At the Open University of Great Britain, certain problems are created by the school's heavy reliance on radio and television broadcasts as a mode of instruction. Students have difficulty: 1) integrating the broadcast with the rest of the course; 2) recognizing the purpose of the broadcast; 3) knowing what to do with the results of the broadcast; 4) concentrating on the main teaching points; and 5) concentrating through the entire length of the program. Counselors and tutors should encourage students to read the broadcast notes before each program, to answer a set of analytical questions after each program, and to record the essential points of the program immediately after the broadcast. (EMH)
I enclose a first attempt at providing guidelines to Counsellors and Tutors on the use of broadcasts. If this meets with general approval, it would form the basis of a section in the unit on course tuition, being compiled by R.T.S.

I am not altogether happy about laying down the law on my own, so to speak, but a start has to be made somewhere. I am even less happy about basing guidance on some of the instances quoted, since we do not know how widespread these phenomena are. It is however a common dilemma: do we give advice based on incomplete information; or do we wait until we have definite 'proof' (whatever that might be)?

Your comments - either general or specific - will therefore be even more welcome than usual!
Introduction

This paper could be sub-titled "Putting the Cart before the Horse". We have surprisingly little knowledge about how students can make best use of broadcasting, and what problems they may encounter in learning from broadcasts. On the other hand, we know that some students do have problems, and that the functions of some of our broadcasts are misunderstood by student and teacher alike. Before firm guidelines for counsellors and tutors can be drawn up, much more research into the range and extent of problems faced by students is necessary. It is important then to understand the aim of this paper, which is to provide a framework or background within which you, as counsellor or tutor, can provide advice for the students. In other words, we are not laying down a "party" line, but providing information, incomplete and in some cases of possibly doubtful reliability, which should be used on your part with judgement and discretion.

Any paper aimed at all tutors and counsellors must be of rather a general nature, yet the functions of broadcasts in the Open University vary considerably according to the subject area of the programmes. Also, many of the comments refer primarily to television, not because television is considered an inherently more important medium, but because its effects are sometimes more dramatic and therefore more easily recognised.

The Role of Broadcasts in the Open University

There is not sufficient space here to go into all the reasons why we use broadcasting at the Open University (see Bates, 1973a), but it is necessary to understand in what way
faced by students is necessary. It is important then to understand the aim of this paper, which is to provide a framework or background within which you, as counsellor or tutor, can provide advice for the students. In other words, we are not laying down a "party" line, but providing information, incomplete and in some cases of possibly doubtful reliability, which should be used on your part with judgement and discretion.

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The Role of Broadcasts in the Open University

There is not sufficient space here to go into all the reasons why we use broadcasting at the Open University (see Bates, 1973a), but it is necessary to understand in what way
broadcast material is related to the rest of the course. Open University teaching materials are meant to be "integrated" - in other words, there is supposed to be some relation between material covered in the broadcasts, in the correspondence texts, in the set books, in the readers, etc. This relation may not necessarily be "time-based" - in other words, the context of a particular broadcast in Week 24 on Course x may not relate to the correspondence text for Week 24, but the broadcast material should relate to either general course objectives, or more usually to specific objectives covered in at least some units or blocks.

Here then is really our basic problem: how is the student to identify and relate the objectives of the broadcasts to the objectives of the unit or course?

There are three ways in which this can be done: there can be clear cross-referencing between programme and correspondence text, with the correspondence text explaining and discussing the relevance of the broadcast material; the broadcast notes can spell out quite clearly what the relation is between broadcast and text by specifying the objectives of the programme and their relation to the course or unit objectives (fortunately, in many cases they are the same); or the students can be left to make the relations themselves. (Even in this case, it is assumed that the course team are aware of what these relations are - or are likely to be). The first two methods of identifying and relating the objectives of the broadcasts with those of the unit or course should present no problem for tutors or counsellors, other than making sure that students understand relations between text and broadcast. The third method, of leaving the student to make the relation, does present problems. There may be two reasons for putting the onus on the student. It may be deliberate course team policy, because the course team wants the student to use already
developed skills to make the bridge between the material in the broadcasts and in the texts. Indeed, for higher level courses, this in itself may be a very good test of the students' ability in the subject area, or it may permit the student to discover for himself new relations which were not anticipated by the course team. However, much more frequently, the relation is not spelled out clearly because of unsatisfactory course design, and then the tutor or counsellor really does have a job on his hands. The best answer of course would be to improve course design so that this situation does not arise. Although we are working at this problem, there are in fact often good administrative reasons why courses emerge in this form, even with the best intentions and the most careful planning, and it would be unrealistic to expect all these problems to be solved in the next few years. There are ways, however, in which students can be helped to integrate the broadcast material with the rest of the course, even when course teams do not provide the links themselves.

The Functions of the Broadcasts

Students need to be made aware of the importance of recognising the appropriate function of the broadcast in relation to the rest of the unit or course. The first thing that needs to be said is that broadcasts can have a variety of functions. There is evidence to suggest that many students initially expect our broadcasts to be lectures (indeed, this may well be a problem of wider generality than broadcasting). A lecture basically is a carefully constructed argument, drawing on selected material to support or challenge the argument. Many of our programmes, of course, are just this, using specially designed graphics, selected film material, laboratory experiments, or specially recorded discussions or interviews, as evidence for the argument. However,
in many cases, the illustrative material has been expanded to such a degree that only a part of the argument is presented in the programme itself. Indeed, there are instances where the programme is all "evidence", with the argument either being set out in the correspondence text or broadcast notes, or even left to the student to complete for himself. Therefore it is crucial that the student can accurately discern whether he is being presented with a "complete" argument, or with certain kinds of evidence which fit into an argument expounded elsewhere in the material.

A number of functions for television in the Open University are listed in Appendix I. Most of these can be classified in terms of providing evidence for arguments, or for explaining, clarifying, or illustrating material in the correspondence text. Programmes can be used though to evoke an emotional response in students, or to try and change their attitudes. An instance of this is the first TV programme in E281. Because many Educational Studies students are experienced teachers themselves, one intention of the programme was to change their frame of reference, and to show them how strange and threatening a school environment can be for a child. In other words, this programme was trying to communicate an experience to the students. This may be a valid use of a broadcast (although it raises interesting ethical issues), but it is difficult to consider in terms of assessment. It may therefore be sufficient in some instances for students merely to understand a programme, and the relevance or effect of this experience may not become apparent for some time. It is important however that students accurately recognise the purpose of a programme, and approach it in the most appropriate way. (The problem of students' expectations from programmes is a recurring theme in this paper).
Perhaps the most difficult kind of programme for the student to deal with however is the "case-study". These are very popular with course teams, particularly in the Social Sciences and Educational Studies. Case-studies make "interesting" programmes since they usually have a strong story line, and bring the "real" world to the course. It must be admitted however that far too often, course teams themselves are not too clear about what students are supposed to do with case-study material. The course team should - certainly at foundation or even second level - clearly specify the objectives of such programmes, in terms of what the student is supposed to do, and help the student to integrate this with his other study material. Unfortunately, however, this practice is more the exception than the rule. Usually, the student will be expected to assess the case-study material as evidence for arguments set out elsewhere in the course material (often spread through the course, since case-studies are "messy", in that they do not usually involve just one concept at a time). The student may also be required to bring together for the first time principles or skills developed through the course in order to analyse or explain the case-study material. (If so, the course team should be able to specify - if not to students at least to tutors - what these skills are). A case study may also act as a demonstration or series of illustrations of principles covered in a number of correspondence texts. It can be seen therefore that students need to be fairly sophisticated in their approach to broadcasts to obtain maximum benefit from case-study material. They are not helped by two quite common difficulties associated with case-studies. Because case-studies draw on real-life situations, they sometimes not only provide "evidence" which is conflicting or confused, but also sometimes evidence which cannot be explained by the course as far as it has developed.
Indeed, there are instances where case-study material, highly relevant to the content of a unit, in fact contradicts the theories and concepts being expounded in the correspondence text. The other problem associated with case-studies is that they can be approached by the student at different levels. A case-study may well be seen as just an interesting story, without the student attempting to analyse it in the ways just suggested. In some cases, this may be all that the student is expected to do, but generally, a more sophisticated approach to the programme will prove possible. It is probably with case-studies that tutors and counsellors can be of greatest help, pointing out to students the various ways the material in the programmes can be used.

**Broadcasts as "Evidence"**

One of the problems in using broadcasting with adults is its familiarity. We all know what broadcasting is. On the other hand, many of our students will not have had experience of broadcasting as a teaching tool, before enrolling with the Open University. Again, student expectations of broadcasting - or at least their attitude towards it - may be inappropriate. There is certainly evidence, as we shall see, that some students need to be taught how to view or listen analytically. Again, students need to be aware of what kind of programme is being presented. Is it an objectively argued programme, based on carefully validated research, presenting a more or less self-contained argument? Is it one man's point of view? Or is it a carefully presented alternative approach to material presented in a different way elsewhere in the course? I used the term "analytically" rather than "critically" deliberately. Some students are so suspicious of broadcasting as a reliable source
of information that they are unwilling to believe evidence accurately presented on television, even when they are willing to accept a written account of the same evidence! For instance, in MST282 (a course on mechanics) frictionless pucks (using a "hovercraft" principle) were used to demonstrate physically one of Newton's Laws. The producer and academics went to considerable trouble to construct the experiment so that the principle was accurately demonstrated, and at one stage stroboscopic photography was used to provide pictures from the experiment for the broadcast notes, so that students could make their own calculations. In discussion between the producer and a group of students, it became clear that some students, although understanding the programme and accepting the principle itself, nevertheless suspected that the experiment had been faked to produce the required results. On further questioning it became apparent that this suspicion was general for all the programmes up to that point in the course.

This suspicion of television is not too important in many instances, but there are occasions when it can seriously interfere with the learning process, particularly when students are expected to make use of evidence presented in broadcasts. A student has to exercise considerable judgment in discerning how he is supposed to react when evidence is presented in broadcasts. He has to ask himself questions about the nature of the evidence. Is the programme deliberately trying to create accurate examples, models or demonstrations which the student is expected more or less to accept, as evidence for or against an argument? Or are the examples, models, demonstrations, etc. themselves a matter for critical examination? For example, in many Science programmes, students are shown equipment or experiments which they more or less have to take on trust. It is the way the experiment was set up, the
results, and the interpretation of results which are important. There is rarely any assumption - at least on the academic side - that the results would not be repeatable under similar circumstances, or that they have deliberately cheated to obtain those results. In some Arts, Social Sciences, Educational Studies and Technology programmes, the actual evidence presented to the student, the method of collection, and the role of the producer and academic in the selection of material, are all legitimate areas of concern for the student in assessing the validity of the material. (Indeed, in D203 the way a previous programme had been made was in fact the subject of the next programme.) It is important therefore - particularly when a change in the usual format of programmes takes place or when students are taking a combination of courses across Faculties - that students are clearly aware of how the material presented in broadcasts is supposed to be used.

The question of taking things on trust is indeed crucial in broadcasting. Time, particularly in television, is precious. Thus in Maths programmes for instance students are often expected during a transmission to follow the general line of the argument, rather than satisfy themselves in detail at each stage of the argument. Carrying out calculations or manipulating of formulae at each stage would hold up the flow of the argument and can be carried out afterwards. But deciding when to accept and pass on, and when to stop and criticise or analyse, is often extremely difficult. Students have to learn to pick up cues, either from the broadcast notes, from general introductions to courses, or from the programme themselves, about how they are to approach "evidence".
Being too critical, or being too willing to accept broadcast material, can prevent the student obtaining the maximum benefit from the broadcasts. He has to learn how to judge the appropriate response, and it must be admitted that far too often, the course material does not give the student sufficient information to make this judgement accurately.

The Side-Tracking Effect

One of the strengths of television and radio as teaching instruments is their emotional impact. They do have the power - when used skilfully - to absorb totally the viewer or listener. This very power, however, can also be the cause of inefficient learning. Television in particular presents a mass of information to the student, much of which can be irrelevant to the main purpose of the broadcast. If the student finds the irrelevant - or less important - material more interesting, then the teaching point being made can easily be lost.

There are three ways in which students can be diverted from the main purpose of the broadcast. One is through illustrative material being so powerful that it 'takes over' and swamps the teaching point. Two examples well indicate this point. In one of the Science Foundation broadcasts, (SL00/21) a three foot long snake was brought into the studio to demonstrate how its body structure determined the way it moved. It was placed in a tank of water, and remained in shot (actually attempting to get out!) while the lecturer moved on to another point. There is a strong possibility that most viewers were watching the snake, and not concentrating on what the speaker was saying, at that particular point. An even more dramatic example occurred in relation to a BBC Further Education programme...
course, "Man in Society". One programme was meant to illustrate the principle of selective perception - how the way we see things is influenced by our background. In this programme, newsreel film of an Anti-Vietnam war demonstration was shown. This included some very violent scenes between police and demonstrators. The programme indicated that a student and a policeman would see different things in the same piece of film. The producer showed this programme before the course began to a meeting of about 50 tutors running evening classes in conjunction with the course, as an example of the kind of programme being made. Instead however of discussing how programmes such as this could be used in a course of social psychology (as they were repeatedly asked to do by the producer), the tutors engaged in a long and heated discussion about the rights and wrongs of student demonstrations.

This example is revealing, in a number of ways. It does demonstrate that we are all, academics, students, and tutors alike, susceptible to distraction by powerful illustrative material. (One of the reasons why it is sometimes difficult to discover the relevance between programme and correspondence text is because the selection of material by academic and producer has been more influenced by its dramatic quality than by its relevance). It demonstrates once again the importance of the function of the broadcast being clearly recognised, and held in mind during transmission. It demonstrates also the need to ensure, in the Open University situation, where time is precious, that discussion and analysis of programmes is relevant.

There are two other ways in which television or radio can side-track students, or distract them. One is related to the personal characteristics of the speaker - his dress, his mannerisms, his style of presentation, etc. This is probably
of minor importance, but more important is the interference of one's own prejudices with the teaching point being made. For instance, in Social Science programmes, controversial people - particularly politicians - are frequently interviewed, or used as 'source material'. Their actual views - or even their personalities or the ideas with which they are associated - may be personally objectionable, but very often party political views or ideas are not the important point of the interview. Factors which the politician himself may well be unaware of are usually being examined. For instance a programme on the course "Decision Making in Britain" examined the Labour Government's decision to drop its own Industrial Relation Bill. Richard Crossman and Barbara Castle, two Cabinet ministers at the time, were interviewed about the reasons for the Government's change of policy. (As it happens, their actual political views about the need for the bill, although relevant, appeared from the interviews to be less important than other factors - such as support or opposition from backbenchers or the T.U.C.). What the student must be careful of in this situation is letting his own views on the desirability or otherwise of the Bill interfere with his analysis of all pressures leading to the decision that was actually made.

This need to ensure that broadcast material does not disrupt the objectivity of the student may be a specific instance of what could well be a more general problem with adult students. The Associated Examining Board, which operates GCE 'O' and 'A' level examinations, also designed an examination for preparatory course students. This examination was in two parts, the first part of which was set at the end of the first term. In the Chief Examiner's report on this examination, he noted a tendency for students to draw on pre-conceived and often irrelevant stereotyped 'political' viewpoints
in answering their questions. If this is a general tendency for adults returning to study after a long period, then the immediacy and controversial nature of much broadcast material may well require counsellors and tutors to give careful guidance to students, so that students' pre-conceived ideas can be drawn out and rationally examined, and separated from the intention of the broadcast.

We have therefore been able to suggest some possible areas of difficulty for students in using broadcasts, which can be summarised as follows:

1. Knowing how to integrate broadcast material with the rest of the course.
2. Knowing how to recognise accurately the purpose or function of the broadcast (including the nature of the evidence included in the programme).
3. Knowing what to do as a result of having seen or heard the broadcast.
4. Concentrating on the main teaching points, without being distracted by illustrative material, or personal prejudice or bias.
5. Concentrating for the whole length of the programme.

Awareness of these problems in itself may be useful. Advice on what student, counsellors and tutors should do would certainly be useful. However, it is necessary to repeat once again that we are only just beginning to learn about the difficulties of using broadcasting in the Open University situation. Any advice given must therefore be seen in this context.

Students on their Own

What should students do when watching or listening?
usual advice given for studying - as set out in the B.A. handbook - obviously should be followed, but in addition, there are certain questions students should ask themselves each time they view or listen to an O.U. programme:

(a) What is the relation between the programme and the rest of the course? Can I make any links? How does information in this programme affect what I have already learned?

(b) What kind of programme is it? What are the intentions of the producer and academic? Are they giving me facts? Are they presenting me with an argument? Are they asking me to interpret the information provided?

(c) What can I do at the end of the programme? Are there any questions that I can now answer - or are there any questions that I want to ask? Can I answer these when I have read the course material?

(d) Where did the information or illustrative material come from? Was it specially constructed or gathered for this programme? Or was it taken from some other source? How appropriate was it? Was it genuine? or used out of context?

(e) Was there anything in the programme that might help me with my assignment?

(f) Do I need to see or hear the repeat? If so, what are the questions I still need answered?

The student should be able to answer some of these questions before the programme, either from the broadcast notes or
even from the correspondence text. In any case, there is one hard and fast rule we can give:

**ALWAYS READ THE BROADCAST NOTES FIRST unless otherwise instructed**

After the programme, the students may find it helpful to jot down straight away anything that was important or struck them as interesting, and then try to write brief notes in answer to questions (a) to (f) above. This will reinforce their memory of what they have just seen or heard, and may help them to see the relation between the programme and the rest of the unit or course. Another rule we can give with some degree of certainty is:

**ALWAYS WRITE OR DRAW SOMETHING (or answer something) ABOUT THE PROGRAMME IMMEDIATELY AFTERWARDS (even if you have to make up the questions yourself.)**

If students have a sound tape-recorder, it is often useful to record programmes - even the sound from television programmes - so that playback or revision is possible.

Students should take care however to balance the time spent on broadcasts (particularly if they are using tape recordings) with their other study requirements. It is worth remembering however that broadcast material in many cases is perfectly valid material for assignment answers, and this material should of course be considered just as much toward their credit as material from other sources, such as the correspondence text or recommended reading.

**Group Viewing or Listening**

If you accept that some of the difficulties outlined earlier are more than just the figments of a tired research worker's imagination, there is obviously a job to be done by tutors and counsellors in training students to make best use of broadcast
material, and that the sooner this is done - i.e. during the Foundation Course - the better. Tutors and counsellors should be able to work out their own ways of doing this, but in most Foundation Courses there are sufficient examples of most functions of broadcasting to work out a coherent programme. "Case Studies" in particular are worth using.

Generally it would be advisable, to watch or listen to the programme during transmission without interruption with the group, (if that is possible), then follow this up with the film or sound cassette. (The advantage of having video-cassette machines generally available for this kind of exercise is obvious). At natural points during the cassette, stop, and ask the group to discuss the preceding material. Probably most comments will be about the content, but be on the watch for comments which suggest some of the difficulties outlined in this paper are occurring. Eventually, try and get students to ask themselves - and answer in the group - the questions set out in the preceding section. Even experienced tutors may be surprised at the amount it is possible to get out of a 25 minute television programme using this questioning approach, and it should lead to students being able to use broadcasts to full advantage on their own.
Conclusion

It should be clear that counsellors and tutors have an important role to play in educating our students, regarding the use of broadcasts. It should also be clear that we do not know nearly enough about the range and extent of the problems faced by students in this area. Knowledge and experience in how students can be helped in making full use of broadcasting is difficult for us to tap, but disseminating knowledge is essential if we are to improve our teaching system. Therefore your comments on the usefulness of this paper, or on your experiences in getting students to make full use of the broadcasts, will be most welcome. We will try to take account of comments when we revise the paper for next year, and, if appropriate, we will try to incorporate your suggestions or insights into our research programme.

Comments should be sent to:

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