnam there are 369 universities and colleges, in which 160 are universities, and 209 colleges. The number of students is 1,603,484, covering 73.62% of universities students and 26.38% of college students, which account for 188 students per 10,000 populations He also adds that although there have been teaching and learning method reforms, Vietnamese education is still weak, especially in terms of human resource development. Thus, in the strategic development of Vietnam education there will need 100,000 lecturers. And 25,000 of them will hold PhD degrees. In the upcoming years, the MOET will recruit about 2,000 lecturers to send abroad fro their higher education.

Vietnam, a Glimpse in the Context of Change and Development

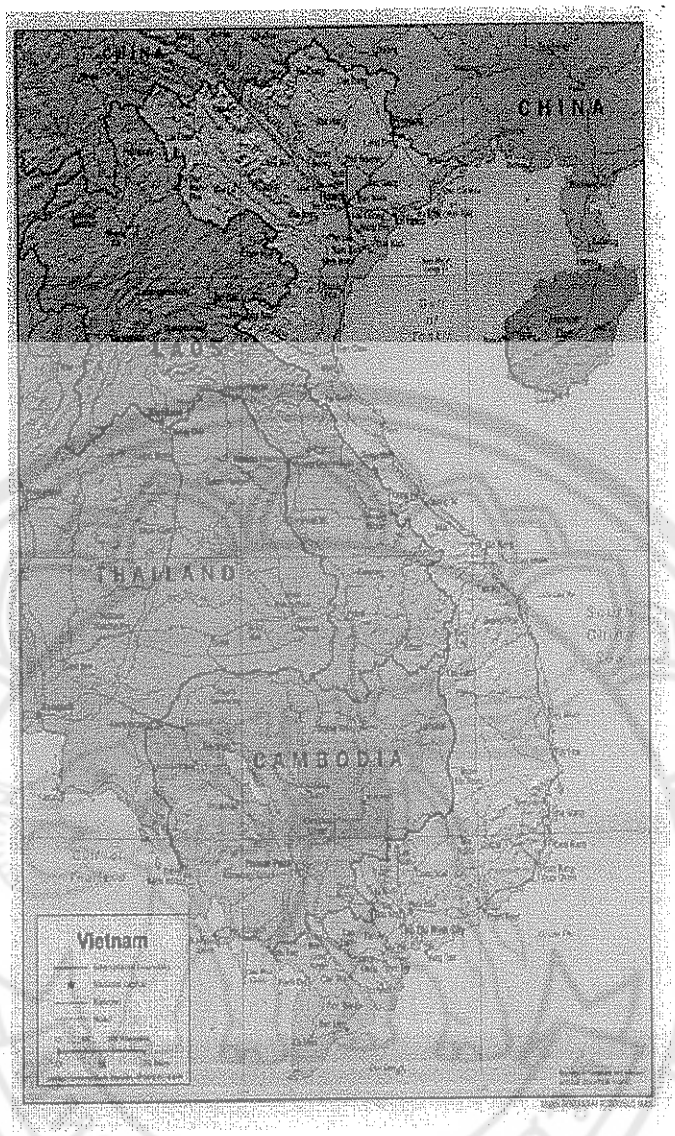

Figure 3 Map of Vietnam

Sources: Kate Thirolf, University of Michigan, USA, and Jack Thirolf, Princeton-in-Asia Fellow (2006-2008), Vietnam

Vietnam, officially the Socialist Republic of Vietnam (Vietnamese: *Cộng hòa xã hội chủ nghĩa Việt Nam*), is the easternmost country on the Indochina Peninsula in Southeast Asia. It is bordered by China to the north, Laos to the northwest, and Cambodia to the southwest, and the South China Sea to the east. With a population of over 86 million, Vietnam is the 13th most populous country in the world.

Vietnam is approximately 331,688 km² (128,066 sq mi) in area (not including Hoang Sa and Truong Sa islands), larger than Italy and almost the size of Germany. The perimeter of the country running along its international boundaries is 4,639 km (2,883 mi). The topography consists of hills and densely forested mountains, with level land covering no more than 20%. Mountains account for 40% of the area, with smaller hills accounting for 40% and tropical forests 42%. The northern part of the country consists mostly of highlands and the Red River Delta. Phan Xi Păng, located in Lào Cai province, is the highest mountain in Vietnam at 3,143 m (10,312 ft). The south is divided into coastal lowlands, Annamite Chain peaks, extensive forests, and poor soil. Comprising five relatively flat plateaus of basalt soil, the highlands account for 16% of the country's arable land and 22% of its total forested land.

Vietnam is divided into 64 provinces (known in Vietnamese as *tỉnh*, from the Chinese 省, shěng). There are also 5 centrally-controlled municipalities existing at the same level as provinces (*thành phố trực thuộc trung ương*). The provinces are further subdivided into provincial municipalities (*thành phố trực thuộc tỉnh*), townships (*thị xã*) and counties (*huyện*), and then, subdivided into towns (*thị trấn*) or communes (*xã*). The centrally-controlled municipalities are subdivided into districts (*quận*) and counties, and then, subdivided into wards (*phường*).

The Socialist Republic of Vietnam is a single-party state. A new state constitution was approved in April 1992, replacing the 1975 version. The central role of the Communist Party was reasserted in all organs of government, politics and society. Only political organizations affiliated with or endorsed by the Communist Party are permitted to contest elections. These include the Vietnamese Fatherland Front, worker and trade unionist parties. Although the state remains officially committed to socialism as its defining creed, the ideology's importance has substantially diminished since the 1990s. The President of Vietnam is the titular head of state and the nominal commander in chief of the military of Vietnam, chairing the Council on National Defense and Security. The Prime Minister of Vietnam Nguyen Tan Dung is the head of government, presiding over a council of ministers composed of 3 deputy prime ministers and the heads of 26 ministries and commissions (Wikipida).

Also in the source of Wikipida, the percentage of Buddhism is 85%, Christianity 8%, Caodaism (originally from Japan in the 19th century) 3%, and others 4%. The official spoken and written language of Vietnam is "Vietnamese language" Vietnamese. The culture of Vietnam has been influenced by neighboring China. Due to Vietnam's long association with the south of China, one characteristic of Vietnamese culture is filial duty. Education and self-betterment are highly valued. Historically, passing the imperial exams was the only means for Vietnamese people to socially advance themselves.

Emerging from this prolonged military engagement, the war-ravaged nation was politically isolated. The government's centrally planned economic decisions hindered post-war reconstruction and its treatment of the losing side engendered more resentment than reconciliation. In 1986, it instituted economic and political reforms and began a path towards international reintegration. By 2000, it had established diplomatic relations with most nations. Its economic growth had been among the highest in the world in the past decade. These efforts culminated in Vietnam joining the World Trade Organization in 2007 and its successful bid to become a non-permanent member of the United Nations Security Council in 2008.

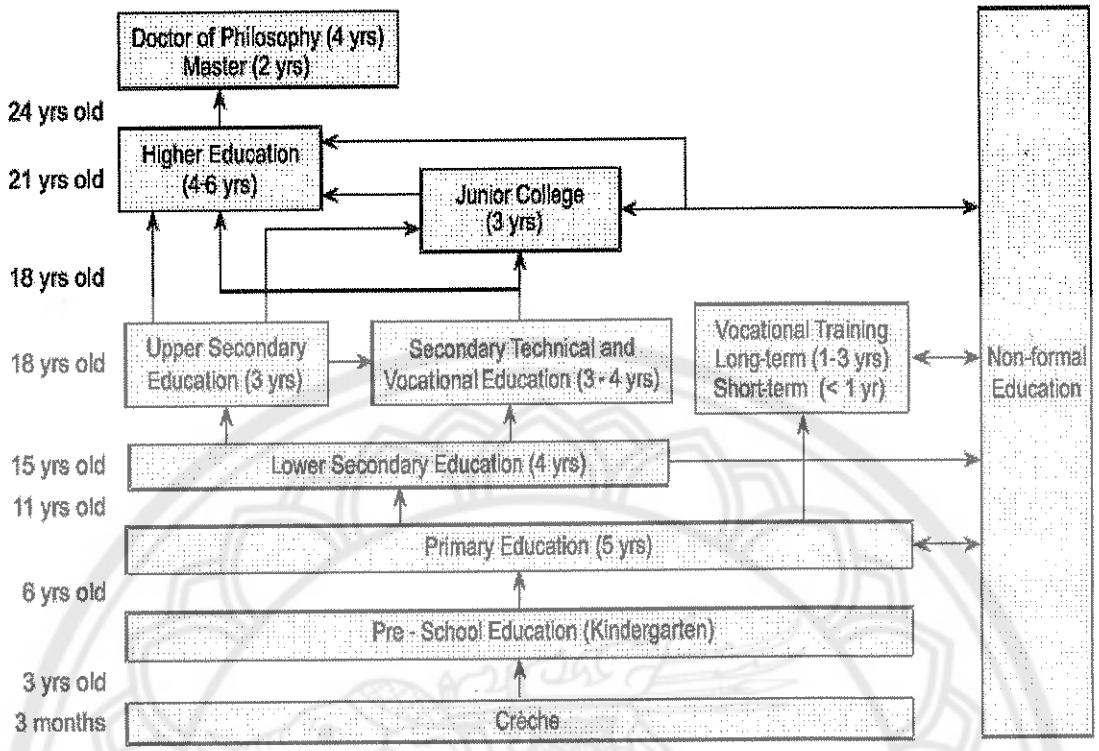

Figure 4 Vietnam Education System

Source: http://en.moet.gov.vn

Vietnam's education system can be divided into 5 categories: pre-primary, primary, intermediate, secondary, and higher education. The normal starting time of schools in Vietnam is at 7 o'clock or 7:30. The finish time depends on the levels and usually at 4 o'clock, which means longer hours of studying than other countries. Vietnam is a developing country and the government is trying to improve the education in every city in Vietnam. But mostly, people come to the main cities to learn, like Ho Chi Minh City or Ha Noi capital city. Children normally start primary education at the age of six. Education at this level lasts for 5 years and is compulsory for all children, which is why Viet Nam, albeit still a developing country, has very high literacy proportion, over 90% on average. *Junior high schools* teach students from grade 6 to 9. To graduate, they have to pass the Intermediate Graduation Examination presented by the local Department of Education and Training (which was abolished in 2006). This educational level is generalized throughout most of the

country–except in very remote provinces, which expect to popularize and standardize middle education fully within the next few years. Intermediate is also a non compulsory schooling form in Vietnam. In *Secondary education,* most students manage to pass the IGE (Institutional Graduation Examination). High school, which consists of grades 10, 11 and 12, is standardized in all major urban regions, but is not uniform in rural provinces. At the end of grade 12, all students are required to write a leaving examination held by Province's education service. The examination tests students of 6 subjects including Mathematics, Vietnamese Literature, Foreign Language (mostly English), and other 3 subjects determined by the Educational Board of Vietnam. The Educational Board of Vienam is planning to merge this examination with the university entrance exam in 2009. For *Higher education*, University Entrance Examination is very important in Vietnamese students' lives. High school graduates have to take it after the SGE (Secondary Graduation Examination) and get high results to be admitted to universities. The pressure on the candidates remains very high despite the measures that have been taken to reduce the heat around these exams, since securing a place in a public university is considered a major step towards a successful career for young people, especially those from rural areas or disadvantaged families. In the year 2004, it was estimated that nearly 1 million Vietnamese students took the UEE (University of Entrance Examination), but on average only one out of five candidates succeeded. Normally, candidates take three exams; each lasts 180 minutes for the fixed group of subjects they choose. There are four fixed groups of subjects:

Group A: Mathematics, Physics, and Chemistry;

Group B: Mathematics, Biology, and Chemistry;

Group C: Literature, History, and Geography;

Group D: Literature, Foreign Language, and Mathematics;

Besides, there are also groups: H, M, N, R, T, V, and so on

Most of Vietnam's universities also offer Master (2 years) and Doctor (4 years) degrees. In addition to universities, there are community colleges, art and technology institutes, professional secondary schools, and vocational schools which offer degrees/certificates from a-few-month to 2-year courses.

Private universities

According to Vietnam's Ministry of Education and Training (MOET), there are currently 23 non-public universities, accounting for 11% of the total number of universities. These non-public universities are currently training 119,464 students, or 11.7% of the total number of students. The government is planning to increase the number of non-public universities to 30% by 2011. Foreign educational institutions are increasingly open in Vietnam. Most of their fields are English language and business.

As the second country after China with sustained economic growth during the first years of the 21st century, Vietnam is currently revisiting its education system. It recognized the increasing role of English as the language of business and the importance of international cooperation to help adapt the education system, notoriously slow in change management, to the rapid pace of its economy.

Running a foreign education system in Vietnam is relatively challenging. Quality control and affordability are key issues, let alone the challenges related to dealing with a bureaucracy that is still figuring how to deal with the forces of change due to globalization.

Teaching Quality Issues

The practice leading to a large number of graduates being unable to find a job, and the fact that degrees from Vietnamese universities are not recognized worldwide. There is, therefore, a huge demand for quality educational services. Teaching methods delivered in the public school system are very teacher-oriented. You will find that the students are quite studious and much disciplined in the classroom. The more successful students are those who can absorb the given material and transfer the knowledge to their notebooks as in class debate is not entirely welcome in every class. This is a sharp contrast to western classroom settings where participation and challenging of materials has a greater focus.

Students are arranged by class number and do not move from classroom to classroom between classes. They also stay together as a small group for their entire elementary, junior-high, or high-school levels in one location per grade. The teachers are the ones who float from classroom to classroom making it difficult for the Vietnamese teacher to establish a room of their own. This is where western students develop much needed social skills; where as the Vietnamese students develop a

stronger group bond. The end result though, is the severe shyness in many Vietnamese when introduced to a new group of people and the need to interact. It becomes even more apparent at the university level. By invitation only, foreign teachers have begun to enter the public school sector (usually language education) and are also having a large impact on helping to introduce western teaching methods from the inside.

Currently, only public schooling costs for students from grades 1-5 are subsidized by the government at 50% of the total tuition. All other schooling costs for students (100%) past grade 6 is at the parents' expense. The drop-out rate after grade five only increases as the student reaches university age due to lack of family funding. The average monthly salary of local Vietnamese public teachers is between 60USD to 100USD and many supplement their income by working hours in the private language sector or home schooling in their off hours. Public schools are under-funded, but have made great strides in attempting to improve their facilities in the larger cities.

Private language centers for English language education are in high demand in the larger. Students have flooded these schools with the expectation of greater marketability in the job market. These classes are usually taught by foreign expiates and generally carry a salary between 10USD-20USD per hour depending on both the qualifications of the teacher and the quality of the school. Lower educational standards in some of the lower paying schools have resulted in less than qualified teachers (known to the local community as backpacker teachers) to fill their ranks.

Vietnam Ministry of Education and Training (MOET), its Roles to Higher Education

Since its establishment in 1990, The Ministry of Education and Training (MOET) has taken its responsibilities for all education and training at the national level. MOET is divided into many separate departments, of which the most important are those responsible for primary and secondary education, higher education, teacher education and adult education.

The MOET, Vietnam plays its important roles in Vietnam education. Its management and financing of education and training are becoming more decentralized in Vietnam. This can be seen from two different perspectives: horizontal decentralization and vertical decentralization. Horizontal decentralization refers to the functional departments responsible for education and training in the central

government. Although MOET plays a pre-eminent role, many institutions in Vietnam fall under other line ministries and government agencies. For example, Hanoi Medical College falls under the Ministry of Health and the Ministry of Culture and Information manages the College of Culture and the Hanoi Conservatory. 8 In one other instance, Vietnam National University, though nominally under MOET, operates independently as a separate entity. The multiplicity of actors can result in duplication, confusion and waste. Vertical decentralization refers to the different levels of government responsible for education. In higher education and vocational/technical education, with the exception of universities, the role of provincial governments in running educational institutions is at least as large as the role of the central government. In the past, the lack of a formal legal management system led to extreme dependency on MOET which in turn reduced the ability of each institution to respond to community needs in the emerging market economy. The ability to provide vocational training appropriate with the demands made by an emerging market economy remains one of the most pressing issues under discussion in the vocational education arena. With the recent release of Decree 85 on education reform, which allows local education authorities more power and responsibility to undertake long-term education programs in their respective areas, the central government hopes this will spur further positive changes in education quality.

Universities are beginning to obtain autonomy over financing (self management of funding) training, research, human resources, and international cooperation. Education experts hope that this new found autonomy will raise the quality of research and teaching by providing a legal framework of responsibility and accountability. This year, MOET is allowing universities to control their budgets. Under new regulations, university and college managing boards will prepare their own spending plans and implement them with only a supervisory role played by MOET. In another positive sign, universities will be able to raise additional funds through research, production cooperation, etc. to supplement tuition fees which remain set by the State. MOET is has also a given the green light to a pilot scheme to allow the private sector to set up colleges and universities, whereby private tertiary institutions will be governed by a rule shortly to be submitted to the government for approval. According to the new rule these private institutions will be treated the same as state

ones and administered by the ministry in terms of professionalism and overseen by the governments of cities and provinces where they are located. These are positive steps amidst ongoing calls for further reductions in centralized oversight from MOET.

MOET's area of responsibility extends to all levels of education including pre-school, general education, professional education, tertiary education, and continuing education. Accordingly, it wields significant power over education and handles a number of tasks including: (1) the promulgation of regulations affecting curriculum, (2) the drafting and publishing of text books, (3) enrollment and student management, (4) academic assessment procedures and granting of degrees, (5) infrastructure and facility maintenance, (6) staffing and personnel in education, (7) developing future education plans; and (8) providing proposals to the Government for the regulation of education matters such as scholarships, construction of universities, and study abroad. MOET has partial responsibility- shared with the Office of the Government (which is attached to the Prime Minister's Office), the Ministry of Finance and the Ministry of Planning and Investment- for broader decisions of policy formulation, target setting, and sectoral financing.

Vietnam Higher Education on the Drive

From the source of IIE (Institute of International Education, Vietnam 2004), education in Vietnam has always kept a high position in Vietnamese society. From the beginning of its independence as a nation, education has continued to be a major preoccupation of government and a highly valued and respected activity in the society. One of the very first actions of the Government in 1945 was to initiate a literacy campaign. This campaign has met with universal success in that as of 2000 Vietnam could demonstrate a literacy rate of 94%.2 As of the 2003-2004 school year, there are some 22 million students in the educational system. Recently, Vietnamese education achieves approximately 17.1% of all state budget expenditures (around US$1.6 billion) and is expected to increase to 18% by 2005 and 20% by 2010. This increase comes as part of an overall plan to revamp and ratchet up the quality of education. Much of the monies devoted to education in the next few years will be directed toward infrastructure, new construction, and the development of information technology and internet access, a key sector specifically targeted for development

According to IIE (2004, p.50) in years past, higher education in Vietnam had been similar to that of the former Soviet Union with a multiplicity of small mono-disciplinary institutions with limited linkage between teaching and research. The present structures and procedures have been inherited from the era of central planning when higher education was segmented by economic sectors with many specialized institutions, each with little autonomy of its own, reporting to a particular line ministry. By Decree No. 90/CP, dated November 24, 1993, the Government addressed the structure of national education and committed to the concept that all should have the right to study and pursue higher education. Following this decree, the number of public, semi-public, private and people established universities increased and began to offer a number of training forms suited to the particular needs of the student. Between 1993 and 1995, total higher education enrollments grew by 117% (from 162,000 to 354,000), while expenditures grew by 63%. The number of higher education institutions has grown from 120 in the early 1990s to a current number of 224 despite the consolidation of several public institutions into larger multi-disciplinary institutions (called national or regional universities).

Following up on the work begun by Decree 90/CP (Vietnamese Government Council), the Education Law of December 2, 1998 set forth additional stipulations for the Vietnamese higher education system. The Education Law defined higher education as that one receives at the college or university level. It further clarified the degrees available and the structure for pursuing them. Therefore, a student holding the equivalent of a high school diploma may pursue either a 4-6 year academic program for a bachelor's or a 3-year academic program at a junior college. A junior college degree holder may then continue an additional 1-2 years for a bachelor's degree. A student with a bachelor's degree may pursue an additional two years to obtain a master's degree and 4 years to obtain a doctorate.

The Law further clarified which institutions may grant what degrees. Junior colleges remain responsible for 3-year training programs but may share this ability to grant such degrees with universities. Universities may also offer 4-6 year training programs and, with the permission of the Prime Minister, Master's and Doctoral degrees. Research institutes, though primarily responsible for doctoral degrees, may also, with the permission of the Prime Minister, provide master's degrees in

cooperation with the universities. Currently, master's and doctoral training is available at 66 universities, institutes, and academies and 62 research institutes. For 2003, total university and college enrollment is 1,016,500, an increase of 5% from 2002. Enrollments are expected to increase such that by 2005 Vietnam would like to have a ratio of 140 university students for every 10,000 people and 200 per 10,000 by 2010.

For the types of universities, (IIE, 2004) there are three broad types of universities in Vietnam; two of which are more traditional forms meaning that they rely on classroom lectures as their principal medium of instruction. The first of this type are the "specialized universities," each of which focuses on a single area of study, such as economics, engineering, fine arts, or law. The second of this type are the "multi-disciplinary universities," including five newly established national and regional universities in some of Vietnam's largest cities. The third and newest category of university education in Vietnam is the "open university" system in Hanoi and Ho Chi Minh City. Already by 1995, only one year after they opened, these accounted for 52,583 students, or approximately one out of every seven higher education students in Vietnam. There are more than 200 universities and colleges in Vietnam educating approximately 1,000,000 students at any given time. This figure includes a number of junior colleges, but excludes institutions under the Ministry of Defense and the Ministry of Foreign Affairs

First, in Multi-disciplinary Universities, the new universities consist of two types: national and regional – and are multi-disciplinary in character. Two national universities and three regional universities have already been established. At present, the national universities offer bachelor, master and doctoral programs, while the regional universities offer bachelor, masters and other college-level programs. Let us take a look at some HEIs:

Vietnam National University Hanoi, initially established in 1993 as an amalgamation of several universities, including the College of Natural Sciences, the College of Social Sciences and Humanities and the College of Foreign Languages, now also contains the Information Technology Institute. Vietnam National University at Ho Chi Minh City, initially known as the Ho Chi Minh City National University, was founded in 1995 from nine institutions.

Da Nang University, established in 1994 from the Da Nang Foreign Language Teachers College, the Da Nang University of Technology, the Nguyen Van Troi Vocational Training School, and the Da Nang Junior Teacher Training College The new university maintains its emphasis on technical fields, while Hue University to the north, and prepares students in social sciences and humanities.

Hue University, founded in 1995 from Hue University, the Hue University of Pedagogy, the Hue Medical School, the Agricultural University of Hue, and the Hue College of Fine Arts. Thai Nguyen University was established in 1994 from four university-level institutions (Viet Bac Teachers College, Bac Thai College of Agriculture No. 3, Thai Nguyen College of Industry, and Bac Thai/Thai Nguyen/Viet Bac College of Medicine), and the Bac Thai Secondary Technical School for Mechanical and Electrical Workers. The new university has five separate colleges and numerous research centers. The university is responsible for providing education for students from all provinces in Vietnam north of Hanoi.

At present, the government has announced that it intends to reorganize the national universities, *Hanoi National University and Ho Chi Minh City University*, in particular, to improve the standard of teaching and to build a more elite corps of graduates. The precise contours of this renovation continue to evolve.

Second, in Private (Non-public) Education and Training, the government's focus on the development of education and training in Vietnam more and more relates to increasing educational coverage, changing educational content, and directing scarce resources toward their optimal use so as to provide graduates with the skills necessary to perform effectively in a shifting and developing labor market. A major reform designed to further these objectives is the development of a "non-public" system of education to parallel the public system. Vietnam's history of free or reliably low cost education and centralized planning made this a politically sensitive direction in which to move. This may explain the reliance on euphemisms, such as "non-public," in most contexts instead of a clear reference to "privatization" of education. Nevertheless, these policy changes introduced over a relatively short period of time have had a profound impact on the future of Vietnam's education system. Due to financial constraints and the number of students in need of an education, MOET must encourage the establishment of more private universities. Additionally, MOET has

also proposed that some State owned schools in usual cost of undergraduate study. Students who complete a regular program of study receive a graduation diploma or degree endorsed with the words "chính quy." Older awards may include the words "dài hạn" indicating a long-cycle program, normally undertaken in full-time mode. This group is still the largest of the five higher education groups but has declined in recent years as a percentage of the total number of individuals attending colleges and universities.

In-service "tại chức": In-service is another well-established program in Vietnam. In the current system, in-service students, sometimes referred to as "part-time", undertake an abbreviated course while employed. For the most part, these students are civil servants sponsored by their government offices. They are studying to upgrade their skills and to prepare for more difficult or more responsible positions upon completion of their training programs. Until recently this was strictly an employer-nomination scheme, but arrangements are now more flexible as regards courses studied. Courses undertaken in this mode are usually focused on more practical experience rather than the theoretical or academic. Students who complete a degree or diploma in this mode also receive a graduate degree, but it is endorsed with the term.

Open "mở rộng": After 1988-89 a combination of factors, including the abandonment of guaranteed employment for graduates and the acknowledged need for universities to fund themselves to a significant extent, led to the establishment of "open" programs at many universities. Students' access to these courses was based on their ability to pay fees, in some cases almost irrespective of the academic credentials. In general, the curriculum and the teachers were the same for regular and open students, although the classes themselves were usually segregated. Students who completed the open mode degree received a graduation diploma endorsed with the words "mở rộng". These degrees did not usually have a high status and were not normally accepted for entry to postgraduate programs. It was argued that the perceived low quality of the open degrees devalued regular degrees from the same institution, and that the money received did not compensate for the strain on resources. Accordingly, MOET decided in 1992 to modify the open system. Open admission is now restricted to the designated open universities in Hanoi and Ho Chi Minh City and

to the junior and community colleges.

Part-time: While universities will no longer offer open admission programs, they are granted the authority to offer part-time programs comparable in requirements and standards to the regular programs. However, students seeking admission must have a baccalaureate and one year's work experience.

Short-term training "ngắn hạn chuyên tu": Students who have completed two or three years of secondary technical education or vocational education training and have a diploma or certificate can undertake upgrading courses and obtain a degree after three years rather than the four or five years required by regular students entering directly from upper-secondary school.

Specialized or retraining courses "bồi dưỡng và đào tạo lại": Another group of students receiving "upgrading" are those who graduated from higher education institutions in the past and are pursuing training or re-training, often in subjects that were not available previously, in order to deal more effectively with their current jobs or to prepare themselves for new jobs. For example, computer programming is a common subject now being studied by people who graduated from the various engineering and science fields.

For undergraduate courses and awards, there are two types of undergraduate programs: short-cycle and long-cycle. Firstly, short-cycle programs refer to programs offered at junior or community colleges. The programs normally require three years of study and lead to the Certificate of Higher Education, Junior College Diploma or Associate (Bachelor) degree. Secondly, long-cycle programs are offered by universities and require between four and six years to complete. Upon graduation from a long-cycle program, the Diploma of Higher Education or University Graduate Diploma and/or Bachelor Degree is conferred. Programs in arts, sciences, education, economics, and foreign languages usually require four years of study, although courses involving a major foreign language component in addition to the other major may require five years. Engineering, agriculture and pharmacy degrees normally take five years, although some universities are planning to reduce this to four and expand the graduate programs. Medical and dental programs take six years to complete.

For credit system: A credit system is slowly being introduced around the country and has been adopted by various universities to replace the previous tightly structured subject-based model. In the old system, a class of students entered a program together and stayed together throughout the entire degree program, following the same curriculum. In the new credit system, courses will be assigned a credit value and students must complete a prescribed number of credits before being eligible to graduate. In this system, each credit represents one hour of theoretical lectures (or two thirds of an hour of practical work) plus one hour of preparation per week, over a 15-week semester.

There are two-phase education system: first, for general education: A two-tier degree program was introduced in 1988 whereby the first three to four semesters of study constitute the general stage of core curriculum, preparing students for more specialized studies during the second phase. In the first phase, often referred to as general education, students take general subjects such as humanities, arts, and science. There are seven core groupings: social sciences, humanities, foreign languages, business and management, economics, mathematics and physics, biology, and chemistry. Completion of the first phase (or the first 90 credits) leads to the award of a Certificate of University Studies which determines eligibility to take the selection examinations for admission to the phase two, or the specialized education component. At the end of the general education program, a student's status and scholarship are reviewed. It is also possible for students to change universities at this stage, but in practice this is restricted due to the nature of the core studies program and its availability at another university.

Second, for specialized education: During the second phase, students take more specialized studies in one or two areas. Programs are based on the list of specialties issued by MOET and comprise about 34 groups and 127 disciplines. This phase concludes with a graduation thesis or project or with comprehensive exams. Formerly, the thesis option was restricted to the best students, but now may be considered as a major equivalent of credits. Not all institutions have adopted the two-phase system, but the universities under complete MOET control have done so. Degree certificates offered upon completion of the full bachelor program include the title "cử nhân," followed by the area of specialization. Although this regulation is said

to apply across all disciplines, the traditional titles of "engineer," "doctor," "architect," and "pharmacist" are still in use at the same schools rather than "cử nhân."

For vocational education, this kind of education in Vietnam occurs at both the secondary and tertiary levels. Because the majority of jobs most greatly needed in Vietnam's transitioning economy relate to technical skills, vocational educational issues have naturally taken on significant prominence. Vocational education's development is challenged both from a supply and demand perspective. From the supply side, there has been and continues to be a shortage of faculty, facilities, equipment, and materials. From a demand side, many students consider vocational education to lack the prestige attributable to a university education.

For graduate courses and awards, until very recently, postgraduate education remained undeveloped in Vietnam and students tended to go overseas to further their studies. In addition, research institutes at centers of which there were more than 300 in 1993 normally conducted research. Early postgraduate education programs were based on French models, but from the 1960s in the north and 1976 in the south, Vietnamese postgraduate education followed the Soviet pattern. With the reduction of study opportunities in the former Eastern bloc countries and the increased interest in Western economic methods, the Government is seeking a more flexible and streamlined postgraduate system with clear differentiation from tertiary education, one of the complaints raised against the current system. Notably, a MOET decision issued in 2002 expanded the ability of students to pursue graduate level study by expanding eligibility to include both regular and in service graduates.

Master's Degrees are awarded following a two-year program of course works and thesis defended before external examiners. Entry to the program is by competitive examination. A student needs to have achieved very good marks at the undergraduate level in order to be considered for entry into the master's degree program. In addition, part time graduates who want to pursue a master's degree must also provide a certificate of good performance from their graduating university.

Doctoral Degrees are conferred following a minimum of two years' course work after the master's degree and completion of a thesis or project. A student may, however, be invited to enter into an accelerated master's/doctorate degree program of four years' duration upon graduation from university. The thesis for the doctoral

degree is defended before a national committee selected by MOET. Candidature is usually restricted to students who hold a master's degree and who are invited to join the program. However, holders of the undergraduate degree with outstanding achievement may also be admitted to candidature after passing the examinations of the so-called "minimum" program in political subjects, a foreign language, and the relevant academic or professional specialization. MOET Decision No. 02/2001/QD-BGD-DT (Decision from Vietnam Ministry of Education and Training: MOET) tightened the requirements for admission by limiting them to outstanding graduates with the highest grades. The doctoral degree is the highest degree currently available in Vietnam. This postgraduate structure applies to all disciplines. However, in some professional areas, such as medicine, there are two postgraduate streams, one leading to the two higher academic degrees and the other to higher professional specializations.

In terms of grading system, since 1971 (1977 in southern Vietnam) a 10-point grading system has been in use at all levels. The normal passing level is 5. The following is published by MOET as the official "definition" of grades, but especially at the tertiary level, this can vary with some institutions assigning 8-9 to the top 5% of students , for instance as follows: (1) 9-10 (ưu/ xuất sắc) excellent/outstanding about 5% of students, (2) 7-8 (khá) good about 35% of students, (3) 5-6 (trung bình) average about 50% of students, (4) less than 5 fail about 8% of students, and (5) (đạt) pass for pass/fail courses.

The grade average usually determines promotion from class to class and semester to semester. Sources differ on whether an average grade of 5 is always required. It appears that in some cases, a score of between 4 and 5 with no 0s may result in a pass.

As well as these subject or course grades at the primary and secondary school levels, general classifications may also be used to describe achievement in major school examinations such as the Secondary School Leaving Examination in which four subjects are examined. The classifications are: (1) 36-40 (gioi) very good or excellent, (2) 28-35 (khá) good, and (3) 20-27 (trung bình) average.

At some institutions, another grade, "trung bình khá" (fairly good), has come into use. A final note is that once accepted to university, most students tend not to concentrate on their grades as much as they had in secondary school. Their focus is more on passing. The top students, however, remain competitive as their scholarships are based on maintaining certain marks (IIE, 2004).

For tuition fees and financial supports, higher education institutions are permitted to charge fees, subject to government regulations on fee levels, the categories of students permitted to pay reduced fees or exempted from paying fees altogether, and the institutions' use of the fees they collect. It is likely, however, that the fee structure will be significantly modified over the next few years. Under the currently existing fee structure, institutions have a measure of discretion regarding the level of tuition fees charged, but they are required to report their revenue to the line ministry or provincial governments that oversee their operations. Now, fees may also be charged for special services, such as matriculation, examinations, boarding and graduation. In addition, institutions may enter into "training contracts" with employers or provincial authorities to provide in-service training. The fees charged for these services are not regulated and may be set at full cost recovery.

The current policies on fees and fee exemptions do not take family income into account in determining how much different families or students pay. This has been a concern as higher fees may increasingly result in the exclusion of children from poorer families. 46 In higher education, fee levels for different programs are supposed to reflect priority subject areas, while specific categories of students, including war invalids, orphans and ethnic minorities, may be granted fee exemptions. In the interest of equity objectives the government does provide scholarships and more recently, no-interest student loans. Finally, one rural university has creatively introduced a policy whereby students who enter a particular field and work in the locality in that field following graduation for a period of 5 years will receive a waiver of tuition fees.

Within the future plans for development in HE, being considered a major priority as part of a larger education plan for 2020, Vietnam intends to build a modern system of higher education capable of satisfying the needs of the new economy. Over time, MOET intends to consolidate the existing university network while constructing universities with higher training quality and better facilities. As mentioned earlier, in

terms of student/population ratios, Vietnam has set a ratio of 140 students per 10,000 people for 2005 with the expectation that it will rise to 200 by 2010 and 300 by 2020. These are ambitious numbers and reaching them will require a coordinated effort in several different areas including better quality control, new curricula, improved teaching techniques and staffing, and most importantly, increased financing from a number of sources.

Viet Dzung (2001, p.11) when addressing about the international cooperation in Vietnamese education, especially in HE, gave out the key achievements, (1) Sending Vietnamese students for overseas studies, (2) Accepting foreign studies to Vietnam for studies, (3) Managing 'in and out" delegation, (4) Receiving volunteers and short-term consultants, (5) Receiving experts and consultants abroad for teaching and cooperation, (6) Receiving international projects, (7) Organizing international conferences and seminars, (8) Cooperating in delivery of foreign courses in Vietnam, and (9) Mobilizing the support from overseas Vietnamese for education and training .

Deputy Minister Tien Long (2008, p.1) when discussing educational quality of Vietnam HE, saaid that the primary duties are to develop human resources in professions meeting with social requirements toward high leveled laborers, and to produce new intellects equipped with scientific research techniques, creativity, IT transfer and social services. Tien Long (2008, p.2) also adds that Vietnam HE system; however, has not got access to the advancement of other countries in the regional and global arenas, has not yet kept up with the country's requirements for the socio-economic development, and has not linked with the needs of human resources employment with high levels of professions in the local and national areas either. Then talking about limitations in quality assurance management in Vietnam's HEIs so far, Long (2008, p.5) posed some as follows: (1) Outdated curricula, (2) Insufficient libraries, laboratories, and other school facilities needed to support teaching and learning process, (3) Insufficient area of land for a college or university as fixed in the HE regulations; for example only 22,24 hectare per college or university and 70m2 per student, and some HEIs under 1 hectare and 2,67m2 per student, (4) Lack of dormitories and entertainment playgrounds, and (5) Only 66,7% graduates said that they felt satisfied with the educational quality, scientific research and school administration, but the graduate's working capacities have not met with the

requirements of the employers (approximately 50% workplace are please with graduate's work). According to Long (2008), the Ministry of Education and Training (MOET) of Vietnam encourages all the HEIs to implement TQM (Total Quality Management) in the years to come.

To Long (2008, p.3) about the weaknesses of quality assurance practices in Vietnam, there had appeared some as posed below: (1) unspecific and unclear criteria for HE quality assurance, (2) operations for quality assurance just at the outset of the school campaign, not throughout the whole school change process because of the shortage of qualified and well-trained experts in this field, without policies for encouragements, or rewards, having no connection with the foreign counterparts for consultancy, and having no "independent unit' for quality assurance at the workplace, (3) scientific research has not been concerned about due to workload, and because many lecturers are not familiar with this job, (4) leading scientists, professors, administrators have retired, and some majors at some HEIs have not yet offered graduate programs, (5) capacities in doing scientific research of lecturers are limited, (6) there are not enough libraries, laboratories and other school facilities needed, (7) international relations to foreign counterparts at some HEIs are not strong, (8) some HEIs do not have enough teaching staff with professional titles such as associate or assistant professors, lecturers, or experts, and (9) financial budget to support school facilities, lecturers' salary, students' scholarships are insufficient.

Additionally, Long (2008, p.4) reaffirmed that quality assurance management in Vietnam's HE had been implemented since 1998, basing on the following regulations: (1) Education Law (1998 and 2005), (2) Regulations to colleges and universities, (3) Decrees from the Government about planning HE network, (4) Regulations about specific requirement to Admissions Colleges and Universities Entrance Examination and Master's and PhD programs, (5) Regulations on academic affairs at HE level, (6) Temporary regulations about quality assurance management in HEIs, (7) Regulations about requirements and procedures to establish new colleges and universities, and regulations on criteria for HE lecturers, curricula, school facilities and others.

Long (2008, p.9) also addresses the quality assurance management criteria in Vietnam's HEIs as presented below: (1) Missions, objectives and visions of HEIs, (2) Organization and administration, (3) Curricula, (4) Academic affairs, (5) Administrative, teaching, office and working staff, (6) Human resources and supports to learners, (7) Research & Development (R&D) and IT transfer, (8) International relations and academic cooperation, (9) Library, teaching and learning aids and other school facilities, and (10) Finance and its financial administration.

Meanwhile, Tho (2009, p.15), when addressing about HE in the present time at an interview with Vietnam Times, said that Vietnam's HE must focus on the education quality. And it is the HEI that is the venue to equip students with self-study and capacities to catch up with new changes in the society.

Thu Thuy (2009, p.4) gave out her speech about Vietnamese education settings when interviewed with Dantri Newspaper recently that it is a must to change the thinking of educational administration from school leaders, in which (1) the school board must implement any methods to evaluate the teaching capacities of teachers, (2) motivations towards teaching excellence have to be launched, and (3) the school board should employ "questionnaires" to teaching (one channel towards quality assurance management) from students, which is considered to be a greater motive for teachers to fulfill their job more effectively.

MOET, Vietnam (2008, p.14) expected the outcomes for the National Strategy of Vietnam education from 2009 to 2020 with the National Major Projects, in which there are (1) compulsory education from kindergarten with children at five years old and maintenance of the illiterate campaign, (2) new curricula, textbooks and teaching and learning aids, (3) new quality assurance criteria and development of quality assurance in educational sectors, (4) professional development towards teaching staff and school administrators, (5) attraction of the contribution from Vietnamese overseas and foreign intellects to teaching, doing research and transferring IT, (6) development of talented students, (7) improvement of quality, efficiency and effectiveness of ethics/morality education in school, (8) establishment of HEIs with departments ranked with international standards, (9) improvement of vocational education, (10) development of educational supports at mountainous and remote areas

and special aids to disadvantaged students, (11) improvement of education and social integration for disabled students, (12) development of school facilities and (13) development of human resource through ICT.

Mekong Delta, a Unique in the South

Mekong Delta (MD) is located at 8°33'-10°55'N, 104°30'-106°50'E; the delta region of the Mekong River from the border with Kampuchea to the sea, including the provinces of Long An, Tien Giang, Dong Thap, Ben Tre, Cuu Long, Hau Giang, An Giang, Kien Giang, Minh Hal and Tay Ninh, Ho Chi Minh City and the southern parts of Song Be and Dong Nai provinces. Can Thi city with Can Tho University also lies in this MD.

The Mekong Delta (Figure 5, p.164) is generally regarded as beginning at Phnom Penh in Kampuchea, where the river divides into its two main distributaries, the Mekong (Tiền) and the Bassac (Sông Hậu Giang). The Mekong (Tiền) subsequently divides into six main channels and the Bassac into three to form the nine "dragons" of the outer delta in Vietnam. The delta comprises a vast triangular plain of approximately 5.5 million hectares, almost entirely below 5m above sea level. It extends for about 270 km from its apex at Phnom Penh to the coast, and has a coastline of about 600 km. Approximately 1,600,000 ha of the inner delta lie within Kampuchea; the remaining 3,900,000 ha constitute the southern tip of Vietnam. The delta is the result of sedimentation and erosion, the sediments varying in depth from at least 500m near the river mouths to only 30m at some places in the inner delta. At the nine mouths of the Bassac and Tiền branches, the combined action of river deposition and the sea has produced a coastal belt of slightly higher elevation. Deposition in the delta continues to extend the Ca Mau Peninsula south and west at a rate of 150m per year in some places.

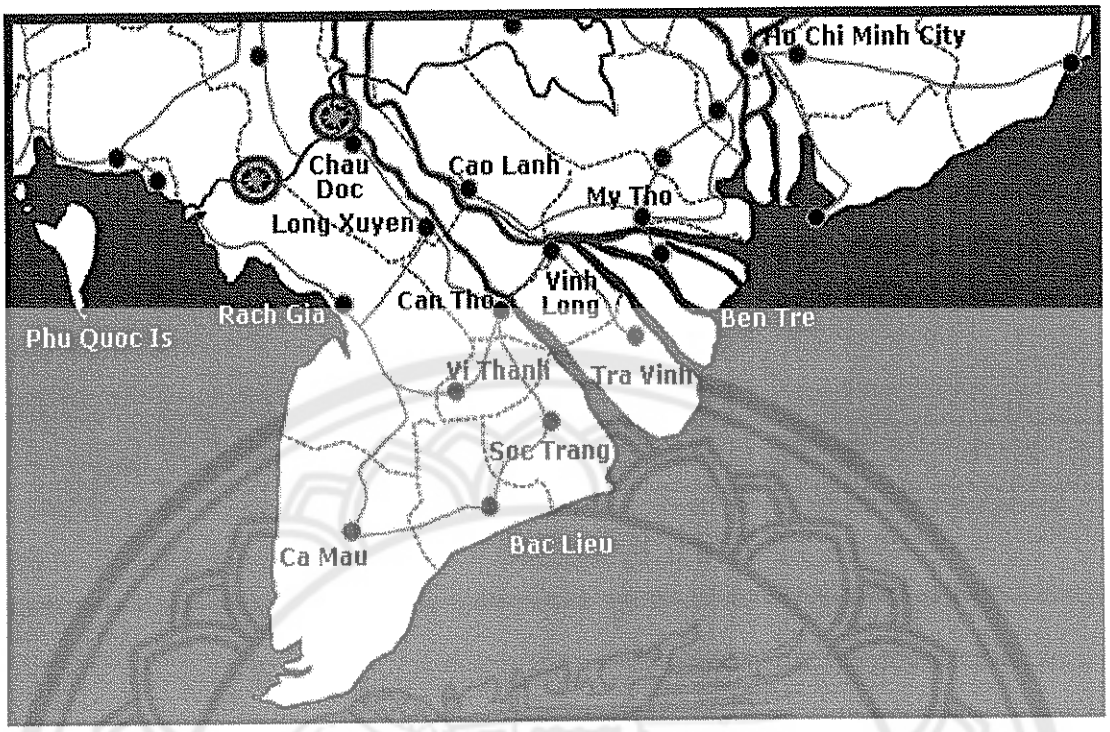

Figure 5 Mekong Delta Map

Source: http://www.travelfish.org

The delta contains about 280,000 hectares of mangrove and Melaleuca forest. The mangrove forest consists of 46 plant species, 38 of which are of some economic importance. In sequence from the sea, the forest is dominated by Avicennia, Bruguiera, Rhizophora and Nypa. The Melaleuca forest consists of 77 plant species, with M. leucodendron predominating throughout. By 1980, 2,474,000 ha of the delta were under cultivation, mainly for rice. Some 40 plant species have been identified in the rice paddies. Can Tho city, the heart of southwest in the Mekong Delta. Can Tho is a province in the Southern of Vietnam, located on the bank of the Bassac River (Hậu river), in the Mekong Delta, 170 kilometers southwest of Ho Chi Minh City. The province neighbors on five provinces: Dong Thap on the Northeast, An Giang on the North, Hậu Giang on the South, Kien Giang on the west, and Vinh Long on the east. Can Tho has a complex of rivers and canals in which Hậu river is considered as the benefactor of the region as yearly floods deposit large quantities of alluvia on the rice fields. That makes Can Tho "the green lungs of the Mekong Delta."

Can Tho has two distinct seasons: the dry and the rainy seasons. The province is endowed with sunshine all year round with a high humidity. There is almost no storm sitting the province. Average temperature is 27°C. Today Can Tho is the city population of 150,000. It is an important industrial and farming center. Local manufacturing industries include shipbuilding, rice processing, textiles, and farm machinery. Other important agricultural goods include coconut oil and sugarcane, and the city's outdoor market sells a wide variety of fruit and marine products. Can Tho is also a fruit basket of the region. Specialties include durian, mangoes, jackfruit, melons, and many shellfish and ocean fish. Can Tho is home to several educational institutions including Can Tho University (founded in 1966), a training college for teachers, and several vocational colleges that teach commerce, finance, medicine, and agriculture the Mekong Delta.

Can Tho University (CTU), its Missions in the Mekong Delta

Cần Thơ University (CTU) (Figure 6, p.166) is a university in Cần Thơ, City, Cần Thơ Province, Vietnam. This is a multidisciplinary university, a leading university in the Mekong River delta region of Vietnam.

CTU, an important state higher education institution in the Mekong Delta, is the cultural, scientific and technical center of the MD and Viet Nam. Since its founding in 1966, CTU has been improving and developing itself. It has an enrolment of 35,038 undergraduate students, 1,806 students have been following Master courses, and 40 students are PhD candidates. CTU has got 1,908 staff including 927 teaching staff and 981 supporting staff. From a university with a few fields of study at the beginning, it has developed into a multidisciplinary university. Currently, it has 77 undergraduates, 28 Master and 8 Doctoral training programs. Every year CTU receives students on internship programs from the U.S, Belgium, Japan and so on, or under agreements between their universities and CTU.

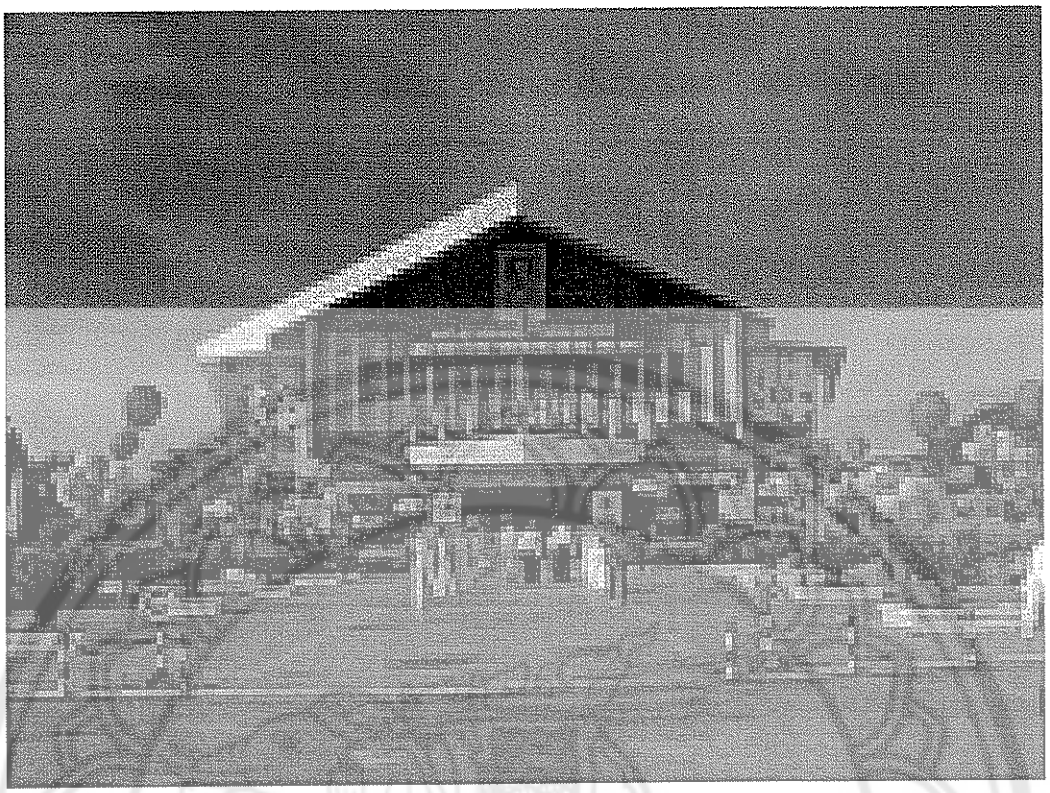

Figure 6 Can Tho University, Great Hall

Source: http://www.ctu.edu.vn

Can Tho University's main missions are training, conducting scientific research, and transferring technology to serve the regional and national socio-economic development. In addition to its training responsibilities, CTU has actively taken part in scientific research projects, applying the advances in scientific and technological knowledge to solving problems related to science, technology, economics, culture and society in the region. From achievements in its scientific research and international cooperation projects, the university has developed a variety of products and technological production processes that benefit people's lives and promote export, thus helping the university gain prestige in national and international markets.

The university has established scientific and technological cooperation with many international organizations, universities, and research institutes. As a result of these cooperative projects, the staff's administrative capabilities and specializations have been upgraded. The facilities, experimental equipment, and scientific materials have also been added. The facilities of Can Tho University are located in three places:

1. Campus I (30 – 4 Street): with an area of over 5 hectares, is being used as guest houses, the accommodation for staff members, and the office and classrooms of School of Economics and Business Administration.

2. Campus II: (3 – 2 Street): with the area of 87 hectares, contains the main classroom buildings of the university, Rector board buildings, all schools/colleges, institutions/centers, departments/offices served teaching staffs and students.

3. Campus III: (No 1, Ly Tu Trong Street): with the area of 0, 65 hectares, is serving for College of Information and Communication Technologies and its services.

Can Tho University academic units are of School of Education, School of Law, School of Economics & Business Administration, School of Pre-University, School of Political Sciences, School of Sciences, College of Agriculture & Applied Biology, College of Engineering Technology, College of Information &Communication Technologies, College of Aquaculture & Fisheries, College of Environment & Natural Resources, Biotechnology Research & Development Institute, Mekong Delta Development Research Institute, Hoa An Bio-diversity Research & Experimental Center, Center for Foreign Languages, and Learning Resources Center.

And the supportive units are composed of Department of Administration and Planning, Department of Academic Affairs, Department of Scientific Affairs, Department of International Relations, Department of Personnel, Department of Political Affairs, Department of Financial Affairs, Department of Facility Management, Construction Management Board, Department of Student Assistance, Department of Legality, Services Center, and Quality Assurance Center.

For *annual registration qualifications*, every citizen of the Socialist Republic of Viet Nam, regardless of male or female, religion, ethnic group, family background, and socio-economic status has the right to take the entrance exam if he or she meets the following qualifications:

1. Graduation from a high school, a school equivalent to a high school (supplementary high school) or a vocational high school.

2. Being healthy enough to study and to work.

3. Being within the allowed age to take the entrance exam at universities which have an age requirement (e.g. the Universities of National Defense, Police, Procuracy and some universities for gifted students).

4. Being a permanent resident of the area where the target university is located if he or she decides to register at a university which has regulations about geographic recruitment areas.

5. Submission of all the necessary documents and exam fees to the target university on time in accordance with MOET's regulations.

6. Being present at the exam place at the exact time stated on the exam permission form sent to the student.

7. Acting soldiers or policemen can only take the entrance exams for the universities which are regulated by the Ministries of National Defense or Police and only after obtaining permission from their organizations to register.

8. For the time of recruitment, CTU schedules the annual entrance exam for the beginning of July. Three months before the exam day, the Ministry of Education and Training publicly declares the number of students that will be recruited by each university and in what disciplines. And the blocks for the university entrance examination, every year Can Tho University has 4 recruitment blocks:

8.1 Block A (Group A/ Stream A) includes: mathematics, physics and chemistry.

8.2 Block B (Group B/Steam B) includes: mathematics, biology and chemistry.

8.3 Block C (Group C/Stream C) includes: history, literature and geography.

8.4 Block D (Group D/Stream D) includes: mathematics, literature and a foreign language.

The Ministry of Education and Training decides the number of students recruited annually.

For *the tuition fees and scholarships*, being based on decision number 241/Ttg by the Prime Minister, all students have to pay tuition fees. There are several types of scholarships. Some are granted on the basis of academic achievement and others are awarded according to need and social policies. The amount awarded varies. The decision to grant a scholarship to any student in the first semester of the undergraduate program is based on entrance exam results. From the second semester on, scholarships are granted based on students' extended average scores of the previous semester, which are the total of the average scores from courses and training completed. Students who receive financial support from social welfare are provided with scholarships throughout their studies at the university. The tuition fees for all training programs (disciplines) are announced by the university at the beginning of each academic year.

Here are *Undergraduate Programs:*

1. *College of Agriculture & Applied Biology* offers courses: Crop Sciences, Agronomy, Animal Sciences, Veterinary Medicine, Food Technology, Land Management, Soil Sciences, Plant Protection, Ornamental Plant & Gardening.

2. *College of Aquaculture and Fisheries* offers courses: Aquaculture, Fisheries Management, Marine Biology, Aquatic Animal Health Management, Fishery Economics, and Fishery Product Processing Technology.

3. *College of Information & Communication Technology* offers courses: Information System, Software Engineering, Computer Network and Data Communication, Computer Science, Information System Management, Bilingual Informatics Engineering (in French-Vietnamese instruction), Informatics Engineering from college level program, and Informatics Engineering at college level program.

4. *College of Sciences* offers courses: BSc of Chemistry, BSc of Biology, and BSc of Applied Mathematics.

5. *College of Environment and Natural Resources* offers courses: Environmental Sciences, and Environmental Engineering.

6. *College of Engineering Technology* offers courses:

Mechanical Engineering, Manufacturing Engineering, Food Processing Engineering, Transportation Engineering, Building Engineering, Civil Engineering for Rural Development, Bridge and Road Engineering, Control Engineering, Electronics

and Telecommunication Engineering, Computer Engineering, Hydraulic Engineering, Chemical Engineering, Electrical Engineering, Mechatronics, Industrial Management

7. *School of Economics and Business Administration* offers courses: Accounting, Accounting- Auditing, Finance and Banking, Corporate Finance, Business Administration, Marketing, Tourism and Service Management, Agricultural Economics, Commercial Management, Environmental and Resource Economics, Foreign Trade, and Economics.

8. *School of Education* offers courses: Mathematics Teacher Education, Physics Teacher Education, Chemistry Teacher Education, Biology Teacher Education, Geography Teacher Education, Language and Literature Studies, History Teacher Education, Vietnamese Literature and Linguistics Teacher Education, Math – Informatics Teacher Education, Physics – Informatics Teacher Education., Tourism, English Teacher Education, English Language and Literature Studies, French Teacher Education, Primary Teacher Education, Biology and Agricultural Technology Teacher Education.

9. *School of Law* offers courses: Administrative Law, Judicial Law, and Commercial Law.

10. *School of Political Sciences* offers only the course Civics Teacher Education

11. Institute of Biotechnology Research and Development offers courses: Biotechnology, and Advanced Biotechnology.

12. Institute of Mekong Delta Research and Development offers only the course Rural Development.

13. Learning Resource Center offers only the course Library Information Management

14. Department of Physical Education offers only the course Sport Teacher Education

And the following are Graduate Programs:

1. *Master's Degrees* (2-3 years) consist of courses: Soil Sciences, Crop Sciences, Animal Husbandry, Veterinary Medicine, Plant Protection, Food & Beverage Technology, Post-harvest Technology, Aquaculture, Information System, Mathematics, Physics, Chemistry, Ecology, Environmental Sciences, Environmental

Management, Principles and Methods of Vietnamese Language and Literature Education, Principles and Methods of English Language and Literature Education, Principles and Methods of French Language and Literature Education, Viet Nam Literature Studies, Business Administration, Agricultural Economics, Finance – Banking, Biotechnology, and Rural Development.

2. *Doctoral Degrees* (3-4 years) offer courses: Soil Sciences, Animal Husbandry, Crop Sciences, Plant Protection, Marine Aquaculture, Freshwater Aquaculture, and Microbiology.

In terms of *scientific research*, CTU has earned a good reputation for practical scientific research and the quick transfer of laboratory results to production fields. Scientific research programs executed by the University faculty are of different types:

1. Work requested by local communities as well as by NGOs.

2. National multi-disciplinary research programs financed by the central government.

3. Programs supported by international organizations such as FAO, IRRI, and various NGOs or in collaboration with regional or foreign universities and research institutes.

4. Twelve prioritized research programs : Biotechnology on plants and animals, Biotechnology on disease control, Natural resources conservation, Extraction technology, Teaching methodology, Market studies, Rural planning and development, Information technology, Agricultural mechanization and automation, New material sciences, Post harvest reservation and processing, GIS-Natural resources management.

Most of the scientific researches programs carried out by CTU are of local or national importance, but much attention has been paid to basic research, particularly in areas related to local conditions.

In the field of *international relations*, it is a one of CTU's greatest strengths. Thanks to international collaboration programs, CTU has improved its management, planning, teaching, research. Funds from these programs have also been used to improve the University's facilities and infrastructure. Currently, CTU is working cooperatively with more than 80 institutes, universities, and organizations worldwide, particularly those from Australia, Belgium, Canada, Denmark, England,

Finland, France, Germany, Japan, the Netherlands, Norway, Sweden, and the USA. Cooperation with Asian nations such as Cambodia, China, India, Laos, Malaysia, the Philippines, Singapore, Thailand, Taiwan, etc. has been diversified and developed.

The Department of International Relations is the unit founded to manage the CTU's cooperative projects. The department is also responsible for three missions of international cooperation including: Tropical Semester program, Mekong 1000 project and the Overseas Study Consultancy Center.

1. Tropical Semester is a special program designed for international students which introduces tropical environment and livelihood and helps students explore the cultural life in the Mekong Delta.

2. Mekong 1,000 Project: is a project of training staff abroad for graduate levels to promote the process of industrialization and modernization in the Mekong Delta, Vietnam.

3. Overseas Study Consultancy Center consults people who want to study abroad and helps in processing overseas studying procedures.

In the era of globalization, the Vietnamese education is being influenced as other developing countries in the world are. The national education reforms since the early 1990s with many major changes have been seen (Mac Cargo, 2003). Obviously, the country is also facing challenges and opportunities. First, taking about the challenges, Mac Cargo (2003) states that the reforms had resulted in a rapid increase in numbers of students, numbers and types of educational institutions and courses of studies at all levels of education. He adds that; however, the national education system seems to be facing deterioration in quality.

At the same token, Quoc Hung (2007, p.6), when writing his article entitled "An Overview of Vietnamese Higher Education in the Era of Globalization: Opportunities and Challenges" conveyed the five challenges, which included the comparability of quality and standards, the multi-nationalization of higher education, the problem of brain drain, the problem of intellectual property and maintaining a university as a learning organization. And mentioning about the roles of the leaders in the transformation in Vietnamese higher education, Quoc Hung (2007) suggests that Vietnamese universities need a radical transformation to improve the quality and effectiveness of education in order to meet the diversified demand for human

resources. In the context of Can Tho University, Vietnam, the author also puts out his suggestions on this matter that Can Tho University leaders, in spite of following the directions from the Vietnamese Ministry of Education and Training, need to empower the practice of educational decentralization at department levels in terms of vision sharing.

In the context of opportunities towards higher education environment, when being asked from Viet Nam News on May 31, 2006, Deputy Minister of Vietnamese Education and Training, Tien Long said that the overall objective of tertiary reform in the next 15 years (the country's global integration plan for education from 2006 to 2020) would be to achieve basic changes in the quality and scope of the system so that it could respond to the socio-economic development and the people's demands for further studies.

Also at this interview with Viet Nam News at the same matter, former Rector of Can Tho University, Prof. Dr. Le Quang Minh expresses that if the Vietnamese Ministry of Education and Traning (MOET) set a target for the Mekong Delta (in the south), in which Can Tho University is located, to reach the national average knowledge level and human recourses development indicators by 2010 and compare it with the Red River Delta (in the north), the Vietnamese government would build at least one university of technology and a training center in the region to produce highly-qualified human resources. And he adds that the government should channel more money to turn Can Tho University into a regional institution.

Meanwhile, discussing transforming a university into a learning organization, Quoc Hung (2007, p.7) emphasizes that institutional leaders and managers should take active roles to initiate significant changes. He points out,

> ...This is, especially, important at Can Tho University, and most Vietnamese universities, where the bureaucratic management style is still popular
>
> (Quoc Hung, 2007, p.7)

Also, Quoc Hung (2007, p.8) posed a couple of *challenges* as follows: (1) The University has still organized instructions and measured students' results via their mastery of the subject matters. Then, the university curricula still focus on abstract, formal knowledge rather than on practical and experiential knowledge, causing the gap between school and reality, (2) The university is still on the practice of the teacher-centered approach, (3) Technology, especially the use of internet, has not been used effectively due to the lack of computer literacy and English. Many older and middle-aged lecturers are not adaptable to modern technology, and students are not well trained, (4) Time consists, a major barrier towards teacher learning, research doing and school change, (5) Salary is another problem, and (6) Budget from the government is not sufficient. University needs to do money rising from other sources.

Hung Phong and Phuong Hoa (2007, p.6) said that school - teachers - students - education management systems were the components of the education system. The final target of the education was to create useful "products" for the society. Therefore, students should be the central focus of the education. However, the role of teachers, educational institution and education management system are significant for creation of high quality "products." All these components are linked and influence each other. There can not be a good student without a good teacher. Poor condition of the school environment would undoubtedly affect teachers' and students' state of mind. The importance of education management system should also be stressed. All these systems are directly influences by the education system. If education environment is deprived and has signs of degradation, than it would certainly have an adverse impact on teachers, students and education cadres. By contrast, favorable educational environment would be a driving force for the development of the education.

In some suggestions on Vietnamese education system, Hung Phong and Phuong Hoa (2007, p.6) expressed that it was clear that educational problem was very complicated. For a long time the government and society were tossing about to find the "exit" for education. The questions which were put forward are: how to build an efficient education system? Which model should be used? These are the urgent issues for Vietnamese education, which have been intensively addressed. In our subjective opinion, there are two ways. One of them is so-called "planned approach," which is

based on organizations and people who have the power to plan and create rule that education have to follow. The second strategy is to liberalize the education, similarly to market economy. Superiority of the "market -driven" strategy to the "planned" have already been proved on the example of the economy. Why not, try this method on the education? One of the great achievements of humanity is the model of "three powers should be divided." In order to have a steady system, it should have the mechanisms that would create the symmetry and balance each other. If the power is not distributed and the mechanisms do not counterpoise, it will be easy to loss the balance. Having the above in mind, education could be restructured as follow: (1) Ministry of Training and Education should be a directing organization which has a role to give an orientation. It should have a function of creating regulations (legal system), establishing the system of criterion and standard that given rules are followed. Using this legal system and standards the Ministry (Government) can set the direction for the education. (2) Educational institutions should be allowed to have maximum initiative so they could make their own decision, choose their own model and direction. (3) Assessment institutions and media should reflect the real situation in educational Institutions. (4) The government and society should join to support the education financially. This process should be democratic and public.

And Dan (2008, p.8) put down his ideas that according to CTU report (2009), this institute is launching seven major projects for the period of 2008-2010, in which there is (1) implementation of high biotechnology and technology, (2) development of social, cultural and educational research, (3) implementation of ICT, (4) management of environment and natural resources, (5) development of technological engineering, (6) improvement of food processing technology and product protection after harvest, and (7) research on economic and marketing development.

In conclusion, change at the individual level depends on the capacity in order to gain new skills, develop new attitudes and come to new understandings. This is a lifelong process for teachers to develop. The school leaders may recognize that the process of change requires both pressure and support. The lifelong learning must be the goal of fostering learning in students.

Indeed, the practice of change management in educational field in Vietnam in general and in Can Tho University in particular is going through both challenges and opportunities. And the deep research about Can Tho University administration is one of the main tasks that this dissertation writer would like to carry out.

And importantly, all the above-mentioned issues have helped to create a Global Educational Change Management Model and later Can Tho University (CTU, Vietnam) Change Management Model in ESD in HE level with main factors, sub factors and elements to be proposed to implement in this venue in the long run.

Conceptual Framework of the Study

This was the literature which was grouped into a "frame," helping to create strong supports of information with factors, sub-factors and its elements in the model. And the frame would be used to set up independent and dependent variables leading to the research methods and results of the study later.

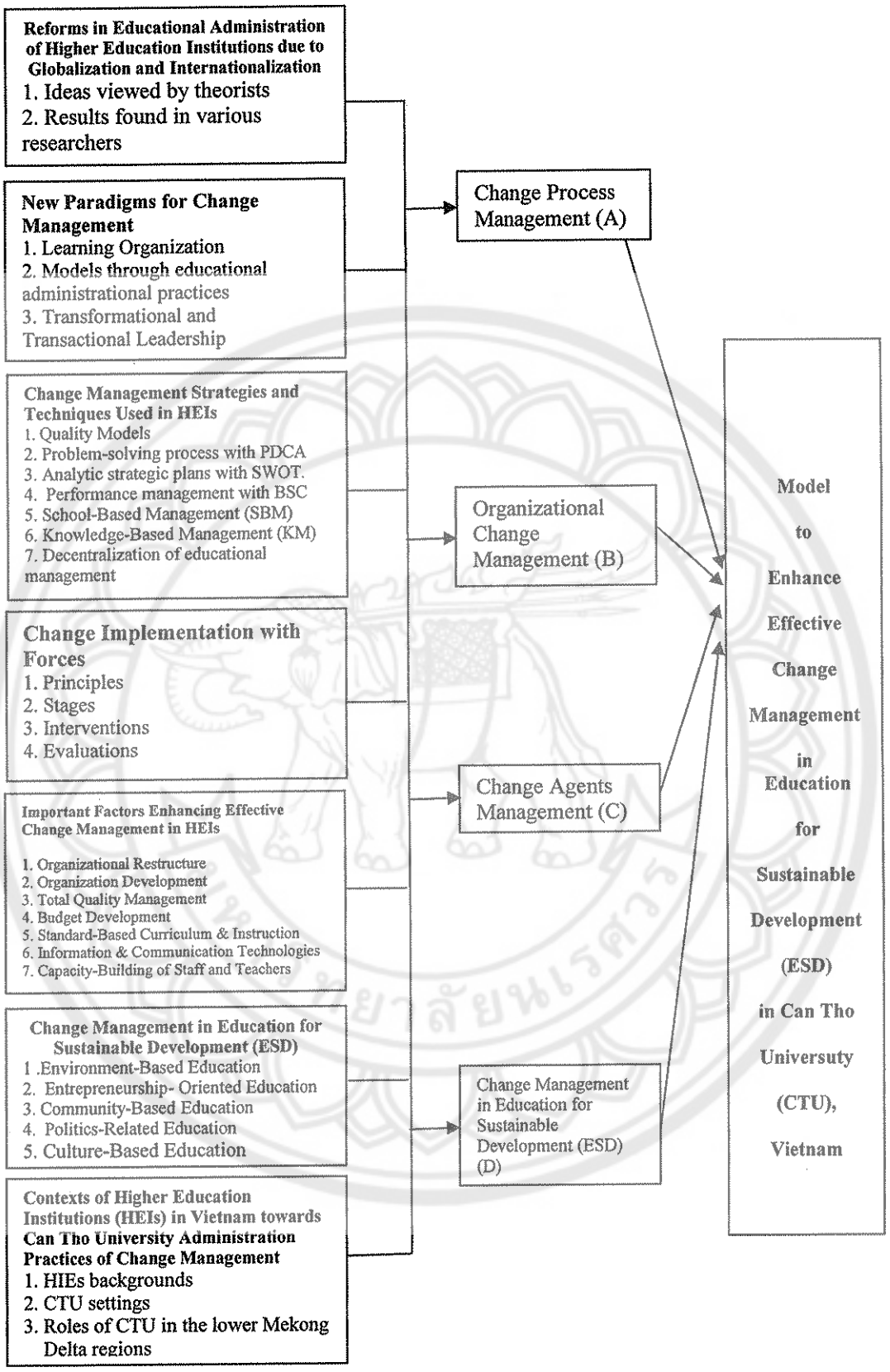

Figure 7 Conceptual Framework of the Study