The Utilization of the Malaysian Educational Television¹

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> Makalah ini mengandungi tiga bahagian, Bahagian pertama mengandungi perbincangan ringkas tentang sejarah latar kelahiran Rancangan Televisyen Pendidikan (TVP) di bawah Kementerian Pelajaran Malaysia, objektif-objektifnya, dan proses pengeluaran rancangan TVP di Malaysia. Bahagian kedua mengandungi perbincangan tentang langkah-langkah yang diambil oleh pihak Perkhidmatan Sebaran Pendidikan (PSP), Kementerian Pelajaran Malaysia, dan tindakbalas pihak masyarakat sekolah terhadap kemudahan-kemudahan yang diadakan oleh pihak PSP berhubung dengan rancangan TVP. Perbincangan dalam bahagian ini jelas menunjukkan bahawa pihak kerajaan benarbenar berusaha mengadakan segala macam kemudahan untuk keperluan kejayaan penggunaan rancangan TVP di sekolah sekolah di Malaysia; sebaliknya, pihak masyarakat sekolah pula menampakkan sambutan yang dingin terhadap usaha-usaha dari pihak kerajaan. Bahagian terakhir mengemukakan beberapa cadangan: (a) khusus untuk membaiki mutu penggunaan rancangan TVP oleh pihak masyarakat sekolah, dan (b) langkah-langkah yang difikirkan perlu dan boleh dijalankan oleh pihak PSP dan Kementerian Pelajaran Malaysia sendiri agar perlaksanaan dan penggunaannya di peringkat sekolah sekolah benar-benar dapat menjayakan objektif penubuhan bahagian TVP, iaitu memperbaiki perimbangan pengajaran pembelajaran di antara sekolah sekolah di luarbandar dengan sekolah-sekolah di bandar.

Introduction

This paper consists of three parts. The first part discusses briefly the historical background, objectives, and process of production of Educational Television² (ETV) in Malaysia. This is followed by a closer study of the utilization process of ETV. The discussion in this part is divided into two sections: steps taken by the *Malaysian Educational Media Service Centre* regarding the utilization of the ETV, and the response from the school community and suggestions for its improvement. The final part of the paper makes several suggestions for further improvement of the whole utilization process of ETV.

The establishment of the Malaysian ETV programme is closely connected with the development of media service in the teaching-learning process within the national educational system. Media programme was started in 1956 when the Audio-Visual Aids Section was established within the Ministry of Education. Then, in 1963, the Ministry of Information and Broadcasting started its Radio Service to Schools. This service, however, was taken over by the Ministry of Education in 1966 and renamed Educational Radio Programme.

The development of media service for the teaching-learning process in Malaysian schools reached another phase when the ETV programme after preliminary trials as pilot projects in 1965 and 1966³, was included in the Second Malaysia Plan of 1971-1975. Under this plan the Educational Media Service Centre was formed. This Centre, which is a division of the Ministry of Education, consists of an Audio-Visual Aids Section, an Educational Radio Section, and an Educational Television Section, the last of which is the concern of this paper.

The objectives of the Malaysian ETV according to government reports are:

- strengthening the national system by reducing imbalances and improving educational opportunities in rural schools which are handicapped for lack of qualified staff and equipment;
- improving the quality of education by demonstrating good teaching methods and providing additional audio-visual materials;

- 3. assisting in curricular reforms through speedy and effective delivery;
- improving survival rates at all levels by motivating pupils through interesting programme materials, using developed audio-visual techniques and enabling teachers to devote more time to individual attention in large classes;
- assisting in the teaching of subject areas where trained teachers are in short supply, e.g. Science, Mathematics, and Technical and Vocational subjects,
- 6. promoting civic consciousness and national unity through civic programmes at both primary and secondary levels through use of Bahasa Malaysia following the phased introduction of Bahasa Malaysia in English Language medium schools;
- disseminating information of educational interest to parents and keeping teachers up-to-date on curricular innovations and practices through World or Education programmes;
- 8. assisting in teacher training programmes; both pre-service and in-service, through employment of

The above list of objectives shows that the Malaysian ETV is first entrusted with a reformatory role —to reduce educational imbalance between urban and rural sectors. It may also be said that ETV is expected to bring about democratization of education in a more radical manner than any other approach or method.

To achieve these objectives, calculated plans are to be observed with regard to the production process⁵ and utilization of this programme. The production process of the Malaysian ETV, which is similar to that proposed by Alan Hancock (1971, p.116), consists of the stages shown in Figure 1.

The personnel involved in the production process of each of the programmes of the Malaysian Educational Television range from members of the Advisory Committee to the crew members in the studio. For maximum efficiency, they are supposed to work together as a team, as may be seen in the flow chart in Figure 1.

The Utilization of the Malaysian Educational Television Programme

As stated earlier the Malaysian Educational Television (ETV) has various significant roles to play. Besides making an attempt to bring about educational equality between the privileged urban sector and the long neglected rural sector, it is also expected to improve the general quality of education by effective delivery and demonstration of good teaching methods. It has been pointed out that the Malaysian Educational Television is reasonably well organized and administered with good programmes to fulfill these roles (Fatimah Binti Ali, 1977, pp.37-74). All these discussions, however, concern only one party, the giving end—and nothing has been said yet about the other party—the receiving end or the school community.

The success of an ETV system does not depend only on its organization and administration, but perhaps more so, on the response of the intended viewers of the school community. Sound organization, efficient administration and good programmes would be useless if the intended viewers are indifferent towards the whole idea of ETV. This section will deal with the utilization of the Malaysian ETV. This includes all the necessary steps taken by the Educational Media Service Centre — the preparations of programmes, transmitting schedules and teachers' notes, and the distribution of television sets—as well as the schools' response towards them.

Steps Taken by the Educational Media Service Centre

The Educational Television Programmes

These programmes are prepared mainly for the primary and secondary classes, but only a few chosen topics from selected subjects are produced. From 1972 until 1979, there has been some slight increase in the number of the subjects dealt with in the programmes. The number of programmes, and the number of intended year level, however, has increased rapidly from time to time. This is due to the rapid expansion of the Malaysian ETV transmitting time.

To date, the programmes are prepared for the teaching of seven subjects for Standards Three, Four, Five and Six, i.e. Sains Rendah, Hisab Rendah, Sejarah, Hal Ehwal Semasa, Bahasa Malaysia, Bahasa Inggeris and Tatarakyat, the majority of which have nineteen programmes made up of nineteen chosen topics. All programmes use Bahasa Malaysia except those for the teaching of English.

The programmes for the secondary schools concentrate on the teaching of only four important subjects, i.e. Sains, Hisab Moden, Perdagangan, and Sivik Menengah. Like those for the primary schools, only certain selected topics for each subject are included in the programmes, and the number has increased rapidly from year to year according to the forms. Science programmes for Form III increased from ten in 1976 to nineteen in 1979 and for Sixth Form (national medium) from thirty in 1976 to sixty in 1979.

Apart from these, there is a Bahasa Malaysia programme entitled Alam Pendidikan specially

for teacher trainees, teachers, and parents.

The above analysis clearly indicates the *Malaysian Government's emphasis on science and mathematics* in the school curriculum. The significance of mathematics and science in the ETV programmes may be understood more if it is remembered that schools in the rural areas still lack specialist teachers, and facilities for these two subjects. By including them in ETV programmes, these facilities and specialists are automatically "brought" to these schools.

The Transmitting Schedules

The Malaysian ETV transmitting schedules are prepared by the Subject Committee and printed by the Publication Unit on sheets of high quality glossy paper, measuring 36 by 24 inches. Each sheet carries all the particulars of the programmes to be transmitted for a period of four weeks. Since 1975 up to the present, the total yearly transmitting time was 38 weeks. Also, since 1975 up to 1977, the daily transmitting time of the Malaysian ETV was from 7:40 a.m. to 1:00 p.m. for the morning school session, and 1:10 p.m. to 5:20 p.m. for the afternoon session⁶. There is, however, a slight change in the daily transmitting time in 1979, i.e. from 7:40 a.m. to 12:40 p.m. for the morning school session and 1:20 p.m. to 4:40 p.m. for the afternoon session⁷. The length of each programme is between fifteen to twenty-five minutes. The weekly transmitting days are from Monday to Thursday except public holidays.

The printed transmitting schedules are sent to schools at least two weeks before the opening of each school year. The ETV teacher coordinator of the school usually receives the ETV schedules from the State Educational Media Service Officer, and distributes them to his fellow teachers. In some schools, however, this responsibility is assumed by the headmaster himself. No matter who receives the ETV schedule, it is always the responsibility of the headmaster and his time-table committee to arrange the school time-table so that it coincides with the ETV schedules. The subject teachers concerned are informed by the time-table committee regarding the ETV programmes which are relevant to their classes. The topics of the programmes for each of the subjects are stated in the time-table; thus, the subject teachers can make their weekly or unit plans harmonize with the plans or topics of the ETV programmes. In such a way, the students will be able to follow and benefit from the programmes.

It is significant to note here that until 1976 each programme was repeated eight times, i.e., four times in the morning and four times in the afternoon, on different days through Channels One and Two. This repetition in transmitting programmes was made by the Malaysian ETV for several important reasons. Among them were: (i) to make it easier for the school to adopt the ETV schedule; (ii) to help the less intelligent students for whom the repetitions were essential; and (iii) to enable schools with a limited number of television receivers to rotate the use of the television room(s) among the different classes of the same year level.

The ETV schedule carries information not only for the teacher but also for the students. By knowing beforehand the topics, the date and the time of telecast, students can then prepare themselves ahead of the actual telecast. Thus, the students are able to derive the maximum benefit from each tele-lesson⁸ or programme. It is for this reason that a master time-table regarding the use of the ETV was prepared and made available in the school's notice board(s) for easy reference.

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The Teachers' Notes

The teachers' notes of the Malaysian ETV programmes are printed on 7 by 9% inches bond paper. The number of pages varies from one to five according to the requirements of the topics concerned. These notes are prepared by the script writers as the content sequence of these notes must tally with that of the scripts. Since these notes serve as guides to classroom teachers regarding the ETV programmes, they are prepared in such a way that they resemble lesson plans.

Each teachers' note consists of several items which include (i) the name of the subject, (ii) the intended year level, (iii) the topic to be taught, (iv) the programme number, (v) the aims and objectives of the programme, (vi) the suggested preparation before the telecast, (vii) the contents of the programme, (viii) the suggested activities during the telecast (if needed), and (ix) the suggested follow-up activities in the classroom. The duty of the classroom teachers here is to understand the objectives of these notes, and to prepare the students for activities before, during and after the telecasts for topics that have been selected and made into programmes. Thus, the teachers themselves should first teach the prerequisite topics to help the students understand the telecast. Then and only then can the ETV programmes be made more meaningful to the students.

The Television Sets

Aside from the ETV schedules and the Teachers' Notes, the Malaysian Educational Media Service Centre also supplies at least one television receiver to each school throughout the country. In the case of the rural schools which are without electricity, generators are also provided. Schools with a bigger population are usually given two or three television sets each. In addition, a few of them are also supplied with one set of video-cassette recorder (VCR). Schools, however, are also encouraged to purchase more television sets. Table 1 below shows the distribution of television sets by the Educational Media Service Centre up to 1974.

The Educational Media Service Centre has also standardized the size of all the television screens to 24 inches. The television receivers are expected to be situated at the most convenient place(s) in the schools. Instructions regarding the location of the television sets are always given to the headmasters and the ETV teacher coordinators by the different State Educational Media Service Officers.

The Utilization and Evaluation Courses

To ascertain that the ETV schedules, the Teachers' Notes, and the television sets are effectively utilized, the Educational Media Service Centre has conducted since 1972, several in-service courses throughout the country for the State Educational Media Service Officers, headmasters, teachers, school supervisors, the lecturers of teacher training colleges as well as school inspectors. A total of 8,124 teachers have attended these courses up to 1975 as shown in Table 2. Aside from these courses, information regarding the utilization of the Educational Television (and Educational Radio, and other audio-visual materials) are also made available to the school community through the Educational Media Service Journal, which, until 1978, was published twice a year but from 1979 onwards, is being published only once a year.

The Schools' Response

The above discussion reveals that the Malaysian Government is serious in implementing its Educational Television programmes. This is because the Government has taken all the necessary steps to ensure that this expensive innovation is effectively utilized. What remains to be discussed now is the response of the school community towards this innovation. This response may be seen by analyzing the general reactions or attitudes of every section of the school community — headmasters, teachers and students — towards the ETV programmes, transmitting schedules, teachers' notes as well as television receivers.

TABLE 1 List of Schools Supplied With TV Sets and Generators [Pinjaman Bank Dunia 5,000 Buah]

	State	List	'A'	List	'В'	List	'C'	List	'D'	List	E'	List	'F'	Sek. Men. Berasrama	E .	Total		Col- leges	Juma'ah Nazir	EMSC	Grand Total
		E	G	E	G	E	G	E	G	E	G	E	G	E	E	G		E	E	E	
1.	Perlis	18	25	-	=	6	3	-	-	-	_	4	-	2	30	28	58	_	-	5	63
2.	Kedah	63	119	3	35	72	125	2	13	7	41	45	-	4	196	333	529	=	1	10	540
3.	P. Pinang	75	10	18	_	116	14	-	1	_	-	56	-	2	267	24	291	1	1	10	303
4.	Perak	137	126	27	32	198	227	58	16	-5	6	57	_	4	481	407	888	2	1	10	901
5.	Selangor	89	84	42	12	148	94	7	10	6	52	120	-	8	428	252	672	3	1	10/4*	702
6.	Negeri Sembilan	54	65	7	9	60	65		3		_	52		4	177	142	319	1.	1	10	331
7.	Melaka	46	33	-	16	60	36	8	-	-	_	22	-		136	85	221	1	-	4	226
8.	Johor	73	152	1	65	78	219	24	64	2	122	47	-	2	227	622	849	1	1	15.	866
9.	Pahang	37	137	-	4	37	124	6	12	8	20	15	-		103	297	400		1	15	416
0.	Trengganu	38	98	-	23	6	74	3	8	- 5	_	14	-	2	63	203	266	1	1	10	278
1.	Kelantan	53	120	2	25	15	107	. 1	10	-	-	27	_	2	100	262	362	1	1	10	374
		683	969	100	221	796	1088	109	136	23	241	459	-	30	2200	2655	4855	11	9	125	5000
	Total		1652		321		1884		245		264		459	30			4855	11	9	125	5000

TV Sets (E) TV Sets (G) Total

2345 2655 5000

[Source: Educational Media Service Centre, Malaysia]

^{*} EMSC Section + In Reservation E Electric G Generator

TABLE 2

The Malaysian Educational Television and Educational Radio Utilization and Evaluation Courses for 1972-1975

Date	Participants	No.	Places
1972 Jan. 17 to Feb. 13	School Supervisors, School Inspectorate, Lecturers of Teacher Training Colleges and EMS Officers	34	National Broadcasting Training Center, K.L.
1972 April (School holidays)	Headmasters & Assistant Headmasters of Secondary Schools	1180	All States (State Level)
1973 Mar. 12 – 24	State EMS Officers & Lecturers of Teacher Training Colleges	24	National Broadcasting Training Center, K.L.
1973 April (School holidays)	Headmasters & Teachers of the Elementary Schools	2160	All States (Regional Level)
1973 August (School hõlidays)	Science and Modern Mathematics Teachers for the First Year of Secondary Schools	1202	All States (Regional Level)
1974 April (School holidays)	Science and Mathematics Teachers for Std. 5 (Primary Schools)	1400	All States (Regional Level)
1974 August (School holidays)	Science and Mathematics Teachers for Third Year of Secondary Schools	770	All States (Regional Level)
1974 Dec. 1 – 9	Audio Visual Workshop "Key Personnel"	24	AVA Center, K.L.
1975 April (School holiday)	School Coordinators	1330	All States (Regional Level)
1975 July 4 – 7	State EMS Officers and EMSC Officers	16	Universiti Sains Malaysia, Pulau Pinang

[Source: Paul Si, "A Brief Report on Instructional Television and Instructional Radio Utilization and Evaluation Courses", (Mimeographed), n.d., n.p.]

The Educational Television Programmes

A general survey made for this study shows that, generally, Malaysian students are enthusiastic about the ETV programmes, but their enthusiasm is left unexploited for two reasons: firstly, not enough ETV sessions are arranged for them; secondly, in most cases, ETV is viewed without proper guidance by their teachers. Unlike the students, the headmasters and teachers generally seem to be indifferent towards ETV. They seem to regard the ETV as something for relaxation rather than for serious and more meaningful learning. In spite of the utilization courses attended, many headmasters and teachers are still in the dark as regards the objectives and potential roles of the country's ETV. One headmaster, for instance, thinks that the purpose of the Malaysian ETV is simply to keep up with the Joneses.

The Transmitting Schedules

This general attitude of the headmasters and teachers may be seen, for instance, in their reactions towards the ETV schedules. It must, however, be mentioned that many headmasters do take serious steps to harmonize their school schedules with those of the ETV. These headmasters, especially those of primary schools, arrange that all classes having ETV programmes are given as much opportunity as possible to view the programmes. They also arrange the time-table in such a way that at least one class views the ETV lesson each time.

Some headmasters, however, are not as keen, and they usually leave the entire responsibility regarding the ETV schedule to the time-table committee. More often than not, this committee tackles "the problem" at its convenience with the result that maximum utilization of ETV by the intended viewers does not become possible. In some schools, the time-tables are arranged in such a way that as many as three different classes view the ETV programmes at the same time. In other schools the programmes are simply made available only to the weaker classes, while others are left out. Still, in other schools, students are only allowed to view ETV occasionally. Tables 3 and 4 give the distribution of the utilization figures for 1974 and 1975 respectively according to classes.

TABLE 3

The Educational Television Utilization Figures for 1974

Series	Total Classes	Classes Viewing	% Viewing
Primary			
Sains D4	6702	3318	50
Sains D5	6548	3396	52
Hisab R. D4	6702	3288	49
Hisab R. D5	6548	3295	50
B. Malaysia D3	6753	2991	44
B. Inggeris D4	6702	3022	45
Tatarakyat (D5 & 6)	12744	5480	43
Secondary			
Sains T. III	1282	365	29
Science F. 3	1282	477	25
Sains T. II	1558	540	35
Science F. 2	2014	669	35
Sains T. I	1749	588	34
Science F. 1	2280	765	34
Hisab M. T. III	1282	182	14
Maths F. 3	1922	209	11

Series	Total Classes	Classes Viewing	% Viewing
Hisab M. T. II	1558	383	25
Maths F. 2	2014	512	25
Hisab M. T. I	1794	526	32
Maths F. 1	2280	638	29
Commerce T. II	where of Eniment lab	104	Cold Street Indame.
Commerce T. I	shoots of teach will sub-	179	distribution of fish
Sivik (T. I, T. II)	3307	759	23

[Source: Peter Dye, "Revised Educational Television Utilization Figures for 1974." n.d., n.p. (mimeographed).]

TABLE 4

The Educational Television Utilization Figures for 1975

Total Number of Classes	Classes Viewing	% Viewing
5962	4484	75
6028	4042	67
5732	3798	66
5962	3800	64
6028	3762	62
5732	3614	63
6240	3916	63
5962	3693	62
6028	3608	60
11760	4011	34
1208	666	55
1635	621	38
1426	739	52
1995	747	37
1589	747	47
2190	761	35
1208	475	39
1226	445	36
1426	625	44
1995	657	33
1589	758	48
710	210	36
856	271	30
2634	831	32
953	325	34
	5962 6028 5732 5962 6028 5732 6240 5962 6028 11760 1208 1635 1426 1995 1589 2190 1208 1226 1426 1995 1589 710 856 2634	of Classes Classes Viewing 5962 4484 6028 4042 5732 3798 5962 3800 6028 3762 5732 3614 6240 3916 5962 3693 6028 3608 11760 4011 1208 666 1635 621 1426 739 1995 747 1589 747 1208 475 1226 445 1426 625 1995 657 1589 758 710 210 856 271 2634 831

[Source: Chiam Tah Wen, "Educational Television Utilization Figures for 1975." n.d., n.p. (mimeographed)]

As stated earlier, the ETV schedules not only indicate transmitting time for each programme, but also the topics to be telecast. Thus, teachers can incorporate these topics into their weekly scheme of work so that the topics may be conveniently followed up when the time comes. Many teachers write in their record books that they are arranging their teaching to coincide with the ETV schedule. This is, however, meant only for the information of authorities and not for actual utilization of ETV. More often, it is this group teachers who do not look after their students during the ETV period. Hence, this negative attitude of some teachers towards the ETV is passed on their students. However, there are many students who find the programmes more stimulating than conventional classroom teaching and that is why they look forward to the transmitting periods. Students who are under responsible teachers usually prepare their work before the telecast periods, and are very willing to carry out the follow-up activities suggested in the teacher's notes.

The Teachers' Notes

The negative attitude of the teachers and headmasters towards the ETV schedules is carried over to the utilization of Teachers' Notes. Many headmasters do not seem to bother about the contents of these notes and whether these notes are utilized by their teachers and just stock up every copy of the notes that is distributed to the schools.

As for the teachers, each note is supposed to be used as guide or possibly as a lesson plan for the particular tele-lesson. He is expected to study carefully the instructions given in the notes, and follow them step by step before, during, and after the telecast. Some teachers use the notes as expected of them. However, others are indifferent and simply ignore the existence of the notes. They think that the suggestions given in the notes require them to do more preparation and infringe on their professional capabilities. This group of teachers simply do not want to share their experiences and ideas with the teachers preparing ETV lessons.

This indifference exists because of administrative and psychological reasons. The problem of administration stems from the lack of a clear understanding of the roles of ETV. Incidentally, this apathy among teachers has been found in nearly every country during the first few years of the introduction of its ETV programmes, for example, in India, American Samoa and the United States (Robert Franc; 1967).

The Television Sets

Since Malaysian ETV is a new innovation, it follows that the majority of Malaysian schools have no proper television rooms as yet. Most schools have either converted one of their ordinary classrooms into a television room, or simply placed the television set in schools' hall, or the laboratory, or even the library. However, a small number of schools have proper ETV rooms.

Since most schools do not have proper ETV rooms, it also follows that most television sets are not properly mounted at the correct place, height and angle. In some schools, television receivers are placed on top of ordinary tables at the corners of scarcely furnished classrooms. In some other schools, television receivers are placed on make-shift television stands that are too high for the normal eye level. In schools which use the library, or the laboratory as television rooms, the sets are also placed either on tables or on platforms as above. In other words, most schools do not stress, or are probably not aware of the significance of proper positioning and mounting of television receivers.

Conclusion and Suggestions

Since the students are not viewing the television programme for entertainment, it is important to correctly position and mount the television receiver, as these factors create the proper instructional atmosphere for the students. Schools should therefore make every effort to mount the receiver properly. This can be done by mounting the television set from the ceiling of the classroom, or from the wall, or from a column running between the ceiling and the wall, or from a column running between the ceiling and the floor, as shown in Figure 2. If the television set is mounted at an angle that is higher than the normal eye level, it should be titled down a little so as to be less strenuous to the eye.

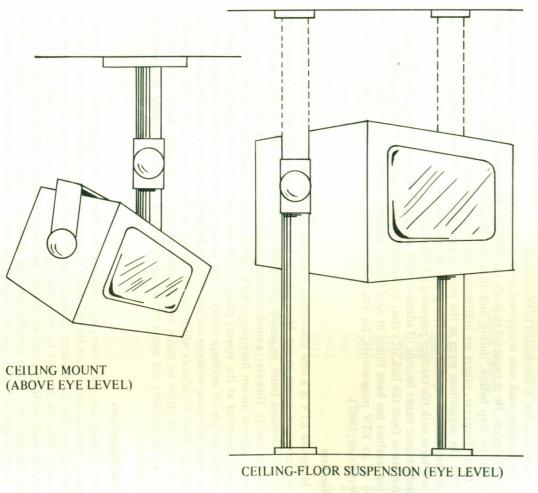


Fig. 2. The Ideal Ways of Mounting a TV Set [Source: Hancock, Planning for ETV, p.133]

Aside from the position of the television sets, the comfort of the viewers in the television room is also important. Here again most schools do not seem to attend to this. In one school, where the viewing room has no chairs and desks, students are made to sit on the floor. In many schools students are provided with desks and chairs or benches, but teachers are not particular about arranging chairs and desks to suit the proper viewing angle. Besides, most chairs and desks do not have rubber cups at the tips of their legs, and thus create a lot of noise when they are moved. Furthermore some of these schools cram as many classes as possible into the television rooms during the ETV periods. The above situation is partly due to the lack of proper facilities and also to the general attitude among headmasters and teachers that the ETV is not a serious and integral part of the education system.

On the other hand, there are also schools which utilize television sets effectively. In these schools, the television receivers are located in specially converted television rooms with enough chairs, desks and chalkboards. Often, the television set is placed at one of the two corners in front of the room. Figure 3 shows an example of the arrangement of a viewing room for a class of 42 students. Only students within the shaded angle are able to view the image on the screen in correct proportion. The students outside the viewing angle can still see, but the image seen is distorted. The shaded angle which is 45 degrees, is the maximum horizontal viewing angle.

For a general improvement of the set-up of an ETV room in Malaysian schools, the following proposals are suggested:

- 1. Any classroom may be converted into a television room as long as it is located away from noise and well-ventilated for proper concentration.
- 2. The room should not be too dark when the light is turned off and the illumination during the viewing period should be 30-foot candles.
- 3. The television set should be correctly mounted at the proper eye level of the sitting viewer. If it is to be mounted a little higher than the normal eye level, it is necessary to tilt the television set down to the maximum vertical angle of 30 degrees as shown in Figure 4.
- 4. The seats should be arranged only within the maximum horizontal viewing angle as shown in Figure 5.
- 5. To minimize the noise in the room, all steel and wooden chairs and desks should have rubber cups at the tips of their legs.
- 6. The number of seats should be proportional to the size of the screens, as shown in Table 5.
- 7. The viewing area should also be proportional to the size of the screen. Tables 6 and 7 show the different sizes of the television screens and their corresponding viewing distances and viewing areas.
- A chalkboard should be placed in the television room for pre- and post- telecast activities.

It is significant to recall here that all schools in Malaysia have been provided with at least one television set each. For effective utilization, however, the schools are expected to purchase more sets. Unfortunately, most schools have not done this. On the other hand, there are also indications that some schools which have been provided with more than one television set each are not making proper use of them. In one school, two of the four sets given to the school are placed in the school's store room; another set is kept in the headmaster's office and only the fourth set is in the science laboratory.

The above discussion reveals that the Malaysian Ministry of Education is serious about the problems of utilization of ETV. It has taken almost every possible step needed for the effective utilization of this instructional medium. This ranges from the preparation of the schedule to the organization of utilization courses for teachers, headmasters, and others concerned. The school

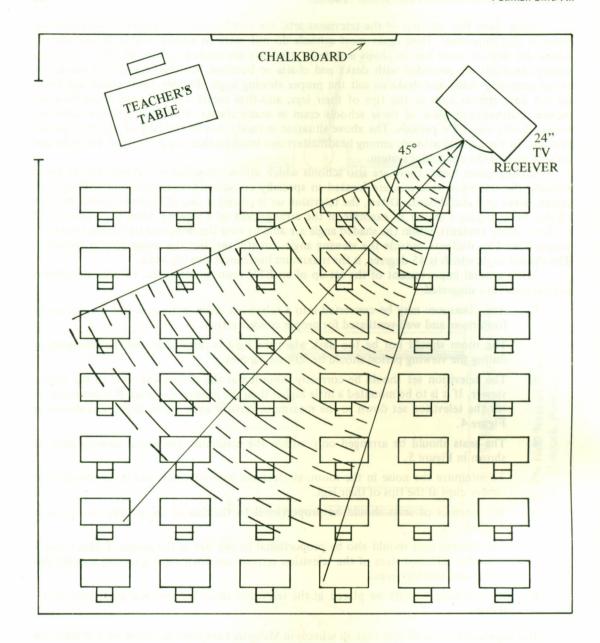


Fig. 3. A Sample of the Physical Set-Up of the Malaysian School's ETV Room

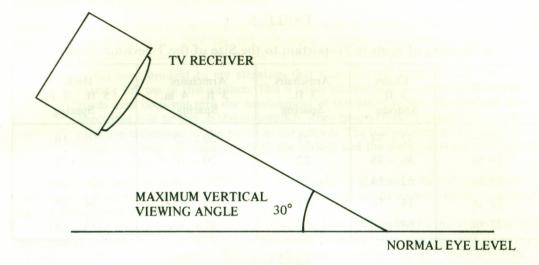


Fig. 4. The Position of the TV Receiver at Maximum Viewing Angle

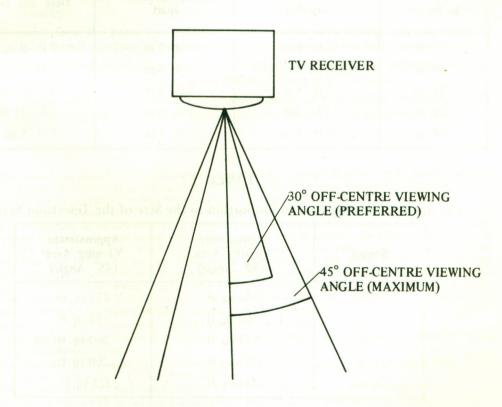


Fig. 5. The Off-Centre Horizontal Viewing Angle [Source: Hancock, *Planning for ETV*, p. 134, 135 for figures 4 and 5.]

TABLE 5

The Number of Seats in Proportion to the Size of the Television Screen

Screen Size in Inches	Chairs 3 ft. Spacing	Armchairs 3 ft. Spacing	Armchairs 3 ft. 4 in. Spacing	Desk 5 ft. 2 in. Spacing
17 in.	32 – 34	21	20 – 23	16 – 18
19 in.	36 – 38	22	20 – 26	20 - 21
21 in.	52 – 54	31	31 – 36	24 - 29
23 in.	54 – 56	331	36 – 38	24 – 29
24 in.	64 – 72	39	41 – 52	33 – 34

TABLE 6

The Minimum Viewing Distance in Proportion to the Size of the Television Screen

Screen Size in Inches	Chairs close together	Chairs wider apart	Desk and chairs
17 in.	5 ft. 6 in.	4 ft. 2 in.	3 ft. 9 in.
19 in.	5 ft. 8 in.	4 ft. 4 in.	3 ft. 10 in.
21 in.	7 ft. 1 in.	5 ft. 5 in.	4 ft. 10 in.
23 in.	7 ft. 2 in.	5 ft. 6 in.	4 ft. 11 in.
24 in.	8 ft. 8 in.	6 ft. 1 in.	5 ft. 5 in.

TABLE 7

The Average Viewing Area in Proportion to the Size of the Television Screen

Screen	Approximate Viewing Area (30° Angle)	Approximate Viewing Area (45° Angle)
17 in.	103 sq. ft.	155 sq. ft.
19 in.	103 sq. ft.	155 sq. ft.
21 in.	173 sq. ft.	260 sq. ft.
23 in.	173 sq. ft.	260 sq ft.
24 in.	214 sq. ft.	325 sq. ft.

[Source: Hancock, *Planning for Educational Television*, p. 136, 138, 139 for Tables 5, 6 and 7 respectively.]

community, however, does not seem to be as enthusiastic as the Ministry. The schedule, teachers' notes, and television set are generally not effectively utilized. The Ministry, however, is not unaware of this, for as Mahathir Bin Mohamed, the then Minister of Education, observed:

> It has been brought to my attention that there are still many schools that are not making full use of this medium. This is rather unfortunate as a great deal of effort and funds have been put into the development of this useful service. Headmasters have an important role to play in this connection. They have to make a special effort to ensure effective utilization of the media in the schools. The full potential of educational television can only be realized if both the makers and the users carry out their complementary roles. 10

This speech was made in January 1976 when the Ministry of Education started to reinforce the orientation of the school community towards the new medium on the occasion of the launching of the first Educational Television Introduction Week.

Though the idea of having Educational Television Introduction Week came rather late in the development of the Malaysian ETV, it is fortunate, however, that this idea still occurred to officials in the Ministry of Education. What is needed most regarding proper utilization of ETV is a rigorous information campaign through which all concerned will be able to understand fully the objectives, the potentialities and the roles of ETV. In fact, for a speedier process of understanding, it may be suggested that the Educational Television Week programme be extended to Educational Television Month. In addition, it is proposed that:

- more and serious utilization courses be given to headmasters and teachers all over the country;
- 2. aside from the Educational Media Service Journal, more reading materials regarding educational television be made available in all libraries and teachers' common rooms;
- 3. some advertisements regarding the ETV programme be made in between the entertainment programmes of the Radio, Television Malaysia (RTM); and
- finally, aside from providing a clear understanding of Educational Television, the Mi-4. nistry of Education supervises more closely the use of ETV programmes in schools.

Notes

¹ This paper is an abstract form of the writer's original M.Ed.'s Special Problem, "Malaysian Instructional Television," submitted to the College of Education, University of the Philippines, Quezon City, Philippines, May, 1977. However, certain modifications have been done based on recent development in the area.

²Educational Television (ETV) refers to all forms of television programming which are informative and which are also culturally or socially oriented. It embraces the whole gamut of in-school or credit course viewing, children's home viewing, non-credit course adult viewing, and general informative and educational viewing. On the other hand, Instructional Television (ITV) as defined by Carter V. Good (ed.) in Dictionary of Education (New York: Mac Graw-Hill Book Company, 1973), p.593 (Reprinted in Manila Under PO 285), refers to "Lesson-planned programmes, systematically developed and conducted largely in school systems or universities may be offered on commercial television or ETV, UHF, ITFS, or standard microwave, open (broadcast) and/or closed-circuit television." In the Malaysian setting, the term used to describe this is Educational Television. Thus, for purposes of this paper, the term Educational Television (ETV) will be used.

³Report of the Pilot Projects on Educational Television 1965, 1966.

⁴Perkhidmatan Sebaran Pendidikan. "Paper 1: Educational Media Service, Peninsular Malaysia." Kuala Lumpur, n.d., n.p. (Mimeographed).

⁵V.V. George, "The Educational Television Production Process," Jurnal Perkhidmatan Sebaran Pendidikan Kementerian Pelajaran, Vol. 1, No. 1 (June, 1973) pp. 43-46.

⁶See "Jadual Siaran TVP Ke Sekolah-Sekolah, 1977," EMS, Malaysian Ministry of Education.

⁷See "Jadual Siaran TVP ke Sekolah-Sekolah 1979," EMS, Malaysian Ministry of Education.

⁸Tele-lesson is a lesson presented by the Educational/Instructional Television Teacher over the television for instructional purposes.

9 A study on utilisation of ETV conducted by the author in 1976 and in 1978.

10 Mahathir Bin Mohamed, "A Speech Delivered During the Launching of the ETV Introduction Week, 5th. - 8th. January, 1976," (Mimeographed), p.1.

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