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The Impact Of Broadcast Satellites On Education

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THE IMPACT OF
BROADCAST SATELLITES ON EDUCATION

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Introduction

In the era of information, a satellite plays very important role in communication. ASEAN countries had first experience about satellite when Indonesia launched its PALAPA satellite in 1976. It was a great impact to communication structure in each country in the region. At least, broadcasting was changed into satellite linking system, following by telephone and other telecommunication which were needed to reform. In Thailand, there are 14 television stations and 484 radio stations. Only 4 television stations in Bangkok are using satellites (INTELSAT-5 and PALAPA) to transmit their programs to rural area.

Today, we discuss frequently about using satellite for educational purpose. Sukhothai Thammathirat Open University had even declared its future plan in a symposium on Educational Broadcasting in Asia and the Pacific Region 1988 to collaborate with TV Channel 11, a public broadcasting station, to lease a satellite transponder of PALAPA for its distant learning. However, TV Channel 11 is the only one that is no satellite connection but still uses micro-wave linking their programs. Not only a non-profit television station and financially supported by the government, some media foundations, and the Open University, but also the whole

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budget are too small amount to invest satellite communication. The cost of investment and operation in a high technological media is likely a big stone burden for the station.

The Satellite Instructional Television Experiment (SITE) of India is another good experience in educational operation by satellite. "Satellite television in India is seen as both a problem - solver and a problem - generator," said Contractor, Singhal, and Rogers in their paper, "Metatheoretical Perspectives on Satellite Television and Development in India." They attempted to analyze the problems of satellite utilization. It is probably the best lesson for any satellite user. The case of India is a good example for high technology application among the poor in a large country and many dialects and races.

Background on Satellites in Thailand

Thailand started using satellite in 1979 by leasing a transponder of the Indonesian satellite (PALAPA) to link television signal (TV Channel 7) from Bangkok to Chiangmai and Chiangmai to Bangkok. The first transmitted television program was a national sport competition at Lumpang province which is located 100 km. from Chiangmai. After the first broadcast program through satellite, another eight earth stations were founded all over the country and completed in the first year. From the following year up to now, there have been a number of earth stations in every part of the country to render nation-wide television coverage possible. The

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system of satellite communication in Thailand is linked by earth stations only; therefore, direct broadcast system (DBS) is impossible at present.

In fact, Thailand used to plan to own a domestic satellite, not only to serve as a space broadcast repeater, but to serve for general communication purposes also. Nowadays, the needs for communication, both domestic and international, is higher. Especially, during this rapid economic growth at the moment, it is important for Thailand to reconsider seriously if it should have its own satellite in future.

In 1977, Thailand was approved for a right to use a still satellite at 74° of the east latitude. At this location, if such satellite had broadcast with 12,000 Mhz, it could have provided communication service throughout the country. Regrettably, Thailand has never owned any satellite yet. Nevertheless, in spite of no own satellite, Thailand has not faced any obstacle for providing domestic communication service, since it can lease a transponder from PALAPA and INTELSAT, if needed. Such a lease can be verified in Asian Mass Communication Bulletin (AMCB), which reported a recent interview with Mr. S. Abdulrachman, Director-General for Telecommunications saying that Mr. Abdulrachman had urged all ASEAN countries to use his PALAPA satellite more.

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Broadcast Satellites on Education

Satellites for educational purposes have been utilized much earlier by many countries. Especially, Indonesia and India have used satellites effectively in spreading education all over the wide areas. Even though Indonesia has thousands of islands and each of its cities are distant from one another, they can use satellites to solve such problem.

Moreover, in many countries, such as Australia, Japan, and many countries in Europe and America, a number of studies about broadcast satellites on education have been conducted. In Canada and the U.S.A., a great number of reports on satellites for educational purposes has been found. For instance, students and teachers could correspond to one another simultaneously, though they lived in different states. Another example was that a famous professor could lecture across the university through a satellite. Because of satellites, scarce chance of meeting this famous professor is then possible easily. Canada also has tried to educate the Eskimos through a satellite to encourage educational equity.

The exchange of knowledge in every matter through a satellite makes education scope wider and also alters educational systems. A simultaneous meeting among various educational institutions is also possible through a satellite, no matter how far apart they are.

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By decreasing gaps and enhancing equal educational opportunity and access to relatively sophisticated knowledge, satellites bring about drastic changes to educational systems. Particularly, open or continuous educational systems provide enormous benefits for general public.

However, broadcasting education through satellites requires very high cost. Consequently, many countries gave up their prior attempt towards satellites utilization. Besides, in terms of education, seldom can obvious monetary payoff be witnessed. These countries are not then ready to invest their money on broadcast-by-satellite education, but they would rather do on communication business. Another reason is that some countries are not vast enough so the distance is not a barrier for widespreading education. The interaction between teachers and students can be achieved in a few hours. This is much cheaper than large-sum investment on satellites utilization.

In Thailand, print media are still more predominant in distant education than televisions and radios. However, in spite of high-cost investment, satellites should have certain impacts on the present transmission of information. For examples, the exchange of knowledge and information will be carried very rapidly. The old teaching method, one-way feeding knowledge to students, will decrease. Students will have more chance to exercise self-education and to

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search for knowledge from T.V. and radio educational programs. Even today, it is noted that students have a tendency to learn from computers rather than from teachers in class. The so-called "human interaction" will increasingly decrease.

Therefore, what do we expect from educational system through satellites? Do we want students learn from computers or do we want them to interact with their teachers as usual, but by different ways? Namely, "feeding" teaching method will be replaced by "discussion" and self-education will be emphasized more.

Conclusion

To summarize, it should be questioned how much the government have to invest, how much educational institutions have to spend and how much students have to pay, so that educational system through satellites can be transmitted effectively.

All of these questions must be considered and planned carefully. We cannot stop technologies to grow. On the other hand, today we may say we will not use them but tomorrow we may not be able to get away from them. Since we know we have to encounter such phenomena, we must encounter it with insight and be able to handle it effectively.

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