

Communication Education and Research in Singapore: Past, Present and Future

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Abstract

This paper focuses on the state of communication education and research in Singapore from the mid-1970s to the present. It surveys the shift in emphasis from the British tradition of year-end exams to the North American model of a credit system of study. In addition, a brief overview is given on the three categories of formal educational programmes in the field. At the polytechnic level, the goal is to train students for entry-level technical positions in media-related jobs. As for the distance learning side, there are a variety of courses currently being offered by private-sector organizations that capitalize on the growing public demand for such training. At the university level, however, the aim is to produce graduates who have the skills and knowledge needed to assume managerial and leadership positions in the industry. The authors also discuss the nature of the accreditation criteria of the university's courses, the role of the advisory committee in reviewing the school's curriculum, the courses offered at the postgraduate level, the state of research in the last two decades, and the key trends and implications facing the media and communication fields.

Education has always received strong support from the Singapore government. In the FY2001/02 budget, the government allocated S\$5.95 billion (20.5% of the national budget) to education (Hu, 2001), maintaining that education will continue to be a key pillar of national development. As Singapore is a small island-nation with a population of about 4 million and little natural resources, the constant emphasis from the political leadership is to promote the country's educational standards, quality of living, technological infrastructure, and economic well-being, among others (Balachandrer, 1996).

The focus of this paper is to review one of the expanding disciplines in Singapore—communication studies. This is a relatively new field of study in Singapore's tertiary education system. Much like many other nations at a similar stage of development, Singapore is now venturing into the information age with heavy emphasis on building a knowledge-driven economy (Low & Kuo, 1999). It is therefore timely to analyze the state of communication education and research in Singapore from the mid-1970s to the present. This will situate the current analysis in perspective and henceforth open up new directions.

Historically, the educational structure in Singapore, as a former British colony, has been largely British-oriented. As a contrast to the North American system that stresses liberal and broad-based education, the Singapore-brand of the British-based educational system emphasizes early academic specialization. At the end of Secondary Four (typically at the age of 16), students are required to take the Cambridge GCE Ordinary ("O") Level Examinations. Depending on the exam results and personal preferences, some "O" level school leavers join polytechnics for a profession-based three-year diploma course. Many continue to enter junior colleges¹ and take the Cambridge GCE Advanced ("A") Level Examinations at the end of their two-year study. At junior colleges, students choose to enter science, arts, or commerce "streams". After finishing "A" level examinations, those who decide to pursue further study are qualified to apply to local universities. The admission is mostly based on academic results and students are admitted to specialized fields.

The strength and advantage of such a system lie in that, by the time a student finishes polytechnic or university study, he/she would be well trained in a specialized field and ready for entry-level employment. Singapore has enjoyed impressive economic growth with full employment since the 1960s (except for a few "hiccup" years). There have been pressing needs for fresh graduates and diploma holders to join the growing labor force. Meanwhile, following a British-style civil service, the reward system (remuneration and promotion) has also been strongly based on academic ("O" and "A" level) grades.

As a result of the policy of early specialization, accompanied by the emphasis given to academic results, the tertiary education system in Singapore has been criticized for its narrow perspective and the lack of a broad-based foundation. Generally, students have relatively limited exposure to the humanities and liberal arts, even among university students in the arts and social sciences faculty.

In recent years since the mid-1990s, serious reviews of the educational system in Singapore at all levels have been conducted. It is not the purpose of this paper to dwell into the details of such educational reforms that are taking place or are in the pipeline. It is noted, however, that some of these changes are rather drastic given the generally conservative nature of the educational authority. Overall, there is a clear trend that the whole system is moving closer to the North American model.

Communication Education: An Overview

The development of communication education at the tertiary level in Singapore had been largely insignificant until the 1990s. A few courses related to mass communication were offered at both the University of Singapore (Sociology Department) and the former Nanyang University (Department of Politics and Public Administration) in the early 1970s. A formal mass communication program was offered under the Department of Politics and Public Administration at Nanyang University in 1975. However, the program only lasted five years with about 100 students graduating from it. The program was subsequently closed after NU merged with the University of Singapore to become the National University of Singapore (NUS) in 1980 (Kuo, 1991)². This ended the brief experience of a formal or systematic communication degree curriculum with hardly any noticeable impact on subsequent developments in the field.³

By the late 1980s, largely due to demands and pressures from the public and the media industry, the first fully-designated program in communication education in the form of a

polytechnic diploma was launched at Ngee Ann Polytechnic in 1989 (Hukill, 1994). As the first and then only program of this nature, it was highly popular during its initial years, attracting some good "A" level students (who were generally considered "overqualified" for a polytechnic diploma course) to the program. This three-year course has a technical and practical focus and is aimed at providing entry-level workers for the growing media industry in Singapore (See Appendix 1).

Soon after the launch of the mass communication course at Ngee Ann Polytechnic, NUS began its planning for a new Mass Communication Department within its Faculty of Arts and Social Sciences. The Department was formally established in 1990 and its first intake began in 1991, attracting 100 top students from among the Arts and Social Sciences cohort. Though highly popular, the new Department, the first of its kind at the university level in Singapore proved to have only a short life.

Also in 1991, the newly established Nanyang Technological University (NTU) appointed a steering Committee to plan for a new course on communication studies. For a while, it appeared that these two universities in Singapore would both establish a communication program and compete with one another. Yet, in June 1992, quite unexpectedly the two universities made a joint statement that the mass communication course in NUS would be "transferred" to NTU from the academic year 1992/93. Two factors were mentioned to justify the transfer: the need to avoid duplication of resources, and the emphasis on professional orientation that was believed to be more suitable for NTU (Sinclair, 1994). The School of Communication Studies (SCS) at NTU was thus formally established in 1992, while the Mass Communication Program at NUS continued to operate at the NUS campus until the two batches of students from that program completed their honors course in 1996. The School subsequently changed its name to the School of Communication and Information (SCI) in 2002 with the inclusion of the Division of Information Studies the previous year.

Today, the communication studies course in NTU is in high demand. Judging by the admission entry points, NTU's communication studies undergraduates are among the best academically qualified. Currently, its master's (M.Mass Comm. degree) course enjoys an acceptance rate of only 25 percent, while the undergraduate program has a less than 15 percent acceptance rate (Ang, 1998).

Current Journalism & Mass Communication Programs

The academic market of journalism and mass communication is thriving in Singapore (See Appendix 1). There are essentially three categories of formal programs available: university level, polytechnic level and the external or distance learning level. At the university level, NTU is the only local tertiary institution offering both undergraduate and graduate degree programs. The NTU School admitted its first batch of 96 undergraduates in 1993. Students were required to complete a four-year Honours degree course comprising 123 (subsequently increased to 125) academic units of coursework. The School later revamped the curriculum in July 2001 by introducing more subjects and hence students are now required to complete a total of 137 academic units. It also offers a Ph.D. course and two master's courses in communication: the Master of Communication Studies (by research) and the Master of Mass Communication (by coursework). In addition, from 2001, two master's courses are offered as a result of the merger of the Division of Information Studies with the School: the Master of Science in Information Studies in 2001 as well as the Master of Science in Knowledge Management in 2002.

At the polytechnic level, due to increasing demands from the field, three polytechnics are already offering courses catering to different areas of specialization in communication. The full-time diploma courses that currently conducted are: Diploma in Film, Sound & Video and Diploma in Mass Communication at Ngee Ann Polytechnic; Diploma in Digital Media Design at Nanyang Polytechnic; and Diploma in Visual Communication and Diploma in Interactive Media Design at Temasek Polytechnic.

It is important to point out that the above polytechnic programs are geared towards producing technical personnel for entry-level jobs that require at least a base level of expertise in the various functions of media organizations. For instance, in Ngee Ann's diploma in mass communication, students are trained in a broad spectrum of areas such as radio/television production, interactive multimedia applications, news writing, graphic communication, among others (www.np.edu.sg/~dept-fms). Its diploma in film, sound and video similarly covers subjects in location production, studio production, computer graphics, post-production, screen-writing, scriptwriting, as well as art and animation. Students graduating from this course can seek careers in Singapore's small but growing film production industry. These programs, however, do not cover subjects outside of the major field. Thus, the Western notion of a broad-based liberal arts curriculum does not fit in with the polytechnic programs. Students are trained in their area of specialization, and as a result, the focus tends to be narrow.

In view of Singapore's current employment market, polytechnic graduates do help to fulfill the growing demand for technical media personnel. Many are employed as production assistants, web-writers, post-production workers, animation technicians, and Internet designers, among others. However, given the importance of paper qualification in Singapore, many of these diploma holders want to pursue a formal university degree after having accumulated a few years of working experience. One option open to them is to spend a short time abroad to obtain a "top-up" degree. Such a degree course typically only requires students to spend two upper division years at certain foreign universities before completing the formal curriculum (Hukill, 1994).

Such a constant paper chase also pushes many private educational centers to link up with foreign universities to offer degree courses in mass communication, media studies, marketing communications, business administration, as well as multimedia applications management, at the external or distance learning level.

There are numerous programs offered by private organizations in association with foreign tertiary institutions operating on an "off-shore" basis. They are usually administered through local intermediaries that manage the courses for foreign universities. Such degree courses are springing up continuously in the private sector, each claiming to be offering quality education. It would seem to be a futile exercise to try to keep track of these degree courses. However, by and large, there are three popular private sector establishments that manage these programs. They are the Singapore Institute of Management (SIM), the Management Development Institute of Singapore (MDIS), and Informatics Holdings. All of them are professional bodies dedicated to enhancing business and managerial effectiveness through hosting executive seminars, short courses, and part-time off-shore degree programs.

At SIM, students may register to read the BA in mass communication that is awarded by the Royal Melbourne Institute of Technology (RMIT). Many polytechnic graduates who already

have their diplomas in either mass communication or business studies take up this degree course to complement their training and earn a degree qualification. This part-time degree course consists of 10 modules that can be completed in two years. Some of the modules are audience studies, consumer behavior, news studies, film and television studies, intercultural communication and communication management, among others (www.sim.edu.sg).

MDIS manages two degree programs that are in the communication field—a bachelor's degree in marketing and media management awarded by Edith Cowan University and a BA degree in mass communication awarded by Oklahoma City University (OCU) (www.mdiss.edu.sg). These two courses require students to spend some time on campus at the host institution to fulfill residency requirement for one semester or several weeks. This is to facilitate professional placement at Edith Cowan and some hands-on production experience in the television studio at OCU. The Edith Cowan program has modules covering marketing research, media and advertising, marketing management, and some basic business subjects. The degree course by OCU offers modules such as news gathering and writing, television scripting, integrated campaign development, and public relations campaign management.

Students can also work for a basic degree at the University of Southern Queensland (USQ) through the coordination of Informatics Holdings. Under the USQ course, students may complete a major in communication studies, journalism or public relations (www.informatics.edu.sg). They are required to take subjects such as television texts and institutions, media and society, publication layout and design, broadcast reporting, public relations techniques, issues management, among others.

Notably, these foreign-based degree courses typically do not have any full-time academic staff or any extensive technical facilities in Singapore. It would be too costly for these “off-shore” courses to hire full-time qualified lecturers or tutors and to set up video and audio production suites, multimedia facilities, and other necessary editing laboratories in these Singapore-managed premises. There is no regulating government or non-government body that oversees the academic standards and accreditation requirements of these “off-shore” degree courses. Their credentials therefore rest with the university that confers such degrees, and the “values” of such degrees are assessed variably by the public and potential employers.

Besides these private organizations managing degree courses for foreign universities, there are two fairly well received institutes that have been offering certificate and diploma courses to the public: the Institute of Advertising of Singapore (IAS) and the Institute of Public Relations of Singapore (IPRS). These are non-profit associations whose main objectives are to contribute to the growth and professionalism of their respective fields by providing educational and consultancy services to the industry (See Appendices 1 and 2). The IAS offers numerous short-term courses. The popular ones are graduate diploma in marketing communications, diploma in visual communications, and certificate in film and video production (www.ias.edu.sg). The IPRS, on the other hand, offers a certificate course in public relations and a diploma in public relations management. These two programs will be renamed to include a mass communication component in the new curriculum. The Institute has also entered an agreement with Charles Sturt University (CSU) to conduct a distance learning undergraduate degree course in communication with emphases on public relations and organizational communication (www.iprs.org.sg).

The courses conducted by IAS and IPRS are targeted at working professionals who are interested in upgrading their own educational standards. These students are usually non-degree holders. Upon earning their certificates and diplomas, many proceed to read a formal degree course at an off-shore foreign university managed by one of the private institutes.

Communication Studies at NTU: Undergraduate Course

As mentioned before, a comprehensive and full-fledged communication program at the university level is only offered at NTU. The history of the School of Communication and Information at NTU is short. Officially established only in 1992, it enrolled its first batch of 96 undergraduates a year later. The School was originally made up of four divisions: Journalism and Publishing, Electronic and Broadcast Media, Public and Promotional Communication, and Communication Research. A fifth division—Information Studies—was formally merged with the School from September 2001 to provide graduate training in information technology and knowledge management. Students therefore receive education and training in print, audio, radio, video, television, photojournalism, advertising, public relations, research, and multimedia production technology.

One strong feature of the course is that undergraduates are required to undergo a broad-based curriculum designed to provide a balanced combination of communication theory and practical training. In the first two years, students are required to read core communication subjects in addition to a variety of related subjects such as economics, psychology, sociology, ASEAN politics, modern world, and Singapore society. In the third and final years, students advance into the specialized communication subjects conducted by each of the four divisions. Currently, students who enrolled in the School before 2001 had to complete at least 125 academic units of study in order to graduate. Due to a revamped “new” curriculum that was launched in July 2001, all students henceforth are required to complete 137 academic units for graduation. They also have the option of taking up a Minor field offered by the National Institute of Education at NTU.

The School also emphasizes practical assignments and industrial attachments to complement its academic coursework. Students are recruited to run the campus newspaper *The Nanyang Chronicle*, and its digital version *The Digital Chronicle*. Students in the electronic and broadcast media division are involved in the operation and management of an Internet radio station and a campus-wide television channel. Students also regularly provide some audio programs to a local arts radio station. In their third year, students are assigned to complete an extensive 24-week professional internship with communication and media-related organizations in Singapore or the region. In addition, they must produce a final year project (which is equivalent to an honors thesis) through which they demonstrate their creativity and/or research skills, as well as the depth of their theoretical understanding of communication issues. Many also participate in the university-wide exchange program to study for one semester abroad at one of several NTU partner universities in North America, Europe and Asia. The School, in turn, also hosts exchange students from these overseas partners.

In Singapore, there is no formal accreditation system of academic programs in tertiary institutions. Following the British tradition, the two major universities rely on external examiners to ensure that the academic standing of their respective degree programs is of the standard expected of Commonwealth universities. Leading scholars with international reputation in the various fields of specialization are appointed by the university to conduct regular reviews by assessing the syllabi, examination scripts, student papers and projects. At the end of the

two-year term, the external examiner submits a final report directly to the president of the university on his/her assessment, observations and recommendations of the program. In place of a formal accreditation system that is common in the North American model, the external examiner's assessment serves as a form of external academic audit to ensure the program under review is of an internationally credible standard.⁴

While the system of external examiner provides a form of academic audit, another feature of "quality-control" of the University's programs is the establishment of the advisory committee under each program. For the NTU School of Communication and Information, the advisory committee consists of leading professionals from the media industry and organizations. The committee provides feedback to the School on the effectiveness in the education and training of its students and suggests the introduction of new courses. It helps to identify changing trends in the needs of communication and media practitioners and to advise on how best to respond to the latest developments in the media industry. To complement the role of the external examiner, the advisory committee plays a crucial role in connecting academia with industry. After nine years since it took in its first class of undergraduates and after having produced five batches of graduates, the School felt it was necessary to revamp its original curriculum to keep pace with changes in technological and media education. Thus, from July 2001, it launched a revised or "new" curriculum. Some of the main features of the new curriculum are:

- To inject more foundation courses into the program, including subjects such as philosophy of science, creative processes and critical thinking, international relations, and issues on science, technology and society. This is to further broaden the liberal arts and humanities background of the students, in addition to several courses available in the old curriculum (e.g., economics, sociology, political science, modern world, Singapore society, and Southeast Asian politics and economy).
- To encourage students to take up an optional "Minor" in one of four areas—namely, Drama and Performance, English Language, History, and Literature in English. These areas are to be offered by the National Institute of Education at NTU. In addition, students may take up a minor in Chinese at NTU's Centre for Chinese Language and Culture. All these minor fields will not only broaden the knowledge base of the students, but also better prepare them for jobs in the communication industry, either as journalists, video/audio producers, corporate communication specialists, or research and policy analysts.
- To incorporate IT-related materials and the necessary interactive components into the new curriculum. This may involve either designing new courses or reformulating existing ones to keep up with the ever-changing technological challenges. More on-line teaching is expected, in line with the overall globalization and digitalization trends.

In order to add more intellectual value into the new curriculum, it is necessary to increase the total AUs (academic units, equivalent to credits in the North American system) from the original 125 to 137. This therefore positions the NTU program one of the most demanding in course load in comparison with others in North America and Asia. Additional laboratory and studio equipment is also needed to support IT-related teaching.

Communication Studies at NTU: Graduate Course

At the graduate level, the School is currently offering six academic programs: (1) Ph.D. in

Communication Studies (by research), (2) Master of Communication Studies (by research), (3) Master of Mass Communication (by coursework), (4) the Postgraduate Diploma in Mass Communication (by coursework), (5) Master of Science in Information Studies (by coursework), and (6) Master of Science in Knowledge Management.

The two programs by research follow the British tradition and are designed for students who are well prepared for independent research in their undergraduate or Master's levels. There are no specific course requirements. (However, candidates are required to take up some "enrichment courses" and some are even required to complete a few graduate-level subjects to strengthen their research work). Typically, those admitted to these two programs have demonstrated adequate research experience after finishing their Honors thesis (required in British-oriented programs) or a research work leading to a Master's degree. Such research degrees at NTU are meant for those who intend to pursue an academic or research-oriented career such as teaching and research in a tertiary institution or research organization. These students are provided with full scholarships to finish their research under the supervision of a faculty member and to complete a thesis/dissertation. The finished thesis goes through a rigorous examination process, involving both external and internal examiners before the degree is awarded.

The master's degree by coursework, on the other hand, is aimed at preparing young media professionals who are already working in the industry for future leadership positions in management, planning and policy. The Master of Mass Communication (MMC) course was launched in 1996 and has been highly popular since the beginning. It takes in a class of 30-40 students each year. Most of the students are pursuing the course part-time. They are required to complete eight subjects and finish a thesis or professional project. This degree course has thus far received favorable responses from students and the industry. Although the commercial market in Singapore is flooded with numerous graduate courses, the NTU-MMC course is able to command a premium as it is taught by full-time scholars and visiting professors who are grounded in theory and industry practice.

More importantly, the strongest feature of NTU's MMC course is perhaps its international approach, balancing between Asian (and Southeast Asian) and Western perspectives. Most of the syllabi of various courses include some readings on Asian and Southeast Asian cases or from such sources. These could be on media regulation and policy, media and marketing, information technology planning, public communication campaigns, or and the impact of the Internet, thus providing an understanding of such issues within the Asian and Southeast Asian context.

The MMC program has begun to attract applications from the region. A number of scholarships are available for applicants from the region. Currently, about five to seven full-time international students are admitted to the course every year. There are indications that the number of such students may continue to rise in future. As NTU has reached student exchange agreements with more overseas universities, there will be more graduate students from established overseas programs joining the MMC course on a semester basis. This will make the course even more international and cosmopolitan, with students from various cultural and professional backgrounds to come and share their experiences.

As for the Postgraduate Diploma in Mass Communication, it is a part-time program designed for information officers, public affairs personnel, and corporate communication managers in

the public sector. This course has been designed specifically for recommended candidates from the Ministry of Information and the Arts and the Institute of Public Relations of Singapore (IPRS). They are admitted based on the same set of criteria as those of the MMC course, and attend the same classes and complete the same requirements as the latter. Students in this part-time course are required to complete five subjects within a period of 12-18 months.

In addition, the aim of the Master of Science in Information Studies is to produce a new breed of information services and systems professionals who are able to develop and deliver value-added information products and services in a digital landscape. Students are required to complete core courses, prescribed electives, as well as a project. The degree course is in high demand as students are attracted to its two main areas of concentration: library and information services, and information management and systems. Typically, about 100 students are admitted into the course every year out of a pool of more than 700 applicants. This degree course is thus a strong driver in the Singapore's move towards a high value-creative technological society.

Finally, the Master of Science in Knowledge Management provides in-depth education and training for professionals who are working in information intensive environment. It is jointly conducted by the School and the Civil Service College of the Prime Minister's Office. The programme requires students to complete five core courses and four electives. They are also required to submit a project. Even though this course is young, it has since registered high public interest and a large application pool of over 230 candidates. In its first intake, only 45 students were accepted.

Communication Research: An Overview

The state of communication research in Singapore can be roughly divided into two eras: before 1992—the period of under-development, and after 1992—the foundation setting stage. Some communication research was conducted by the Sociology Department at the former University of Singapore in the 1970s. Also, in 1971, a regional mass communication organization was established and based in Singapore—the Asian Mass Communication Research and Information Centre (AMIC).⁵ Its role was to facilitate projects and manage seminars on various aspects of communication. However, there was still a serious lack of a full institutional base to support the work of those interested in communication. According to Kuo (1991), what was missing at that time was a systematic and comprehensive research agenda or culture on mass communication, and a core group of researchers supported by students to conduct research as a coherent team.

During the “under-developed” period, some research works were initiated, concentrating in a few areas. One topic that received attention and support was communication policy and planning (Cheong, 1984/85; Kuo, 1977, 1983; Kuo, 1984a; Kuo, 1984b; Lim, 1985). The emphasis on applied and policy-oriented communication reflected the social context of that time where social engineering and state dominance were pivotal. In fact, the first national survey on communication systems and media behavior was conducted by sociologists from the University of Singapore and sponsored by AMIC (Chen & Kuo, 1978).

A somewhat related topic, the role of mass media in social campaigns in Singapore, was also highly popular. This line of research was based on the development communication tradition. They included works on family planning campaigns (Loh, 1973, 1974), on language campaigns (Kuo, 1984a, 1984b), as well as overviews of campaigns in the Singaporean socio-cultural landscape (Nair, 1982).

From the 1980s, researchers began to analyze issues related to the concept of information society and new information technologies (IT). This was due to the fact that IT was then beginning to be identified and promoted as a prime mover of Singapore's economy. Research emphasis was on the social and economic impact of new IT, such as computers, satellite communications, videotext, and cable television (Kuo & H.Chen, 1987; Kuo, 1990; Mohan, 1984; Wei, 1990). Finally, a cluster of works was also done on communication-related laws (Mohan, 1984), privacy (Chin, 1990), copyright (Owi, 1986; Tan, 1984), and press laws (Abdul, 1985).

As can be seen from the above works, while they were relevant to the field of communication, such research was mostly detached from mainstream communication traditions and models, with no serious empirical contributions to theory building or concept testing. Moreover, there was virtually a lack of a main coordinating agent or institutional support to communication research. Most research projects were carried out by researchers from divergent fields such as sociology, political science, public health, law, and business studies. In this sense, communication research in Singapore remained under-developed (some would say "un-developed") until 1992, lagging behind that in other major Asian countries for at least 20 years. During this stage of under-development, however, some limited resources were gathered to prepare for the setting up of the first and only major communication school in the early 1990s, when the conditions were ripe.

The establishment of the School of Communication Studies in 1992, and its subsequent new name in 2002, set the foundation for the emergence of a core group of communication researchers and a new research culture in the communication field in Singapore. With this full institutional identity and support, it was then feasible to conduct research that would put NTU and Singapore on the world map of communication research. In fact, by 2000, research work by NTU researchers has already appeared in international academic journals, such as *Journalism and Mass Communication Quarterly*, *International Journal of Advertising*, *International Journal of Public Opinion Research*, *Journal of Communication*, *Journal of Health Communication*, *Journal of Public Relations Research*, *Media Psychology*, *Gazette*, *Telecommunications Policy*, among others. They have also begun presenting their scholarly papers regularly at major international conferences such as ICA, AEJMC, IAMCR, NCA, AAA, and PTC.

During this foundation setting stage, researchers from Singapore began to test Western-based theoretical models in an Asian setting, in particular, concepts such as agenda-setting hypothesis (Holaday & Kuo, 1993; Kuo, Holaday, & Peck, 1993; Kuo et al., 1996), development communication (Ang & Shikha, 2000), public opinion and formation (Ang & Gunther, 1996) among others. Of special relevance and importance to Singapore is research on cross-cultural communication issues in advertising (Frith, 1997; Lee, 1998; Martin & Sengupta, 1998). In fact, researchers are now showing interest in selected areas in health communication (Chay-Nemeth, 1998) and film and social change (Hao & Chen, 2000).

The NTU School has identified its main research focus as "Asian Media Communication". In particular, special emphasis is placed on the development and impact of new communication technologies, and communication within a multiracial, multilingual, and multi-religious context. Within the broadly defined communication field, the following are the research areas that academic staff are venturing: Asian films and analysis, advertising and

public relations, cultural policy and national integration, development communication, IT and technology, information management, interpersonal and small group communication, media law and ethics, organizational communication, media effects, public opinion, telecommunications planning and policy, and other related areas.

At this juncture, it is necessary to highlight an important institution that has contributed immensely to the field of mass communication and research in Singapore and the region. As mentioned before, the Asian Media Information and Communication Centre (AMIC), a non-profit regional organization, was established in 1971 in Singapore with funding from the Singapore Government and Friedrich-Ebert-Stiftung, an independent German foundation. As a documentation center, AMIC seeks to promote the dissemination of information pertaining to mass communication. It also provides research, training and consultancy to communication professionals and researchers in Asia. It organizes conferences and seminars and publishes journals, books, monographs, bibliographies, and newsletters in the field (www.amic.org.sg).

In 1996, AMIC entered an agreement with the NTU School and re-located itself in the newly completed School building. The two institutions have since been sharing their library resources and collaborating in research, publications and various conferences and workshops. The NTU School and AMIC jointly publish the *Asian Journal of Communication* since 1991. The journal, the only one of its kind that focuses on Asian communication research, has commanded a respectable presence in the field. Another AMIC publication of 30-years of history, *Media Asia*, also became a joint publication of the two institutions from 2000. The two institutions also jointly co-edited the *Asian Communication Handbook* that serves a guide to understanding the diverse media systems of some eighteen countries in Asia. Similarly, several books and monographs on Asian communication, mass media laws and regulations in ASEAN, have also been published under the two banners of AMIC and NTU. The two also co-organized the IAMCR 2000 Conference in Singapore in July 2000, hosting some 350 participants from all parts of the world. It is quite clear there is a strong synergy between the two and a win-win formula has been developed that will benefit not only the two institutions but also the Asian communication field in general.

Communication Education and Research: An Assessment

Communication education and research in Singapore has a relatively short history. This was in part a legacy of the British tradition in communication and journalism education, whereby the field is considered more of a "trade" than an academic discipline. Yet, rapid developments in the information and communication sector in the past few decades, both in technology and in services, have made it eminently clear that there is a need to train information and communication professionals through a comprehensive curriculum so that they will be able to create more value for Singapore's growing economy. The development in communication education and research in the past decade has been gradual but impressive. With this new awareness, the broad field of information and communication (journalism and broadcasting being integral parts here) has since been given strong support from the government, the media industry, and the public in general.

As a result, communication programs in Singapore at both the polytechnic and university levels enjoy abundant funding from the government in setting up state-of-the-art equipment and facilities. The School at NTU was granted an initial fund of S\$24 million for its custom-designed new building and basic facilities (including two video studios). Since 1996, with the opening of the new building, an additional budget of about S\$1 million has been granted

annually to set up new laboratories or to upgrade its various technical facilities. As a new field, communication studies (at both polytechnic and university levels) also attract very good students. The NTU program admits only the top 10-15% of GCE "A" level graduates who apply to the two universities. The admission "cut-off" point matches those of the traditionally popular courses such as law and accountancy. Success breeds success, and it is not surprising that the graduates of the School have been performing well either as professionals in media organizations or as graduate students overseas.

There is a strong potential that the communication course in Singapore will be able to play a regional role in communication education. The NTU School can provide degree courses at both the undergraduate and graduate levels. Moreover, given the needs from the industry and the increased demand for continuous upgrading in skills and knowledge, it can also provide short-term courses and workshops for practicing professionals from Singapore and the region. The geographical location of Singapore, its multicultural environment, and the use of English as the medium of instruction are definite advantages for Singapore to capitalize and to play a crucial regional role. At the same time, researchers should take advantage of the country's multilingual social makeup and work on intercultural issues and explore their socio-cultural impact.

Yet, the ambitious vision and plans of fostering a strong communication education program in Singapore do face some constraints. Because of the relatively short history in communication education (and collaterally communication research), the programs in Singapore face some difficulties in recruiting qualified academic staff to their faculty. A strong local (or localized) teaching and research core group is yet to be cultivated. Moreover, these small numbers of local communication lecturers and researchers tend to be relatively young and inexperienced. As a result, both the polytechnic and university communication programs have to rely on a significant number of expatriates, who typically will stay in Singapore for three to six years on contract basis. (However, equally significant is that a number of these expatriates have since converted to become permanent residents and stay on as "locals"). This in itself is of course not a problem, and could indeed be an asset, as these expatriates provide a much-needed international perspective and contribute to teaching and research in their areas of expertise. The key issue is one of balance. Overall, a strong reliance on expatriate staff tends to imply some uncertainty and instability in staff development. While the situation should improve with aggressive recruitment efforts from Singapore, it will take a number of years before a strong and stable core group of teaching and research staff is in place. Until then, Singapore has to continue to count on "multinational talents" to help develop its communication education programs during this exciting period of expansion and growth.

More serious is perhaps the lack of a strong research culture and tradition due to the short history of the development of this field. While significant accomplishments have been documented in the rapidly growing body of communication research in Singapore in the past decade, it is yet to consolidate a strong body of research literature on Singapore and the region. Some basic benchmark research projects have yet to be launched and completed. To some extent, this shortage is compensated by the publication of the *Asian Journal of Communication* by the School and AMIC, and several major collaborative projects that the NTU School has been involved jointly with AMIC or with other major universities.

As the NTU School enters the new millennium, there are a few challenges that it faces while striving to position itself as a regional research hub. First, it needs to play a greater role in initiating and coordinating regional communication research. One way is to conduct workshops to train aspiring and “young” communication researchers from ASEAN and other Asian countries. Through such a training process, the School can collaborate joint research projects with other Asian universities.

Second, due to its unique multicultural and multilingual facets, the School ought to take advantage of the international composition of its faculty by forming research teams and embarking on basic or theoretical research. Of the more promising areas for communication research within Singapore’s context are (1) the development and deployment of new communication technologies and their social impact; (2) intercultural communication as a means to achieving social harmony in a multiracial, multilingual, and multi-religious society; (3) international communication and its corollary information flow and reception; and (4) developing and testing communication theories and concepts that are applicable to the Asian framework. More importantly, research should focus on pertinent ideas in the New Economy such as informatization, digitalization, privatization, and globalization and examine how these can help to manage the digital as well as content divide, among many other concerns.

Finally, to facilitate Singapore’s role as a credible facilitator in creating value-added services, it is strategically necessary for the NTU School to engage in greater collaboration with government, industrial, and commercial research entities. The ideal outcome should be one where academic staff are able to launch and sustain basic research as well as contribute to professional projects and consultancies. In other words, the School ought to be academically entrepreneurial in positioning education and research that will drive Asian communication while at the same time contributing to national growth through its various industrial engagements.

Conclusion and Discussion

Communication studies is an evolving and expanding field. In view of the need to continue to improve the quality of communication education, some key trends and directives can be identified. First is the trend of globalization in media and communication. In response to this trend, there are both the need to keep pace with globalization and the desire to retain local traditions and characteristics. As observed by Holaday (1992), many Asian communication schools are “Asianizing” their respective programs and courses to include local history, media development and regulatory processes, while at the same time taking into account changes in international practices. Meanwhile, there seems to be this sense of wanting to take control and to be at the forefront of technological development by “internationalizing” their degree courses (Dewine, 1995). This trend is not only an important process for research in itself; it also calls for some adjustments in curriculum design and course development.

Increasingly, information technology (IT), the Internet, web-media management, and multi-media design are aggressively incorporated into mainstream communication education (Collins, 1994; Phillips, 1994). Students must be equipped with the skills and knowledge in IT to be able to effectively contribute to their professions in an Internet-driven world (Lotfalian, 1996; McCombs, 1994). Singapore’s academic programs have been able to keep up with such developments and incorporated them into its curricula for three reasons: First, there is strong support from funding sources to promote equipment upgrading and human resource development. Second, there is a highly supportive IT environment and technical infrastruc-

ture in view of Singapore's aim to develop itself into an intelligent island. Third, with the inclusion of the Division of Information Studies as the fifth pillar of the School, students and academic staff will be able to harness the strengths of this division by exploring research areas in knowledge management, multimedia information systems, electronic commerce, and systems analysis and design. As a contrast, some educational programs and media organizations in some other parts of Asia may not be able to provide adequate training in the IT area due to a lack of facilities or experts. In this regard, NTU and AMIC can join hands to launch relevant courses and workshops to serve the region.

At the same time, there is the need to institute "substance-learning" in communication education (Deetz, 1994; Powers, 1995). Fundamental to a successful communication education program are essential competencies such as general literacy, visual literacy, computer and IT literacy, and most of all, information-gathering and knowledge-cultivation literacy (Rakow, 1993). The ultimate challenge, however, is to foster in students the desire and drive to seek relevant information and to develop reflective thinking ability as well as sound interpersonal relationship skills so as to succeed in the digital economy (Goleman, 1998). More importantly, with the introduction of the minor, students can take courses outside of the major field, thereby strengthening their intellectual capital as well as their future employability in the rapidly changing communication and information industry.

In line with this need to develop areas of literacy, communication education must continue to foster its link with the working world. Knowledge areas in communication degree courses need to include a clear conceptual map and an inventory of "real-world" subjects. At the conceptual level, there should be subjects in media ethics, communication theory, research methods, media and society, among others. To emphasize industry-preparedness, real-life case studies, workshops, and professional internships should continue to be at the core of the communication course (Grantz & Thanos, 1996). Any further revamp in existing curriculum should include more project-oriented assignments so that students can learn and share ideas as a team. This is especially important in video and audio work, multimedia projects, advertising account groups, as well as public relations management. To ensure adequate preparation for employment, students should have working proficiency in their respective majors. Towards this end, there should be a sustainable and mutually beneficial partnership between academia and the media industry.

The goal of all universities is to excel in research and development. It is logistically difficult to expect "off-shore" or distance-learning degree courses to devote sufficient resources in research. The lecturers in such programs are either short-term (ranging from one to a few weeks) visiting staff or working professionals, who cannot be expected to contribute much to communication research. For the polytechnics, their programs are specifically geared towards producing entry-level technical personnel. The over-riding concern for them is to train students to be ready for the market. In this connection, it seems incumbent upon the NTU School to take the lead in cultivating a research culture in communication education. To this end, the School should capitalize on its international and cosmopolitan teaching staff to develop this crucial platform. Since it has (and is likely to continue to have) a large number of expatriate academics coming for a period ranging from a few months to a few years, there can be a pro-active plan to encourage research projects between local and expatriate scholars. These can either be traditional research or industry-oriented projects. The aim is to cultivate these rich resources by combining international experience and expertise with local understanding and sensitivity. This will not only help build up the research and

publication track record of the School, but, more importantly, has the strong potential to lead to some major works of cross-cultural and international nature.

In almost all places, communication programs are designed to perform two basic tasks: to train graduates to serve the communication sector, and to conduct credible research for applied and/or theoretical purposes. As a result, two key connections are essential: (1) the linkage between teaching and practice, and (2) the synergy between teaching and research. In most other countries, there can be a division of labor between various institutions to focus on one of the two functions (although no doubt most programs will try to do both). In Singapore's case, since there is only one communication program at the university level, the School of Communication and Information at NTU does bear a greater burden in comparison with other countries that have a variety of institutions of higher learning or research. This is reflected in the School's curriculum design and its continuous attempt to make its courses relevant to local and regional needs, on the one hand, and internationally credible, on the other. Situated in a technological university, the NTU School has therefore designed its curriculum with a strong professional component. It has also maintained a strong and mutually supportive relationship with the media industry through professional internships, adjunct and part-time teaching staff, committee representation, and consultancy work. All these elements will make sure that the curriculum structure and course content are functionally adequate and relevant.

It may seem paradoxical. Yet, Singapore is too small to be parochial. The communication course here has to be cosmopolitan to be locally relevant and useful. It must also be internationally credible to play a vital regional role. Towards this end, the School has established a strong international network with several major overseas programs in the forms of collaborative research and projects or student and faculty exchange.⁶ The School has to depend on regional and international resources for its sustained growth and development. At the same time, it can contribute by building up such resources to serve the region and beyond. Therein lie the opportunities and challenges for communication educators and researchers in Singapore.

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(Footnotes)

¹ In Singapore, students entering junior colleges are typically 17 years old. This post-secondary programme is of two years duration, and students are required to read three or four advanced-level subjects, language subjects, and some will even take special papers that are more specialized in scope.

² At the time when the merger was underway, an ad hoc committee was set up to assess and recommend whether

the mass communication program at Nanyang should be incorporated into the sociology department at the University of Singapore. However, before the committee could make any assessment or recommendation, a final decision was soon made to close down the mass communication program. In 1981, at the site of the former Nanyang University campus, a new Nanyang Technological Institute was formed. It became a full-fledged university, Nanyang Technological University (NTU) in 1991. A new School of Communication Studies was established in NTU in 1992.

3 In this sense, Singapore's formal education in communication studies lags behind those in the region by at least two decades (Ang, 1998).

4 Two renowned scholars have served as external examiners to the NTU undergraduate program: Steve Chaffee of Stanford University (1996-1998) and Mark Levy of Michigan State University (1998-2002).

5 Its name was subsequently changed to "Asian Media, Information and Communication Centre" in 1996 to reflect its more holistic approach to communication research, education and training.

6 Of the major American universities that have signed memorandum of understanding or launched collaborative research projects are: Cornell University, Michigan State University, San Diego State University, University of Southern California (Annenberg School of Communication), UCLA., and the University of Missouri at Columbia

(School of Journalism)

Appendix 1: Major Communication Programs in Singapore (A Sample)

- (1) School of Communication and Information Nanyang Technological University (<http://www.ntu.edu.sg/scl/>)
Degree courses:
 - Bachelor of Communication Studies (Honours)
 - Master of Communication Studies (by research)
 - PhD in Communication Studies (by research)
 - Master of Mass Communication (by coursework)
 - Postgraduate Diploma in Mass Communication (by coursework)
 - Master of Science in Information Studies (by coursework)
 - Master of Science in Knowledge Management (by coursework)
- (2) Ngee Ann Polytechnic Centre for Film & Media (<http://www.np.edu.sg/~dept-fms>)
Diploma courses:
 - Diploma in Mass Communication
 - Diploma in Film, Sound & Video
- (3) Temasek Polytechnic Temasek Design School (<http://www.tp.edu.sg>)
Diploma courses:
 - Diploma in Visual Communication
 - Diploma in Interactive Media Design
- (4) Nanyang Polytechnic (<http://www.nyp.edu.sg>)
Diploma course:
 - Diploma in Digital Media Design
- (5) Institute of Advertising of Singapore (email: instadv@cyberway.com.sg)
Diploma courses:
 - Diploma in Visual Communication
 - Diploma in Marketing Communication
 - Graduate Diploma in Marketing Communications (jointly conducted by IAS, IPRS & Marketing Institute of Singapore)
- (6) Institute of Public Relations of Singapore (email: iprsnet@singnet.com.sg)
Courses:
 - Certificate in Public Relations
 - Diploma in Public Relations Management
 - BA (Communication) in Public Relations & Organizational Communication (jointly conducted with Charles Sturt University)
- (7) Many distance learning or “off-shore” courses are also conducted at these three private-sector organizations for foreign institutions based in Singapore:
 - Singapore Institute of Management (www.sim.edu.sg)
 - Management Development Institute of Singapore (www.mdiss.edu.sg)
 - Informatics Holding (email: igcol@informatics.edu.sg)