# Open and Distance Learning Institutions in Thailand: Lessons for the Philippines

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#### Introduction

In developing countries, particularly in Southeast Asia, human resource development is significantly vital since it not only increases the quality of trained manpower vis-à-vis national needs but also improves the quality of life and work for the people. With the development of human resources comes a surge of potentials for the people, which in turn, stimulate higher education requirements. However, due to the scarcity of resources, opportunities for education in the tertiary level become limited. Under an environment of insufficiency, disparities in educational opportunities naturally occur. Such circumstances necessitate the provision of unconventional directions to higher education. Diverse styles and systems have been explored in efforts aimed at democratizing education to address such inequalities. In Southeast Asian countries, open and distance education is now being considered a key component to a holistic educational reform agenda to provide a wider and more equitable access to educational opportunities.

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## The Concept of Distance Education

Education is the key that opens doors to various prospects for advancement whether as individuals or as nations. A properly educated populace is a significant rod to steer the country towards the road to sustainable progress. Similarly, a highly skilled and educated labor force is better equipped to contribute to national growth and development. Studies on the strategies of high performing Asian economies such as Japan, Korea, Taiwan and Singapore have shown that human resource development, specifically through education, does lead to economic growth.

Management expert Peter Drucker observed that knowledge has become the true "capital" since access to good jobs and career opportunities increasingly requires a college diploma. As such, he pointed out the need for continuous education at every stage of a person's life. This concept of lifelong education—one in which education is considered to be an essential factor for human existence—implies, in turn, the need for universities to consequently provide easy and open access to education.

In an effort to make higher education available as widely as possible, several models and approaches were brought to the fore. The first model envisions a multi-campus university system where component units of a single university would be strategically located in densely populated parts of the country. The second model involves the establishment of universities in geographical regions of a country. The third model prescribes the establishment of institutions as community colleges or under the auspices of local government units. The fourth model encourages the promotion of extension studies. But while all these systems tend to expand educational opportunities significantly, the issue of inequity remains unresolved.

Against this backdrop, a distance education model evolved and later adopted in several countries as an alternative delivery system so that the democratization of higher education can finally be realized. With this, education can now be acquired at the students' place and pace. Integrated university-level courses can now be utilized to upgrade the skills of working adults in government and business organizations. The system affords high school graduates who live in far-flung rural areas the chance to work and study at the same time. And for those who just want to gain additional knowledge, they can take advantage of relevant courses without necessarily enrolling for a degree or certificate program.

The terms "distance education" and "open learning" have been used with an array of descriptions. "Distance education" is defined as an educational process where a significant fraction of teaching is conducted by someone remote in time and place from the learner; and where a combination of educational media from print to radio/TV broadcasts, video recordings and new information and communication technologies (ICT) may be employed. However, opportunities for face-to-face study and interactions are also provided.

"Open learning," on the other hand, generally refers to the practice of making learning available to students regardless of situation or station. In some countries open learning is synonymous with distance education while in other countries, a mix of methods, which include chalk and talk, face-to-face sessions and multimedia interventions are utilized for mass education. The notion of "open" universities implies the practice of distance learning techniques. However, in some countries such as the UK and Israel, it is taken to mean as "open" access to the university where there is no matriculation prerequisites and everyone can register to be a student (Ai Mee, 1992).

In this study, the term "open university" does not imply an "open access university" but rather an institution where students are taught at their own space and pace utilizing distance education techniques and media. Its main focus is on distance learning at the level of tertiary education. Sukhothai Thammathirat Open University (STOU), officially recognized as Thailand's lone open university due to its long experience in distance education delivery, served as the benchmark for analysis. Ramkhamhaeng University (RU), which is widely accepted in Thailand as an open university even though it does not conform strictly to the definition, was also cited due to its "open learning" practice.

# Challenges to Distance Education

There is usually an inclination to evaluate open universities visà-vis traditional universities. There are doubts and concerns as to the quality of print and media instructional materials for the courses as well as to the level of achievement acquired through distance education. The experiences of countries that have institutionalized distance education at the tertiary level show that there are several critical issues that have to be confronted,

the most pressing being the question of necessity and for whom it should be made available.

In Asian developing economies where resources for education are relatively scarce, creating conventional universities to admit a burgeoning population entails huge costs, and therefore, limits the opportunities for education. In the present knowledge-based economy where the level of a country's economic and social development is linked to its human resource stock, it is essential to have a delivery mode that will allow a vast majority of young adults and working people broader access to education and training while busy with their jobs and personal responsibilities. A distance education system, therefore, can be an effective, economical alternative to traditional settings.

The system, however, has to satisfy the rapidly growing need to educate two target populations—adults and secondary "school leavers." The problem can be quite complex considering that within these groups there is a diverse range of maturity, motivation, background and lifestyles. Working adults, for instance, may be content with an external study system that allows them to continue their normal occupations. The young adults who are used to face-to-face teaching and are yet to be employed, on the other hand, may prefer to be residential students of conventional universities. In fact, practitioners widely attest to the popularity of distance education system among working adults.

The need to establish an appropriate distance education, however, comes as relevant as the issue of necessity and target clients. Those responsible for planning will most likely review blueprints and look into reputable distance education institutions as models. And doing so, they may come to realize that instead of adopting existing models, it is more viable to work out a distinct structure appropriate to our country's organizational culture and socioeconomic milieu.

The question of quality is a controversial and real concern. Academics and employers who themselves have been educated in the traditional system tend to doubt whether it is actually possible to teach effectively at a distance. This is in spite of the fact that several distance education institutions have already shown that the quality of its graduates are comparable, if not better, than those from conventional universities. The concern is more on how to gain respect and convince the public of the effectiveness of this innovation.

Unlike other innovations, the recognition of factors for success is constantly the main point of interest. The success of delivering higher education via the distance system will rely significantly on an institution's personnel, in particular the academic staff. However, in developing countries even conventional universities have difficulty finding qualified staff and teachers. For distance education institutions, there still exists the problem of reorientation from the traditional educational practice even if all cautions have been taken to enlist well-qualified personnel. The tasks of turning academics into enthusiasts and experts of distance learning can be both daunting and demanding so aside from being qualified they must also possess exceptional skills and courage.

During the last three decades, interest in distance education continued to mount as its practice became more widespread. Asian countries have made considerable inroads into the open and distance learning system at least within their national boundaries. While the emergence of open universities in the region shows promise of an adequate supply of well-educated people, the reality is less comforting. Distance education, as an innovation that will bring about the democratization of education, remains to be an aspiration that is easier said than done.

# Lessons from Thailand: Quality Assurance in Distance Education

The key learning experience imbibed from the open and distance education practices in Thailand focuses on improving the quality of distance education by dealing with such issues as size, clientele, content and modes of delivery.

The concern for quality, especially in higher education, is articulated in planning documents, policies and guidelines, and holds true for even the best academic institutions. From its forerunner, the UKOU, to Asia's model in Thailand, the STOU, the recurrent discussions on distance education zeroes in on quality. The emergence of distance education has impelled a growing recognition of the need to ensure quality to meet the people's educational demands and the country's development requirements.

But in distance education, will relevance be the criterion for quality? Most open universities were established initially because of urgent needs. Approximately 85% of the 180,000 students of STOU are working adults. STOU has strongly emphasized not only its degree,

diploma and certificate programs but also its continuing education and outreach programs. However, there is a tendency to compare distance education universities with conventional universities. Concerns are raised over the quality of print and media materials for the courses, as well as the level of success achieved in distance education. But these views, while essentially valid, do not constitute a proof that one approach is better than the other. Interestingly, studies even indicate that STOU graduates are doing equally well, and in some cases even better, in postgraduate entrance examinations and in the workplace than graduates of conventional universities.

Quality is relative. Yet, upholding quality must be an enduring vision. The interim benefit of "mass education," in which numbers become the main parameter of success, must not eclipse the need for quality. Adherence to quality implies that its implementation is ensured at all levels—in the development of learning materials, modes of delivery, student support systems, training of personnel, and monitoring and evaluation.

# Development of materials

A good number of materials have been developed and found to be well-suited for Asian countries. However there is a need to look into the manner and extent to which these materials can be utilized, as well as the presence of collaborative institutions where both new and existing programs can be developed. The setting up of a materials reservoir in Asia could facilitate access to materials for their direct use or development as prototypes to address country-specific learning needs. Since students of open universities are expected to study independently, the quality of the course materials is of utmost importance. In conventional universities, teaching is dependent on the quality of lecturers and varies not only between institutions but within colleges and departments. Likewise, students' oral expression and language proficiency are necessary skills to understand and interact during lectures. In open universities, however, students learn at their own pace utilizing the same materials, be it print, audio or video.

In open universities, materials are prepared and used for a certain period of time with revisions generally planned within five to eight years. A great deal of attention is poured into the production of quality interactive materials because, unlike students in urban areas who have tutors and study groups, students in remote and isolated areas have only the course materials for teachers.

Good open universities come up with first-rate course materials that address the learning needs of the students. In fact, some of the best university teaching course materials are published by open universities such as STOU and adopted by many conventional universities as prescribed text materials. While good materials do not necessarily produce good students, their effective use is counted on to ensure high-quality distance learning

A committee is tasked to oversee STOU course development and course writing is contracted, not just to its faculty, but to the nation's academic experts who are all at the top of their fields. Course development is time consuming and costs are particularly high in the multimedia aspect of distance education delivery. It involves not just the writing of books and study materials but also the production of audio, audio-visual, and computer aided materials for student teaching. In STOU, the bulk of the production such as printing, video filming and broadcasting, are done in-house.

Since quality must be guaranteed throughout the development and production of materials, it is necessary to have strict quality control procedures in the writing of books and the production of multimedia teaching materials. But the huge production outlay is an issue open universities must contend with if it is to maintain quality. There are feasible ways of cutting down on cost such as by adopting an in-source/out-source mode of production for books and multimedia materials. The open university staff may organize and supervise materials production in collaboration with writers from other universities and media specialists from other sectors. Editing, layouting and desktop publishing may be done in-house while actual printing may be contracted out to commercial printers. Radio and television broadcasts may be farmed out to government networks on special reduced rates since the government also has a stake in providing education to its citizens.

The range of activities in course production—from conception to curriculum planning and design; development of print and media materials; and the production, storage and delivery to students—is a major logistic undertaking involving significant manpower and space requirements. However, minor operations running on personal computers and desktop printers appear to be more cost-

effective depending on the bulk of orders and may be ideal for small institutions.

Depending on the needs of target clients, curriculum design and development is often country-specific. Materials from other countries require not only translation but some adaptation to make them suitable to the culture and context of the adopting country. The STOU experience shows that it is far more expensive to translate and contextualize foreign learning materials than to develop them locally. This problem is more evident in the Humanities where geographical, historical and cultural norms determine the variations in the learning and teaching of courses. It may be less apparent in science, technology, and business courses.

However, the solution is not for open universities to focus exclusively on writing country-specific materials but in the modular presentation of the curriculum. The curriculum planning stage must identify "common" and "country-specific" content in the text and exercises. The "common" modules can be used integrally while the "country-specific" part can be adapted to suit a particular culture or context. The vision of curriculum planners should be to make the world their market.

## Delivery modes

The existing genre of distance education deviates from its correspondence school predecessor in a variety of approaches designed to deliver educational materials. But in several open learning institutions in Asia, the strong influence of the print and correspondence-based model still remains. STOU has taken advantage of high-end communications technology through radio and television programs in its efforts. Nevertheless, the use of new information and communication technologies has yet to be utilized to effectively and extensively deliver education at a distance.

Distance education can be made more interactive and less remote through the creative and innovative use of currently available information and communication technologies. The use of videos and computer-access terminals along with fiber-optics, broadband, wireless fidelity (wi-fi), online delivery and teleconferencing devices have nowadays become more common.

Since cost may be a constraint for many developing countries, distance education institutions may consider forging ties with technology providers in the regional and national level. Technology should not drive distance education to change and adapt but rather to enhance learning. Moreover, its utilization must be carefully planned to harness its potential for mass access and enhance educational experience.

### Student support systems

Another characteristic feature of distance education is the presence of expansive student support systems. Tutors who are subject specialists are assigned to students. Face-to-face interactions are interspersed with telecommunication contacts. Systems for giving advice on courses and assigning counselors to assist students with course problems have been observed. It was found that the efficient implementation of a sensible student support system results in high success and low attrition rates because students studying on their own also need assistance and guidance with their course work from time to time.

# Training of personnel

The quality of support systems relies to a great extent on the quality of personnel. Since majority of the staff of distance learning institutions usually come from the conventional sector of education, training is necessary for them to acquire the needed skills to manage and deliver quality distance education.

Since well-established distance education institutions already have well-trained staff and extensive support systems, a coordinated regional training program in Asia will prove useful. Moreover, regional training programs should provide stakeholders access to materials such as training indices and manuals so that workshops can be carried out in-house and within each country.

Since open universities have diverse natures, the training program must cover the entire range of student support services. Both administrators and staff alike require training in market-orientation and marketing skills. In STOU's case, a center was established to handle all admission and enrollment inquiries. Staff training is also necessary in the administration of examinations and the organization of graduation exercises to a large number of students.

Distance education entails self-study using easy to understand, interactive materials. In other words, in coming up with distance learning course materials educators need to stretch their imagination and creativity a little. Consequently, training is necessary in the areas of course development and course adaptation.

Adopting the distance education system has not been easy in Asia where self-instruction is relatively new and uncommon. But the training of student support staff as tutors, counselors, and advisers has been crucial to its success. While there is a surge in self-education in developing countries, however, universities engaging in chalk-and-talk, note-taking, rote-learning methods are still predominant. Since addressing the needs of the learners is a basic principle behind distance education, the collection of course content must be made accessible across distances, space and time. The tutor then takes on the new role of link and guide, and has to be familiarized with the task of directing students through self-instructional courses.

#### Monitoring and evaluation

Aside from examinations, assignments based on question and answer strategies are also fundamental means to monitor student learning and assess achievement. The development of a computerized test bank for each course from which questions for monitoring and evaluation may be drawn is an approach that could work in the Asian setting.

Students who engage in self-study should be given detailed feedback on their performance. Similarly, course coordinators and tutors need feedback on the quality of their instruction. Institutions also require this information to be able to improve courses and identify areas where staff training is still needed. At the onset or at least at the planning stage, therefore, a system of monitoring and evaluation should be instituted.

# Not so Distant Prospects: Specialization and Convergence

# Inclusion of Science and Technology Courses

An exciting field that is emerging in distance education is science and technology teaching. There is much potential in the area of

technological advancement and it augurs well for open universities in Asia to start or expand in the direction of technology education. Since open universities were put up to provide access to education, it is but imperative for distance education institutions to respond to the needs of a rapidly changing society.

Finding science-based courses too difficult for a start, most open universities in developing countries initially offered just humanities and business courses. But with increasing demands for science and technology professionals in Asia, there is clearly a need to address the challenge of science and technology teaching if distance education institutions are to be at the cutting edge of education.

STOU students experience practical training and go out to observe work procedures in various academic, professional, and vocational institutions. Collaboration allows them to utilize the laboratories of partner institutions in the evenings and on weekends. The development of home kits that can be used along with the teaching materials is another approach worth emulating. Loaning these science and technology kits to students is also a cost-cutting strategy. Nevertheless, the high cost of developing and providing practicum kits must be weighed in context to the benefits of educating more people in very relevant technical fields. Governments must also take into consideration the possible socioeconomic implications of having an oversupply of business and arts graduates who face bleak prospects of getting employed.

# Continuing Professional Education

While technology-based training is necessary, change demands the incessant and systematic acquisition and development of knowledge through continuing professional education. The high economic and opportunity cost of upgrading their education serves as a greater impetus for distance learning for working adults who can ill afford to quit their jobs.

The continuing education programs presently offered by most open universities in Asia are in the fields of business and public administration, education, resource management, and support services for national development. But despite the calls for the continuous upgrade of these programs, the future of continuing education now shifts to the fields of engineering, technology and

the sciences. These continuing education programs must be taught with the assistance of media and computers to keep technology-based professions abreast in their fields of expertise. The drive to provide updated professional courses is as beneficial to the open universities as it is to the workforce and the country. There is a need for open universities to modernize to stay relevant for the task of providing continuous education. The conscientious worker who receives training, on the other hand, benefits by learning new skills relevant to the labor market. Finally, the country gains from a working population that has kept itself from being redundant in spite of the rapidly changing technological advancements.

# **Postscript:** A Framework for Open and Distance Learning Systems in Developing Economies

### Policy and Planning: At the Core of Change

The British Open University, the UKOU, has been established in 1969. Almost half a century after its inception, interest in distance education has flourished and its application has expanded. The UKOU has paved the way for distance education to gain the needed legitimacy and technical expertise. However, technological advancements, globalization and "time-compression" have encouraged conventional universities to offer courses online that may eventually threaten distance education's competitive advantage. If open universities are to survive, careful consideration should be taken to strategically plan towards a strengthened educational service and quality to fulfill the fundamental task for which they were originally envisioned—the democratization of education.

The significance of this educational innovation finds recognition in the policies and practices developed by international agencies such as UNESCO and the European Commission, and funding agencies such as the World Bank. Policy for open and distance education in the public sector, while increasingly influenced by the private sector, are formulated at international, regional, national and institutional levels. Institutional and national policymaking levels, however, do not have well-defined margins. Taiwan's experience shows that while the decision to allow its Open University to offer full degrees was made at the national level, it followed the experiment of the university and was assumed to be influenced by the university's own wishes (Chung, 1999). On the

other hand, the government remains to be the most significant policy maker despite of globalization and has set up the most number of distance education institutions. These institutions are subsequently regulated by bodies which derive their authority from governments. Consequently, government policies for education did not apply solely to funding but extends even to administration and regulation. Policymaking at the regional level is often geared towards enhancing regional competitiveness and meeting needs that are common across the regions. Recently, however, international agencies have widened their participation in many significant areas either by financing policy actions or by facilitating international knowledge exchange (Perraton, 2003).

# Important Issues, Crucial Choices

There are basically three inclusive arrays of critical issues that precede policy formulation in open and distance education. The issue of funding comes first. Matters concerning institutional structure, management, regulation, and the relationship with the rest of the educational system, come next. Finally, there is the need to specify the clientele and the intended purpose.

# **Funding**

In economic terms, the cost effectiveness of distance education programs cannot be denied and should be looked into more closely by Asian countries like the Philippines where financial resources are limited. Financing distance education is an intricate matter as open universities are set up in various modes. Thailand's Open University is of the stand alone type. Philippine open universities, on the other hand, exist as autonomous systems but still within the ambit of conventional universities. Hence, the cost structure remains to be a snag even though there is general consensus among economists that distance education systems reap benefits from economies of scale.

Existing cost models demonstrate the tendency of several institutions to underestimate if not miscalculate expenditures involved. These costing problems, complex enough among stand alone institutions offering government-subsidized undergraduate programs, are made a whole lot worse when independently-funded graduate and continuing education programs are offered. In dual mode institutions, the cost structure is a real puzzle due to the

absence of common measures to compare costs between the conventional and distance education systems. However, several observations have been noted, such as:

- There is high capital investment in infrastructures (i.e., buildings, equipment) during the initial stage
- Types, variety and combination of media used (i.e., print, electronic) determine cost
- Course development cost in the production stage is high, particularly when country-specific materials have to be developed because of culture and language requirements.

Governments have implemented various funding mechanisms for open and distance education. This may be in the form of state subsidy or international aid allocated to finance initial capital outlay. Thereafter, the government continues to shoulder the bigger bulk of the cost of distance education. Recently, however, the growing view is that since distance education learners study part-time they probably have jobs and earn income. Some have even observed that nowadays students are expected to meet the greater part of the cost of their distance education (Perraton, 2000).

#### Governance

In the course of time, two distinct blueprints have emerged in the development of distance education. First, open universities have typically been established through a method different from that of conventional universities, and hence, enjoy a generous level of autonomy. Second, distance education units have been created within conventional universities that supervise their governance and structure. As a result, their structures and methods tend to follow those of conventional universities. An analysis of the advantages and disadvantages of both stand alone and dual mode approaches is crucial in making plans to initiate or expand distance education. As Rumble (1992) suggested, dual mode institutions have the competitive edge because they offer opportunities for sharing resources. However, many face conflicts with their parent universities in terms of curricular, administrative, and staffing policies, which ultimately limit their development.

The relationship between distance and conventional education is a factor of both preference and mobility in the midst of structural models. In India, for instance, students of dual mode universities

can move freely between studying on-campus and studying via distance mode. In Indonesia, however, the open school structure relies on conventional schools that act as centers providing support to students who are studying mainly through open and distance learning (Panda, 2003). The dilemma of keeping the autonomy of distance education institutions and the development of an integrated system of education, therefore, must be thoroughly resolved.

The expansion of open and distance education also provokes questions on procedures and responsibility for regulation. Hallak (1990) believes that even if the government itself did not provide the educational service, it retained the responsibility for regulating it. Therefore, it is necessary for governments to decide where responsibility for regulation resides and the extent to which open and distance education will follow conventional education. Open and distance education institutions are likely to adopt policies and guidelines that cover areas that transcend the conventional education system.

#### Purpose

Education no doubt reaps individual and social benefits. However, in coming up with sound policy, there is a need to find balance not only between individual and social gains but also in terms of equity among students through diverse approaches. establishing open and distance learning institutions, several factors such as educational democratization, expansion of educational service to respond to public or economic demand, and quality enhancement, are often evaluated. At the level of higher education, they have often been regarded collectively as the rationale for open university systems. The merit of distance teaching institutions must be accurately appraised in terms of their contribution to workforce development through large student recruitment and comparable training vis-à-vis conventional institutions at equal or even lower cost. Their image as a political force and influence, offering courses of major economic and social significance, is deemed to provide a vantage position in bids for financial support from governments. Nevertheless, any relevant government funding will probably diminish the autonomy that open and distance education enjoys in the context of conventional education.

# Open and Distance Education: Status and Directions

Changes in policies for financing distance education institutions have occurred in the course of time. Shifts from dual mode-to stand alone universities, and from government funding to reliance on student fees as main source of financing have taken place. Although distance education institutions have varying types of cost factors, its major advantage over conventional universities is that it is cheaper and widens educational opportunities. For now, it may still be difficult to determine the specific opportunity costs to students of the distance learning in comparison with conventional universities because of the variance in their student profiles. But as for opportunity cost to working adults and the benefits to the country through continuous learning (since skill upgrading takes place simultaneously with work), the cost advantage of open universities over conventional universities is considered to be far greater.

The nature and structure of a country's open and distance learning system will be very different from its precursor but basically dependent not only on the country requirement but to its culture, capacity and constraints. Thus, the challenge to academics in Asia is to plan and assemble a distance education system that supports the priorities of their respective countries and exploit, in a cost-effective way, the learning resources available.

Changing politics, globalization, time-compression and new information and communication technologies are pertinent inputs to a new agenda for open and distance education. The promise offered by the use of technology to provide equity and access to educational opportunities has influenced the growth and development of distance education. Nevertheless, the availability and affordability of technology, which are relatively cheaper in the north than in the south, are very relevant issues because they present an acerbic possibility of dilating educational disparity rather than constricting it.

Distance education has made cross-border enrollment possible and new information and communication technologies have provided learners access to information anywhere in the world. With education going beyond national boundaries and technologies threatening to further the gap between rich and poor countries in their access to information, government policymakers are at the crossroad of national interest and consumer protection. The

relevant function of organizing, promoting and supporting a system of best practices have been left upon international agencies.

While Giddens (1998) declares that "education and training have become the new mantra for social democratic politicians," the idea that the mantra will shatter social inequalities is not without a problem. Education, it may be noted, is as well a cause as it is an effect of disparities. In democratic developed countries, the new demands driven by the need to sustain their compulsive development cultures are founded and entrenched in education and training. "Not only does each rising generation have to be equipped to compete in the new 'hi-tech' world, but they also have to be instilled with the values of compulsive development so that they are always seeking, or at least compliant with, change and development" (Evans, 2000). These values of modern societies are swiftly infecting developing societies so that in the era of rapid globalization and knowledge-based economies, dependence on responsive educational innovations have worsened. A decisive comprehension of the political and economic drivers of compulsive development values, therefore, is essential to good educational management and policy.

This being the milieu, a significant knowledge of the policy and development issues that permeate open and distance education institutions within developing countries is crucial to the form and character the system will take. The balance among issues of equity, expansion, quality and economy vis-à-vis choices of cost effectiveness, political prestige, and influence by various institutions, must be struck. Educational institutions, particularly open and distance, should work towards providing courses that not only reflect government policies but also reflect upon themselves critically.

#### References

- Ai Mee, S. (1992). *Open universities: An Asian perspective*. Singapore: Institute of Southeast Asian Studies.
- Altbach, P. G. & Selvaratnam, V. (Eds.). (1989). The development of Asian universities: From dependence to autonomy. Singapore: Kluwer Academic Publishers.
- Altbach, P. G. (1998). Comparative higher education: Knowledge, the university, and development. Westport, CT. and London: Ablex Publishing.

- Bates, T. (2000). Managing technological change: Strategies for college and university leaders. California: Jossey-Bass.
- Boggs, R. & Lau, S. (Eds.). (1999). The state of technology usage in higher education institutions. New York: International Data Corporation.
- Daniel, J. S. (1999). Mega-universities and knowledge media: Technology strategies for higher education. London: Kogan Page Limited.
- Evans, T. (1994). Understanding learners in open and distance education. London: Kogan Page Limited.
- Garrison, D. R. & Anderson, T. (2003). *E-Learning in the 21st century: A framework for research and practice*. London: RoutledgeFalmer.
- Giddens, A. (1998). The third way: The renewal of social democracy. Cambridge: Polity Press.
- Hallak, J. (1990). Investing in the future: Setting educational priorities in the developing world. Paris: International Institute for Educational Planning, UNESCO.
- Holmberg, B. (1986). *Growth and structure of distance education*. Australia: Croom Helm Limited.
- Holmberg, B. (1989). Theory and practice of distance education. London: Kogan Page Limited.
- Chung, H. J. (1999). Contemporary distance education in Taiwan. In K. Henry (Eds.), *Higher education through open and distance learning*. London: Routledge.
- Ministry of University Affairs. (2000). *Thai higher education in brief.* Thailand, Bangkok: Ministry of University Affairs.
- Onishi, Y. (2004). The impact of middle class and open university graduates in Thailand on its economy. Unpublished dissertation, Faculty of Education, Chulalongkorn University.

- Panda, S. (Ed.). (2003). Planning and management in distance education. London: Kogan Page Limited.
- Perraton, H. & Lentell, H. (Eds.). (2004). *Policy for open and distance learning*. London: RoutledgeFalmer.
- Perraton, H. & Creed, C. (2002). *Teacher education guidelines:* Using open and distance learning. Paris: UNESCO.
- Ramkhamhaeng University. (2001). Ramkhamhaeng University Catalog 2000. Bangkok: Ramkhamhaeng University.
- Robinson, B. (1998). Developing open learning and distance education: Some questions and issues for policy-makers. Paper presented at IIEP Workshop on Open and Distance Learning, UNESCO/International Institute for Educational Planning, Bangkok.
- Rumble, G. (1992). The Management of distance learning systems. Paris: International Institute for Educational Planning, UNESCO.
- Seet, A. (1992). Open universities: An Asian perspective. Singapore: Institute of South East Asian Studies.
- Sukhothai Thammathirat Open University. (2000). 22<sup>nd</sup> Anniversary Sukhothai Thammathirat Open University. Bangkok: Sukhothai Thammathirat Open University.
- United Nations Development Programme [UNDP]. (1990-2004). Human Development Report. Washington D.C.: UNDP.
- UNESCO. (1990-2002). World Education Report. Paris: UNESCO.
- UNESCO. (2002). Open and Distance Learning: Trends, Policy and Strategy Considerations. Paris: UNESCO.