

Media Workstation

PLANNING FOR MEDIA USE

Teachers often complain that media is not always available to use in lessons. Only one overhead projector to share among all the staff, if any at all. The slide projector is old and jams often. Only one television room, and that and its video are constantly booked by those teachers whose lessons depend on the medium. Even printing facilities are limited, with restrictions on the number of photocopies made per teacher, and stenciling just does not get the job done well. And only a few schools have invested in image reproducing equipment. Computers and ways of projecting what's on their screen? Forget it.

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“If a Resource Mentality were there our lessons would be planned on a Visual/ Audio/ Verbal plane that would make for Efficiency, Effectiveness and (believe it or not) Entertainment”



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That's what always comes up during seminars and workshops on media use in the classroom. No media readily available, so can't use media. Alternative? Chalk and talk. Pity about the fact that media makes for more effective teaching. Nothing to be done about it!

Wrong! Availability of the media is only one of the factors affecting media selection. The main element involved in whether media of any sort is used during lesson planning does not depend on the actual presence of the hardware, but on the teacher him/herself and the way he/she approaches the actuation of pedagogical objectives.

Bypassing verbalisation

By nature we are verbalisers. We communicate intentionally primarily with words. We plan our communications to others as a set of verbal structures that will only incidentally use non-verbal signs, although these are as integral a part of what we communicate as our words are. The same applies to our lessons.

Oh yes, there's the ubiquitous board, and, of course, the text-books, but we do not think simultaneously of WORDS and MEDIA. We think first of words, and then, if at all, of the media that can SUPPORT those words. Hardly ever the other way round.

If that all-important RESOURCE MENTALITY were there to begin with, then our lessons would be planned on a VISUAL/AUDIO/VERBAL plane that would make for (1) Efficiency, (2) Effectiveness and (believe it or not) (3) Entertainment.

Beginning with the last one first, and accepting that its inverse is the norm in classroom teaching, i.e. entertainment being the last thing on the teacher and students' minds during lessons, we might try to understand why this is the case.

Content probably has a lot to do with it. Even with selectivity, syllabi demand their pound of flesh, and the knowledge base needs to be built in all subject areas.

Student attention is also a culprit, with physical and psychological distracters often accounting for minimum cognitive absorption and leaving room for little or no affective domain involvement.

Classroom environments often add to the burden, even in the best of times clinically invoking the icon of the imposed closed room, fostering lack of enthusiasm and feeding tedium.

So a lot depends on delivery, and pure verbalisation, even from excellent orators, puts too much emphasis on one channel, struggling with semantic preoccupations while cornering attention and imposing discipline. Little wonder the traditional 20 minute student attention span seems to be getting shorter and shorter.

The use of media varies the output. It applies to more than one sense and leaves little room for aberrant use of the other senses in the meantime. It often involves physical manipulation and needs some sort of motion from the students (if only in the craning of necks to catch sight of a monitor), so there is very little chance of somnolence settling in. There is disruption, true, but that's the healthy disruption of thinking human beings who need to be involved in learning proceedings, and not left at the receiving end of almost intravenous knowledge injection.

Number two: the difference between describing an object and showing it either as an R/O (real object) or as an image is obvious. Logically, this is a generalised comment and not applicable across the board, but it applies enough times for the generalisation to be made. So use of media in teaching is effective in most cases, if enough planning goes into their use and the selection of media is apt.

And, number one: efficiency. Continuing the above analogy, it takes much longer to describe an object than to show it, and, taking the same comment on generalisation as read, one must say that that reduces both actual delivery time, and student absorption time. Recall is also usually better, since research has indicated that comparatively much less of what is heard is remembered than of what is seen. By "heard", we mean the explanation itself, not the audio enhancing of the explanation.

Planning with media in mind

So how does all that replace an OHP if the equipment does not exist on the premises? It doesn't. What it does is show the necessity of, for example, projecting an image in front of a

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30-strong class. Once that necessity is felt, then the teacher will know that he/she cannot replace the missing OHP with chalk and talk. He/she will merely have to find an alternative way of projecting the visual, or at least enlarging it enough for the class to see ... or, even multiplying it in a reduced size for the benefit of the class, reasonably divided in groups for the occasion.

The RESOURCE MENTALITY creates resources where these are missing. But first, the need must be felt and accepted for it to do so. Which is where we came in.

Once that is accepted, what formal regime must be followed to ascertain that the media selected are the right ones for the job at hand? If you want to get the benefit of the 3E's, that regime must be a pretty thorough one.

Today we'll present here a two pronged approach based on the literature.

First, one of Ellington and Race's (1994) algorithms for selection of instructional materials is being presented (Fig.1) as a facile model of the media selection process. The algorithm dealing with "mass instruction" has been chosen because it is the closest to the way we traditionally deliver our lessons in classrooms, i.e. as presentations. It needs a bit of updating, but is generally quite applicable.

Second is Gagnè, Briggs and Wager's (1992) classic list of practical factors to be considered in media selection (Fig.2).

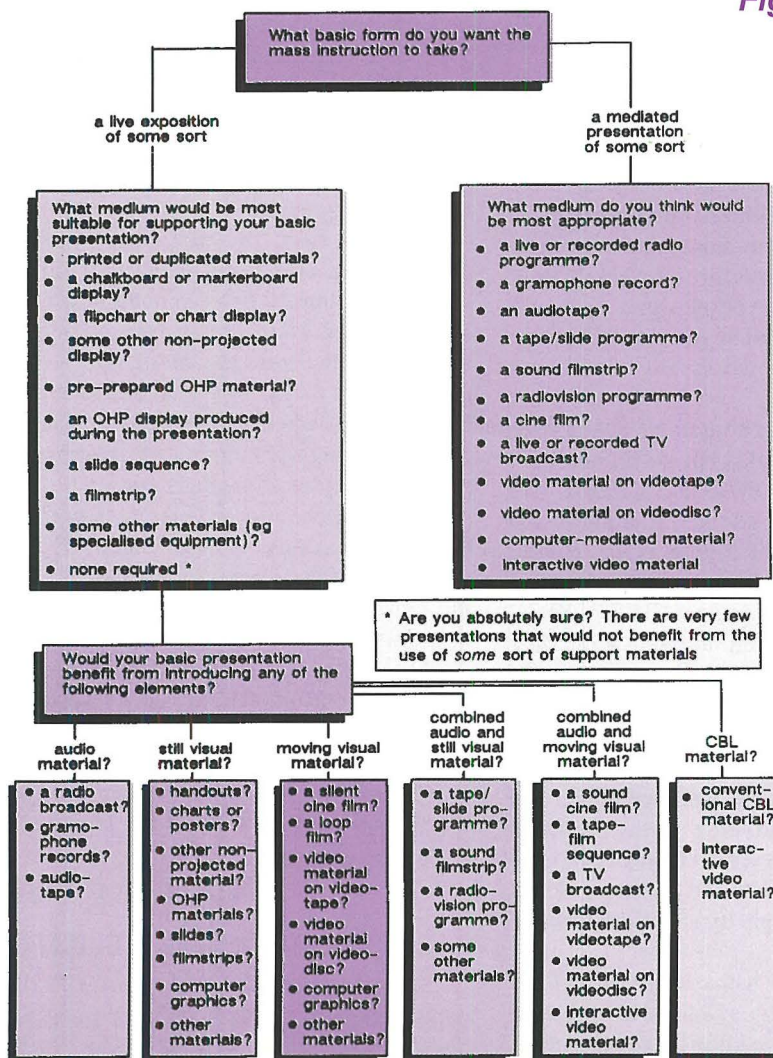
Conclusions

This was really nothing more than a prologue to the realm of media use. Really nothing more than the posing of tantalising questions and an introduction to selection processes. More of the same (but taking it from here, and in more detail) will be presented in future issues, but for now I will end this piece with one more question.

When was the last time you enjoyed listening to somebody giving a speech more than watching a movie (any movie)?

I don't think you need to bother answering.

Fig. 1



from Ellington, H., & Race, P. (1994). *Producing Teaching Materials*. (3rd ed.). London: Kogan Page.

1. What size of group must be accommodated in one room on a single occasion?
2. What is the range of viewing and hearing distance for the use of the media?
3. How easily can the media be "interrupted" for pupil responding or other activity and for providing feedback to the learners?
4. Is the presentation "adaptive" to the learners' responses?
5. Does the desired instructional stimulus require motion, color, still pictures, spoken words, or written words?
6. Is sequence fused or flexible in the medium? Is the instruction repeatable in every detail?
7. Which media provide best for incorporating most of the conditions of learning appropriate for the objectives?
8. Which media provide more of the desired instructional events?
9. Do the media under consideration vary in probable "affective impact" for the learners?
10. Are the necessary hardware and software items obtainable, accessible, and storable?
11. How much disruption is caused by using the media?
12. Is a backup easily available in case of equipment failure, power failure, film breakage, and so on?
13. Will teachers need additional training?
14. Is a budget provided for spare parts, repairs, and replacement of items that become damaged?
15. How do costs compare with probable effectiveness?

Fig. 2 from Gagnè, R. M. & Briggs, L. J. & Waver, W. W. (1992). *Principles of Instructional Design*. Fort Worth: Harcourt Brace Jovanovich College Publishers.

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Further reading

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