

The Roles of Classroom and Studio Teachers in Television Education

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It is my privilege and pleasure to speak to our friends from Asian countries on the problems of instructional television. I have been associated with radio and television education since 1933, when I started the first Japanese school radio broadcasts to over 3,600 elementary schools in the Osaka area. For the first half of this time, I was at NHK as the Educational and Program Director planning school radio broadcasts. For the last twenty years, as the president of the Japan Radio-TV Education Association, I have been engaged in promoting the utilization of school radio and television, and as the president of the National Society for the Study of Radio-TV Education I have been encouraging teachers and professors to study educational broadcasting theory, to put it into practice and to do research work in the field of radio and television education.

Based on my thirty-five years experience in radio and television education, I would like to discuss with you "the role and functions of classroom teachers and studio teachers in television education." This has been one of the most crucial problems among the Japanese teachers who are interested in the utilization of school radio and television in classrooms. Also, I would like to talk about some problems of instructional television in Asian countries and make a few suggestions for the future development of instructional television in your countries.

I. Television and the Teacher

The modern school is being challenged both in quality and quantity. The classroom teacher is over-burdened. She is required to be a subject specialist, to teach facts and skills, to administer tests, and to provide demonstrations and observations. Some of these can be effectively handled by instructional television. There are certain activities which television can provide more efficiently than can the classroom teacher. By handing time-consuming, sometimes inefficient and often impracticable activities over to television and audio-visual instruction, the teacher can make good use of her time to help children develop their creative and inventive talents, critical thinking, and acquire the ability to solve problems. It is not an easy task to change the outlook of traditional teachers. But there is an urgent need to convince the teachers of the effective use of instructional television.

This, then, is one of my fundamental principles: The encouragement of classroom teachers to use school television in their classrooms. Some progressive teachers are very eager to use television programs as an integral part of the school curriculum. But others are not. They develop and carry out their own teaching plans and use television programs as a mere teaching aid. They do not expect television to be able to present organized lessons, but only to transmit raw materials that may be interpreted and explained by the teacher. Still others are quite skeptical of using television programs in the classrooms, because they are so fully preoccupied in teaching only by textbooks or printed materials. Unfortunately professors of education who are training teachers belong to the most conservative group. They were taught by the textbook and lecture method, and they teach by the same method as by

which they were taught.

II. Historical Development of Educational Media

It is not an easy task to convince the textbook-centered teachers of the significant meaning of the roles and functions of school television in the training of children for future society. In this connection I often quote the following list of historical periods in which the roles of teachers have changed according to the development of educational media.

1. Spoken Language Age
2. Simple Written Symbol Age
3. Handwritten Manuscript and Woodblock Printing Age
4. Early Movable Type Printing Age
5. Modern Printing Age
6. Audio-Visual Age
7. Radio and Television Age
8. Teaching Machine Age
9. Computer Age
10. Satellite Age

The first type of teacher lived during the time when man had not yet invented written symbols. He had to know all that he wanted to teach because he could only teach what he was able to express in spoken symbols.

The second was after man invented written symbols. It was the duty of the teacher to teach how to write and read these symbols. Students used the symbols for communication as they were taught by their teacher.

The third is represented by the master teacher of the Medieval Age, when a few Great Books were taught to a few people. The Great Books had more philosophical and spiritual meaning than words as mere symbols. The teacher could read all the books and be a real authority in his field.

The fourth was during the early printing age. Since Gutenberg's invention of movable type in the fifteenth century books printed in large numbers instead of being painfully copied by hand could be placed in the hands of students. Dictionaries, encyclopedias and many other books were produced by many scholars. Libraries began to collect these printed materials as well as the old manuscripts. But they were mainly monopolized by the teacher so that they could be used to maintain the authoritarian status of the teacher. Through these third and fourth ages teachers could enjoy their authority. It was so glorious that even modern teachers are still unconsciously trying to maintain the same authoritarian status.

The fifth is the modern printing age. Through the remarkable advancement of modern science and technology, the field of learning has become very diversified and deepened. Rarely does a teacher know completely the subject she teaches. She has read only a part of the books in the field in which she specializes. More new books and printed materials are coming out year after year. On the other hand library science has made great progress and books are available in the library for teachers and students as well. What is the task of teachers in such a modern time, when people are gasping in the flood of printed materials? The main task of teachers is to be a good guide or a good tutor so that the students may find the way by themselves.

The sixth is the modern audio-visual age. Photographs, slides, filmstrips, silent then sound motion pictures, recordings, first on discs and later on tapes, have been invented during the past one hundred years and introduced into human communication as well as used as teaching media. They have been very important in education, because they operate at a lower level of abstraction than do books and permit teachers to bring rich experiences into the classroom. Thus teaching has become more

meaningful and further popularized.

The seventh is the age of radio and television. These media utilize an experienced teacher in their presentation, the classroom teacher can invite a master teacher into the room through radio and television. Team teaching with modern educational media is one of the most important developments in education today. The teacher is requested to cooperate not only with master teachers who visit the classroom through radio and television but also with planners and producers of these new media, through consultation and recommendations. With such a feedback system the one-way communication media may be turned into a two-way system. Thus the teacher has ample opportunity to participate in a very effective manner in producing new instructional materials—with careful organization and expression of ideas through proper channels. Teacher's activities should not be confined to the classroom but must be extended to the originating sources of communication through teacher participation in program development.

After radio and television has come teaching machines or programmed learning, computer and satellites will be next. Some work on programmed self-instruction was done in the United States in the 1920's, but little came of this effort. After an interval of thirty years programmed learning was re-examined by Professor B. Fred Skinner of Harvard University. Several hundreds of programs of different lengths and varied topics, using some twenty different machines, have been made in the United States during the past few years.

Following the lead of American experiments, Japanese educators and psychologists have been conducting various experiments in this field. Making an effective program is not an easy task, and takes longer than writing a textbook. But programmed self-instruction is promising for future education all over the world, both in industrialized and in developing

nations.

The use of computers and satellities in education is so new that we can only suggest what the shape of developments might be. But remarkable developments in computer memory systems and recent achievments in satellites in the Soviet Union and the United States have indicated a promising future for the use of new technology in the advancement of methods and techniques of education.

III. Teacher Training for Instructional Television

Even though today's teacher falls within the sixth, seventh or eighth catagories, that is, in the audio-visual, radio and television and programmed instruction ages, most of them are still teaching as if they were in the third or fourth ages, which was predominate before the advent of modern educational media. Why is this so?

The answer lies in the fact that we are very accustomed to teaching by the traditional method because we ourselves were taught mainly by the printed page. Most teachers are so accustomed to using textbooks, that they are apt to follow the same pattern even when they use television in the classroom. Different from more conventional methods, television requires a drastic change by the teacher in the theory and method of handling educational media.

But in a modern technological society even traditional teachers and educators cannot deny the importance of instructional television. More progressive teachers believe that television can teach as many facts and skills as can the classroom teacher. But when they are asked to use television programs as a part of classroom instruction, they often change their attitudes and are apt to follow the traditional patterns of teaching, emphasizing the value of textbooks and other traditional teaching

aids on the one hand, and criticizing the weak points of television programs on the other. School administrators and school systems in general are also more or less inclined to be skeptical in using television in the classroom because they believe in textbooks and also have heavily invested in materials closely connected with the printed page and therefore try to avoid extra expenses for "novelties."

Printed materials are closely associated with the authoritarian philosophy. Traditional Japanese teachers assume the highest authority in the subject matter in which they are assigned to teach. All instructional materials should be in their control. As long as the teachers maintain this type of authoritarian philosophy there is little room to persuade them to use television programs effectively in the classroom. We are badly in need of the reconstruction of educational theory in the age of modern technology and new educational media.

It is interesting to note that by the seventeenth century printing as an art was restricted in Europe both by the church and the state. Both feared the free and easy access to knowledge through books. Professors of those days felt that academic standards were being threatened through easy access to books without the authoritative interpretation of professors. Therefore our chief methods of instruction in universities has been through lectures and textbooks.

In this connection I think of the time of Galileo when he invented the telescope and discovered spots on the sun. The sun, in those days, was a heavenly body and therefore spiritual. For a heavenly and spiritual body to have blemishes would mean a most undesirable reconstruction of thought. Some refused to look. Other looked and saw the spots but refused to believe it because "Aristotle had never mentioned spots on the sun in his Great Books."

The same situation still exists in our schools today.

How can we persuade traditional teachers to change their attitude towards using television along with the use of printed materials in their everyday teaching in the classroom? This is a crucial problem not only for instructional television but for the entire educational enterprise of our modern technological age.

The problems of instructional television are tremendous, but modern science and technology require education to solve these problems. Technological change and the new educational media are now calling for change and modification in the methods of instruction. Teacher training should therefore be re-examined on the basis of a new concept of philosophy, psychology and method of education brought about by the rapid developments in instructional television and the new educational media.

IV. Instructional Television in Developing Countries

In March 1962 I attended a meeting of Experts on the Development and Use of New Methods and Techniques of Education at UNESCO House in Paris. The present state of development of educational media of each country was reported, and in particular, we discussed the theory behind the use of the new media, the results of research on their effectiveness, and some of their implications for developing countries. The potential value of television, particularly in the reduction of illiteracy, was one of the central points in this discussion. The following is a part of my proposal for a pilot project of instructional television in the developing nations of Asia.

Every nation in the world has had a long history of combatting illiteracy. In Western nations it has been a crucial problem since the Renaissance. In the developing nations of Asia, especially after World War II, fundamental education to eliminate illiteracy has become one of the most important issues.

Japan has struggled to reduce illiteracy since she opened her doors to Western nations in the 1860's. In those days, when Japan was still a feudal country, perhaps 80% of the total population was illiterate. In 1872, Emperor Meiji proclaimed universal education in Japan. However, it required more than two generations to increase literacy to 80%, and another generation to increase it to 98% just before the war. Thus after a century of strenuous effort by the government and the people, illiteracy was reduced to one or two percent of the total population. To accomplish this the government trained teachers, built schools and prepared textbooks.

Fundamental education to eliminate illiteracy for developing countries is one of the most important UNESCO projects. It is Japan's responsibility to share her past experiences in combatting illiteracy with her neighbors. This effort in Japan, however, was accomplished primarily during the Printing Age.

History may not necessarily repeat itself in the same manner in such a rapidly changing world. I would like to recommend to the developing nations to reverse our past experiences. This means that instructional television should be given first priority in combatting illiteracy. It may sound very strange to many people, but it is really quite reasonable. Let me explain.

To train teachers, prepare textbooks, and construct school buildings requires many years. Yet the government may still have great difficulty in enrolling all the children in schools throughout the country. This is part of the history of school education in every nation, East and West.

On the contrary, if the nation initially established a firm policy to use instructional television for fundamental education, television transmitters may be installed within a few months. Along with construction of television equipment, program planners, producers, program directors, and studio teachers may be trained in the same short length of time. In your developing

countries electricity may not be well distributed but transistor television sets are now available. Or ordinary television sets can be used with a small automatic electric generator. Even the remotest community in the country can be reached by instructional television programs providing television transmitters are well located.

There will be no problem in the enrollment of children. They are most enthusiastic about watching and listening to the new educational medium. Even their parents, brothers and sisters, uncles and aunts and grandparents will get together around the television sets. Thus child and adult education may be conducted by the same set at the same time or as the case may be, at different times.

School buildings may not be needed to begin with. Any house or hut, even an open meeting place, may be suitable for group viewing. The leader of group viewing need not necessarily be a trained teacher. A group leader of any kind may be employed in the beginning. The minimum requirement for elementary school teachers in modern society is a secondary education plus one or two years of professional training in education. The training of teachers is one of the most important factors for the development of a school system.

In most cases, the developing countries are suffering from the existence of many vernacular languages. But they are following a policy of selecting one or two national (official) languages from among them. Instructional television programs should be conducted in the selected national language or languages. Thus, the people will be well orientated for proceeding with formal fundamental education.

In the meantime, instructional radio programs of a higher intellectual level may be introduced for the purpose of training languages and of offering more cultural and educational courses.

Compared to the total cost of preparing teachers, textbooks,

and school buildings, an instructional radio and television project is less expensive, and, particularly, requires less time. It is also more effective especially during the early stages of fundamental education.

But I am not ignoring the importance of school education in the developing countries. On the contrary, I would lay special emphasis on constructing well balanced educational programs in an attempt at combining learning by printed materials and audio-visual materials, especially radio and television. By the utilization of the new educational media in the developing countries, remarkable achievement, which other nations took more than a century to achieve, can be made in one or two generations.

A strong nationalistic feeling prevails in almost all of the developing countries of Asia and Africa. This is quite natural when a nation becomes independent from colonial control. History tells us that nationalism in a narrow sense is often a menace to national independence as well as to world peace. Especially in the presently internationally complicated world, people must be well informed in various aspects of world affairs.

Television brings the world into the home and classroom, and takes the home out into the world. It gives people first-hand experience in world affairs and helps people to open their eyes and minds to the world. It is more effective than the printed page. Instructional television plays an important role among the younger generation in widening their outlook on life and in understanding the close relationships among the nations of the world. It is my strong conviction that instructional television should be given first priority, along with the printed page and audio-visual materials, for fundamental education in the developing nations.

It is not an easy task to open the tightly closed doors of the

rural communities. Old traditions, folkways, customs, morals, and taboos dominate the rural community. Television is one of the most influential tools for modernizing the old way of life in every nation and especially in the developing nations. If we could use instructional television wisely and effectively, a cultural and educational revolution might be realized in a minimum period of time.

V. Conclusion

The report of the 1960 UNESCO Karachi Conference on Primary Education in Asia stated that in fifteen Asian countries, excluding Japan and Red China, during the ten year period from 1950 to 1960, compulsory education laws increased student enrollment from 38 million to 66 million. The Karachi Conference planned a 20-year program to include seven years of compulsory education for every Asian student by 1980. For this plan to succeed it will cost 56 billion dollars and include 237 million Asian children.

The progress of education in Asia will depend to a great extent on the methods of teaching employed. For centuries the most formal teaching methods centering on printed materials were successful in educating a few selected students from the better families. Where once there were only around ten students in the class from upper income families, now there are fifty from all social and economic levels. Can the same teaching methods be used in both classrooms?

This question has been stimulating interest in the new educational media and in audio-visual methods of a number of educators in nearly every Asian country. In this respect it is worth noting the report of the UNESCO Conference of 18 Asian Ministers of Education, which was held in Tokyo in April 1962. The final report of this conference called for greater use of

radio, films, television and programmed instructional materials. In Asian countries with their large populations and extensive land areas, mass media methods are vital for the advancement of education.

Of all these educational media, however, the most widespread and universal is educational radio, and now you are planning to start instructional television in the near future.

Thirty-five years of experience in instructional radio and fifteen years of experience in instructional television in Japan has significant meaning for our neighboring nations in Asia. I do hope our friends of Asia will share our experiences in the new media for the educational betterment of their own countries.

(本学客員教授)