Noting that the media can be powerful instruments in the hands of creative teachers, this paper explores the use of media as instructional tools to promote growth in thinking and language processes (primarily reading and writing). The paper views media form and applies it to the interrelationship of experience, thought, and language. It proposes three models of media implementation in the experience-thought-language processes: (1) media as stimulus experiences for children, (2) media as experiences formulated by children, and (3) media as aids to the thought/formulative processes of children. The paper notes practical implications of the models for reading and writing instruction, and describes actual curricular programs that employ media in the ways suggested by the models. (Author/FL)
The Role of Media in Encouraging Thinking and Language

Timothy V. Rasinski
Department of Educational Theory and Practice
The Ohio State University
Columbus, Ohio 43210

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Abstract

This paper explores the use of media as an instructional tool to promote growth in thinking and language processes (primarily reading and writing) in students. Media is viewed from and applied to the interrelationship of experience, thought, and language. Three specific models of media implementation in the experience-thought-language processes are proposed. The models are media as a stimulus experience for the child, media as an experience formulated by the child, and media as an aid to the thought/formulative processes of the child. These models have practical implications for reading and writing pedagogy. They are illustrated through actual in-place curricular programs that employ media in ways suggested by the models.
A few years ago a brand new teacher was approached by a rather somber looking parent.

The parent asked "Why do they show so many movies and TV programs in this school? Why, in my day we never had anything like this -- no movies, no television, no records. If you ask me schools should forget about all this fluff and get down to the basics -- reading and writing and mathematics.

This new teacher was at a loss to respond to this parent. Indeed, the parent had a point. So many times the students were shown a movie or a video tape recording of a television show with no other apparent reason than to keep the kids occupied and quiet. It seemed that one of the major roles that media played in this school was that of a babysitter. We hear it said so often that TV is the best babysitter in the home. It is little wonder that it and other types of media should perform a similar role in the school.

It is sad to say that stories such as this are being played out in schools around the country. Perhaps the most regrettable aspect of this scenario is the misuse of the media. Media is a very powerful instrument in the hands of creative and thoughtful teachers. It can be more, much more than an electronic sedative for children.

This paper attempts to address the proper instructional role of media in the schools, especially as it applies to thinking and the print language skills of
reading and writing. Three models will be presented that suggest the nature of language-thought-experience activities and the role that media might play in them. Examples will then be provided to illustrate these models of media use in actual school curricula. However, before embarking on these models some preliminary work in the form of four brief definitions needs to be accomplished.

Definitions

Consider, first, the term thinking or thought. Thinking is the conscious or unconscious manipulation of internal processes (concepts) for oneself usually for some specific purpose such as the solution of a problem (Carroll, 1964). The key words here are manipulation and internal processes. Manipulation refers to the transforming or changing of concepts. This is done by organizing or reorganizing concepts or by bringing them into contact and interaction with other concepts. Internal processes in general consist of one's store of concepts or knowledge of the world. Thus the process of thinking might be considered to be the transformation or manipulation of the knowledge that one possesses.

How does one acquire that corpus of knowledge. In general there are two ways of knowing about the world. These are through experience and language.

Experience refers to practical or action-oriented ways of finding out about things. Experience implies gaining direct and personal knowledge through observation and/or actual practice. It is learning by acting upon something.
Language, like experience, is a way of knowing about the world. However, it is knowing through communication between persons. There are two forms of language: oral and written. And there are two modes for each form: speech and hearing for the oral form and reading and writing for the written form. This paper will mainly be concerned with the two complementary modes of the written form of language. Language is also employed to classify or organize knowledge (concepts) and experiences (Stauffer, 1980). Thus, language is intimately involved with experience and thought. Indeed, high level thought involves the interaction of language and perceptual (experiential) powers.

Finally, media needs to be identified. Very generally media is the graphic, photographic, electronic, or mechanical means for arresting, processing, and reconstituting visual or verbal information (Edling and Paulson, 1972). There exist very many kinds of media. These include such diverse types as still pictures, audio recordings, motion pictures, real objects, simulations, models, television, and computer assisted and computer managed instruction.

There are three important properties of media (Gerlach and Ely, 1980). First is the fixative property. This refers to the ability of the media to capture, preserve, and reconstitute an object or experience. Such items as photographic film or videotape are materials that permit this preservation. The second property is the manipulative property. This allows the formation or transformation of an object or an event. For example, the speeding up of a film, the use of double exposures, and the editing of a videotape to form a coherent documentary or narrative are all examples of manipulation that is inherent in
Finally, there is the distributive property. This simply refers to the ability of media to be received in essentially the same manner by different audiences separated by time and space.

The first two properties are of particular importance in this paper. The fixative property of media allows events, actions, or objects to be preserved for future use. In this way media is closely associated with experience in that it can capture an experience so that it may be experienced on a vicarious level at a later time.

The second property, manipulation, is also tied to experience. In the process of forming a new object or event, through such activities as script writing, film editing, or model constructing, the manipulation itself becomes the experience. A second notion of manipulation is also important. Manipulation can be the transformation of previous experience into different forms. This transformation is very analogous (if not the same) to the transformations or manipulations of concepts that occur in thought. As we shall later see media can play an important role in this transformational process.

In summary, then, the fixative and manipulative properties of media closely tie media to experience, both existing and new experience. In addition, the manipulative property of media can play an important role in the thinking process itself. These notions will become clearer in models which will be described later.
Roles of Media in Education

Media can play a variety of distinct roles in the classroom. These, however, can be collapsed into one of two categories that reflect the essential nature of media in schools.

The first type of role that media can play is media as the programmer or transformer of the child. In this role the media "teaches" the child predetermined sets of content. Although the child may be able to control the time and pacing of instruction, she has no control over the content or method of presentation. This is at the present probably the most prevalent role that media takes on in schools. Examples of this type of media are very abundant. We see it in computer programs to teach and test certain reading skills (this is essentially an electronic workbook), language masters - especially when the cards are preprinted, and instructional TV programs with pre-set learning objectives and questions for the children to answer.

A second basic way in which media is used in schooling is in the child as the programmer or transformer of the media. In this role the child controls the media, instead of being controlled by it. The child puts the media to work based upon his own interests, his own level of maturity, and his own knowledge of the world. Although examples of this type of media use do exist, they are not nearly as pervasive as the first type. Here we see the child making a model of a volcano to accompany the science unit on land forms. He might also put together a Jackdaw in response to a literature book he read. Or, he may program the
computer to do multiplication problems.

It is this second, more creative and more difficult use of media that this paper is concerned with. And it is this notion of the child as the formulator or transformer of media upon which the models of media use in language-thinking-experience are based.

Models of Media Usage

Within the context of media as a programmable tool for the child to promote language and thought, three rather specific models of media usage are proposed (see figure 1).

The first model uses media as an initiating experience. The child has an encounter or experience with media. For example, she may have listened to a recording of a song, or viewed a display of photographs around a particular theme. This initial interaction with the media is then transformed into some expression of language. In our previous examples the child might find the printed lyrics to the song she heard and read them by herself or in group, or she may decide to write out those lyrics that she heard or make up new lyrics to the same tune. The photographs that she viewed may lead her to write an essay or story around the pictures, or she may be directed to a book that is related to the theme of the photographic essay. In this first model, the media initiator and the language consequence are tied by some transformative process. That transformation is the thinking process where the child decides what direction or
form the transformation will take (i.e., "will I write new lyrics or will I write out the original lyrics?") and how the transformation will occur.

In the second model, the media also takes the form of experience. However, in this model the experience is more direct to the child and it is not the initiating event. The child develops a plan to do something with media. This might take the form of making a filmstrip to tell a story or programming a computer to play a game. In this model the media experience interacts very closely with language. The child making the filmstrip may need to plan out his story in print, read a book about making filmstrips or a book upon which to base his story, or he may wish to add a printed text to his filmstrip. The child programming the computer for a game will want to incorporate written directions into the program. The game itself may require words. Indeed, the nature of the game might incorporate the manipulation of language (i.e., Hangman, Password, matching words to definitions, etc.) In all these media-forming experiences language plays an integral part. The development of a plan, the decisions of what to do and how to do it are all natural and excellent uses of thinking abilities. This formulative experience can later become the initiating experience for language activities similar to those in model 1. For example, the child making the computer program may want to tell the class what he went through or he may wish to write "how to" directions for others who want to program the same game.

The last model is one that is somewhat new and has gained popularity with the advent of word processing systems. In this model the child formulates her own thoughts into language. This may take the form of composing a story,
developing a speech to be given to the class, or writing a social studies report on the State of Georgia. In this activity the child needs to manipulate the knowledge she holds in her head to form the desired message. This is thinking. While the word processor cannot think for the child, it can allow her to manipulate her thoughts on the screen in ways that the paper and pencil never could. She can delete sentences, change words, and move paragraphs around. She can try out different texts side by side on the screen to see which one works best. The thinking processes and the transformation of thought into language are still her own. But the use of this media in an adjunct capacity allows her to think and use language more efficiently, effectively, and critically.

It should be pointed out that these models are not necessarily independent. Indeed, the optimal case is an interaction between the models. The child may decide to construct a model of a farm he studied in social studies (model 2). This may be the initiating experience for another child to write a story about life on a farm (model 1). She may wish to employ a word processor to help her in writing the story (model 3).

Examples of Media Use

The final section of this paper describes actual examples of these three models being used in actual classrooms.

The example that was found for the first model comes from a remedial writing
class in a New York City community college (Spielberger and Lieberman, 1981). Although the example does not pertain directly and immediately to elementary or secondary school literacy learning, techniques used here are directly applicable.

In the first model of media usage the media is the experience that leads to language activities. Spielberger and Lieberman use film (movies) as a way of counter-balancing their students' perceived lack of ideas to begin writing. In their program they begin with a theme. From that theme as a centerpiece they find and select films and excerpts from literature that reflect the theme. For example, one theme that was chosen was simply "places". The teachers then found two films: Harlem Wednesday, a film about life in Harlem in the 1920's and 30's; and Except the People, a movie about 60's life in New York's East Village. The student also read excerpts from such books as Mark Twain's Memories of a Missouri Farm and Thomas Down These Mean Streets. Discussions were intermingled with the films and readings. Then, after several days of the preliminary work, the students were assigned to write on this theme of "places". The compositions had a variety of topics, from "A place I'd like to visit" to "From my window". Finally, the compositions were shared, discussed, and critiqued by the class.

The teachers found that the technique met the three goals they had set. These were: 1) to get the students to read; 2) to encourage the students to analyze and react to what they see and read; and 3) to get the students to write. Moreover, the teachers were very surprised with some results at the end of the course. At the end of each semester all students were required to take an exam.
to determine who was qualified to pass from remedial English to regular College English. The departmental passing rate was 56%. The success rate in the classes using this media priming technique was 82%. Also, the average drop-out rate for the film-use classes was 8% compared to the overall department rate of 36%. These results signalled to the teachers that the students were enjoying the learning experience.

In recent years research in reading has found that the amount and organization of knowledge a reader brings with her to invest in the reading act is an important factor in successful reading. Moreover, this background knowledge can be stimulated and added to in pre-reading activities. This film-stimulus example suggests that the background a writer brings to his writing is also important. Indeed, most ideas for writing in some way come from the writer's store of knowledge. Film and literature apparently are excellent ways to "fire up" and "massage" the writer's background in preparation for writing.

The second model of media usage integrates language into a media related experience that the child formulates herself. The example for this model comes from learning literacy in a video studio (Webb, 1984). Again, the example comes from the college level, but it is easily adaptable to students of any age.

In this class the students follow a nine-step process in completing the two requirements of the course; produce a television documentary on a particular topic and write a term paper on that topic. The first step is to choose a topic. The students keep a writing folder in which, among other things, they maintain
notes from discussions, readings and television programs which will help lead them to a topic. Once they pick a topic the students need to conduct research and prepare a script outline. This leads them to the library. From this part of the process they keep bibliography cards, notes from their research and class, and an outline with the title and audience information in their folders.

In the third step they prepare their graphics, relating them to the documentary and ordering them in the most effective sequence. Next the students write a first draft of their script with camera cues. This is followed by practice, editing, and revision of the script. In the sixth step the documentary is tape recorded, for the first time, using the revised script, graphics and camera cues. The recording is evaluated by the student and her production crew. A revised and final recording session results in the documentary outcome which is evaluated by the instructor. The final step for the student involves transforming the taped documentary into a written term paper.

Throughout this process a number of different activities are being carried out. Some are especially noteworthy in relation to literacy and language learning. The students are in an environment that is rich in language of all types. The documentary requires the use of both oral and written language by the students. And it exposes the students to different genre of writing on the same topic. They need to produce a written television script and a written academic report on their topic. Although the topic is the same, the students soon find that the writing is not. This program necessitates reading and research by the students. Moreover, it is the kind of research that is not simply a copy or
The students need to transform their research into a form that is adaptable to the documentary form. Because the students' product is more visible than a written report, they need to consider their intended audience. Partly because of this sense of audience, the program demands constant editing and rewriting of the documentaries by the students. Revision, beyond the first draft, is generally an unused skill by students. A final noteworthy aspect of this program is tied to the notion of revision. That is, critical evaluation of the product. Not only is the documentary evaluated by the teacher, but also by the student and her peers that make up the production crew.

The third model of using media in activities that promote language and thinking uses media as an adjunct to the thinking-language process in order to ease the processing burden somewhat. The use of audio tape recordings of reading texts is one passive example of this model. However, the newest and most exciting innovation in this area has been the development of word processing systems for personal computers. The word processors can interact with the student in the composing process. A recent article by a junior-high-English teacher (Engberg, 1983) describes the use of word processors in the English curriculum. The written assignments given to the students were of the traditional type except that the students could put their compositions into the computers and floppy disks in their room. Admittedly, some of the newfound excitement about writing came from the novelty of using computers. But other favorable aspects were noted. Students using the word processors took more interest in revision. One reason for this was that the word processor simply made revision easy for the students. Along with revision came collaboration...
among students. They shared drafts with one another, asking for help in expressing themselves in different ways. Perhaps the most important aspect of the use of word processors was the development of thoughtful teacher-student collaborations in writing. The teacher was able to directly help the students through problems in such things as vagueness, redundancy, and circumlocution while the text was still on the screen. This allowed certain revisions to be negotiated without tedious rewritings or the teacher marking up the student’s final draft. Finally, because writing was less of a chore the students wrote more. They were more willing to put their thoughts on paper, take risks and experiment in their compositions.

An Addendum

One of newest media innovations that is or will soon be available to schools is in the area of high technology in communication systems. Students may soon be able to tour the world in real time from their classroom. Additionally, they will be able to talk with people from around the globe.

The possibilities for this in literacy learning are enormous. Exotic and interactive experience activities for reading and writing will be available to classrooms. Students will be able to conference in sight and sound with authors of books which they have read. And, students may be able to formulate television productions that can be broadcast to other schools and classrooms around the country and world.
Conclusion

Media by itself is not reading or writing. All the hours that children spend in front of the TV set at home does not appreciably influence their abilities to read or write. However, the use of media can help make literacy learning and learning to think become a more meaningful, interesting, and less burdensome experiential process.
Figure 1

THREE MODELS OF MEDIA USAGE IN EXPERIENCE -
THOUGHT-LANGUAGE ACTIVITIES

Model 1: MEDIA AS A STIMULUS EXPERIENCE WHICH IS TRANSFORMED BY THE CHILD.

CHILD \(\downarrow\) \rightarrow TRANSFORMS \(\rightarrow\) LANGUAGE

MEDIA (EXPERIENCE) \(\rightarrow\) (THOUGHT) \(\rightarrow\) (READING, WRITING, etc.)

Model 2: MEDIA AS AN EXPERIENCE FORMED BY THE CHILD

CHILD \rightarrow FORMULATES \(\rightarrow\) EXPERIENCE \(\rightarrow\) TRANSFORMS

(THOUGHT) \(\rightarrow\) (MEDIA, LANGUAGE) \(\downarrow\)

LANGUAGE

Model 3: MEDIA AS AN ADJUNCT TO THE FORMULATIVE/TRANSFORMATIONAL PROCESS.

CHILD \rightarrow FORMULATES \(\rightarrow\) LANGUAGE

(THOUGHT) \(\rightarrow\) (READING; WRITING, SPEECH, etc.)

\(\uparrow\)

MEDIA
References


Spielberger, J. and Lieberman, L. Film as a springboard for writing. Media and Methods, 18, 1981, 6-7+.
