THE MEDIA WHEEL: A THEORETICAL INVESTIGATION

INTO A MODEL OF MEDIA INTEGRATION

INTO INSTRUCTIONAL PRACTICE

By

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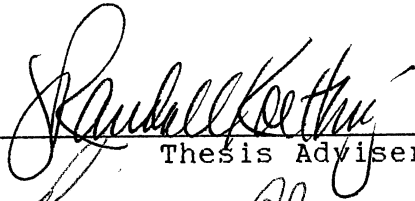May, 1990

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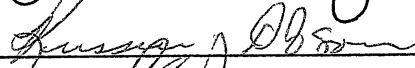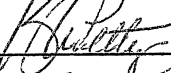
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PREFACE

In 1977 the book <u>Media and Kids</u> was published by Hayden
Book Company Inc. of Rochelle Park, New Jersey. The book was
co-authored by James Morrow and Murray Suid. According to the
author, James Morrow (Unpublished Interview 1988) the book was
intended to be a guidebook for the integration of media into
the instructional plan of a classroom teacher. The teacher
could use this practical guide to help make more effective use
of instructional technology. The methodology that the authors
suggest was based on instructional principles which were
presented in the introductory part of the book. It was these
principles that caught the attention of teacher educators and
instructional design professionals. The instructional theory
that supported these principles did not emulate the
contemporary and prevailing instructional design models in use
in American schools. This philosophical clash resulted in an
early "out-of-print" classification.

After a preliminary survey of the book this writer
concluded that the alternative model of instruction deserved a
critical look. The model is currently reflective of some
educational theories and its research base needed to be
analyzed.

Several major difficulties were encountered while conducting this study. One was the fact that the publication under consideration was out of print, and that the original publisher, Hayden Book Co, had changed ownership and management several times within the past ten years. Hayden Book Co. sold the copyright on <u>Media & Kids</u> to Boynton & Cook Publishers who was later bought out by Heinneman Book Co. Marketing and sales records of <u>Media and Kids</u> were no longer available for review from Heinneman. The copyright was returned to the authors, Morrow & Suid. At the time of this writing marketing and sales records are still being sought. Secondly, much of the information in this study needed to be gathered from personal conversations with the authors. The location of these gentlemen required extensive investigative work. Special acknowledgement goes to Ms. Betsy Bowles, retired teacher in the Chelmsford, Massachusetts School System, for her investigative work in locating her former co-worker, James Morrow. Murray Suid was contacted through James Morrow.

The people who merit acknowledgement for their contribution to this study are the authors of <u>Media and Kids</u>, James Morrow and Murray Suid; Drs. Gerald Speckhard, Forest Vance, and Richard Beapler of Valparaiso University whose motivation and support were invaluable; and the members of my graduate committee for their instruction, interest, and support. Special thanks goes to Dr. Bruce Petty for his

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CHAPTER I

A PURPOSEFUL LOOK AT THE MEDIA WHEEL

AS AN INSTRUCTIONAL MODEL

Statement of Purpose

The purpose of this paper was three-fold. It was to: 1) unravel the research base for the Media Wheel, an instructional model detailed in <u>Media and Kids</u>; 2) project its potential response by American classroom teachers; and, 3) propose ideas and thoughts which would require further inquiry. Through this process a sound argument is made that gives validity to consideration of this alternative point of view as a workable teaching resource.

Statement of Problem

In 1977 James Morrow and Murray Suid (1977) offered an approach to the integration of media into instruction that departed and continues to depart radically from the dominant and traditional forms of teaching methodology in the field of instructional technology. Instructional technology can be defined as a systematic way to develop and evaluate the solution to education problems (AECT definition as reported in

Clark, 1989; AECT, 1977). This definition is considered the standard but is not without criticism. Heinich (1984) urges us to think of technology as an application of relevant scientific knowledge and experience to the solving of practical problems.

The basic assumptions, upon which Morrow and Suid build in Media and Kids, provides an alternative view of children as they interact with their learning environment. Morrow and Suid's views tend to fall into the Heinich definition of instructional technology rather than the AECT definition. The authors propose that the child, as a media consumer (one who is receptive of audio, visual, and experiential stimulation), be ragarded with equal importance as a media producer (one who creates and presents student made materials). With little empirical evidence to support this view, it is necessary to consider the philosophical framework which supports the authors' assumption. It is equally important to consider their assertion within the context of current learning theorists and within the conceptual context of "schooling" in American education today.

Research Rationale

Research based on empirical methodology in the field of instructional technology in recent years tends to fall into the following classifications: media and library management; media program administration; media and library personnel

certification standards; instructional design theory; media production techniques; and, functions of specific media forms in the curriculum as it relates to instruction. The majority of studies have been concerned with the effects of the most recent technological innovation, the computer (Solomon, 1981; Clark, 1983). Clark (1989) states that in the past fifteen years researchers have produced over one thousand studies relating to computer based instruction.

In a similar analysis of the period 1973-77, Allen (1979) revealed that 65% of the media related review papers published in the Review of Educational Research dealt with aspects of instructional media design. During this period 22% addressed media related learner characteristics, and 13% dealt with research on media characteristics. These research problems were dominated by questions concerning the nature and characteristics of media, factors relating to the design and development of mediated productions, and the relationship of media and media design for different learning attributes

Within the dominant topic of research, integration of media into the instructional design process, the writer finds that much of the research is pointed toward the selection of appropriate media materials to enhance learning (Campeau, 1974; Moldstadt, 1974; Travers, 1967). Riser and Gagne (1983) report that the research to present has not yielded results that permit statements about the superiority of one media form over another in a particular situation. In most studies, where two forms were compared, students often learned equally

well from either medium. In an earlier study, Gagne, (1970) states that most instructional functions can be performed by most media. In a reaction to Gagne's statement of 1970, Schramm (1977) points out that in a given situation one medium may be more useful than others, and that attempts should continue to find the best combination of media for a given learning task. Schramm in his concluding statements, regarding his major study, states "A concentration on the most effective use of the media of instruction, rather than on the *best media*, would be good for all media, Big or Little, and consequently good for all of us" (Schramm, 1977 p. 278). The results of these and other researchers' studies have been inconclusive in providing direction to media practitioners.

Wagner (1980), for example posed two researchable questions; 1) Are different media equally effective for a given learning task when each presents the same event of instruction?; 2) Are given instructional materials equally effective for different types of learning outcomes? His findings reveal no significant differences. In those studies where significant differences were found, the results have been criticized because of faulty research designs (Schermer, 1988). This analytical view is supported by Clark (1989) who states that the duration of most studies are inadequate to make generalizations to the overall impact on the educational field. An example of this is that many treatments in computer assisted instruction ranged from thirty to forty-five minutes in length. He also states that many studies were poorly

conceptualized. The literature reviews represented 25 to 50% of the length of the methodology section of the research reports. Planning of research problems were often limited to available population, permission to randomize for generating a valid sample, and inadaquate allotments of time for treatment and testing. Clark also posits that the design of research fails because most models are used for experimentation and seldom are compared to "the plethora of instructional design models and theories" (Clark, 1989, p.59).

Traditionally, American educators have taken their "cues" for the appropriate selection of media from learning theorists Edgar Dale's 1954 model (Dale, 1969) and Robert Gagne (1974). Dale's hierarchy of instructional effectiveness and Gagne's criteria for media selection for effective communication are standards for inclusion in media instructional resources for educators. Dale suggests that certain media forms should be used to replicate as close as possible many real-life experiences in the classroom. Gagne, on the other hand, concentrates on learners and their environmental characteristics to dictate the appropriate media form for instructional use.

Kemp (1977), Gerlach & Ely (1980), Briggs (1970), and other system theorists outline the teacher's decision making process by suggesting a systems approach in dealing with the instructional situation. Much of the directions for instructional technology is thereby rooted in systems theory. Certain assumptions can be made about how these media

theorists regard the teaching/learning process, and their

assumptions are well supported by stimulus-response learning

theorists. The assumptions which are drawn from the writings

of these theorists are:

A.   The student is the object of mediated instruction.
     He is perceived, within a systematic instructional
     model, as a recipient of information to be processed
     into knowledge that is specified in a learning
     objective (Kemp, 1977).

B . Media is regarded as a communication vehicle which
     supports instruction (Dale, 1954).

C.   The role of media in instruction is regarded as an
     instrument that is capable of overcoming the
     limitations of the classroom setting, and provides
     enrichment to the learning process; and,

D.   Media expands the traditional scope of presentation
     techniques of instructional information by means of
     different design options and can be adjusted to
     different individual abilities (Heidt, 1980).

E.   Conclusions regarding the appropriateness of
     recommendations from empirical research (Gagne,
     1974)

In view of the fact that empirical studies have been generally

non-conclusive in many educational situations, it would be

appropriate to consider an alternative point of view.

The above stated assumptions are congruent with the

philosophical underpinnings of American education today

(Eisner, 1979). If schools were to operate with a different

set of assumptions concerning the teaching/learning process,

then the perceptions of the role of mediated instruction would

also change. One such advocate of an alternative approach to

education, Heidt (1980) states, "Previous researchers in

general tried to answer the wrong questions, i.e., they

generated irrelevant hypotheses and employed inadequate methods and research designs." As a justification for his position, Heidt proposes that simultaneous and collective learning in age-group classifications be abandoned, and that a scheme to provide learners with access to learning and materials be devised.

Another curricularist, Elliot Eisner (1979), describes the scientific governance of educational thought in the following way:

> I believe we need theory that unapologetically recognizes the artistry of teaching and that is useful in helping teachers develop those arts. The model of the teacher as a scientist who first hypothesizes before he or she acts may fit some aspects of teaching but certainly does not fit all of teaching. In what sense is teaching an art? p.18

In support of Eisner's enunciation, the educational concerns which challenge the appropriateness of media integration, should be expanded. Included should be inquiry into the justification for the use of media as a tool of artistry, intellectual discovery, and scientific inquiry. Media usage research should not be limited to exploration of efficiency in instructional design to support only the measurable development of the intellect.

Organization of Study

Chapter 1 of this study consists of introductory statements that help define the problem. It also should have

provided the rationale and justification for this type of study.

Chapter II will consider the historical development of the field of instructional technology and call upon Saettler, Reiser, and Schramm as the major historical contributors. In this chapter specific research studies will be cited which support the media forms being advocated in the instructional model by Morrow and Suid whose work is being considered. Chapter II also relates the instructional design model to instructional systems theory and describes how instructional systems theory has impacted curriculum development in American schools.

Chapter III analyzes the educational assumptions, which underpin the methodologies, that are expressed or implied by the authors Morrow and Suid in their book <u>Media and Kids</u>, Hayden, 1977. These assumptions are then related to several learning theories.

Chapter IV deals with the problems associated with integrating their alternative view of mediated instruction into traditional American schools. A description of the conditions of schooling will be discussed in view of the ideas presented by Morrow & Suid.

Chapter V expresses conclusions and recommendations for further research and the potential of Morrow and Suid's instructional model to have a positive impact on teaching in today's schools.

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CHAPTER II

INSTRUCTIONAL TECHNOLOGY--ITS ROOTS

Introduction

The field of education today has profited from the research and development efforts of scientists in many fields. The technology of instruction is a product of the combined scientific efforts of behavioral and physical scientists. Technology and educational practices begin to relate in mutually helpful ways (Saettler, 1968). According to Robert Glasser (1965) there are four main areas of the educational process that are influenced by the advances of the behavioral and physical sciences. When these advances take place, the following events occur:

1. instructional objectives are recast to make them measurable;

2. the diagnosis of learner needs can become more acute;

3. techniques used by teachers will undergo significant changes; and

4. outcome assessment will receive increasingly more attention.

Glasser's statement concerning this mutual influence is a statement of the condition of the field of instructional technology today. The dominant theoretical assumptions that govern research and practice of the integration of technology into instruction are strongly influenced by scientists. These scientists hold to the tenants of behavioral psychology and ask educational questions whose tests can be controlled and whose results can be measured.

Gestalt field psychologists, on the other hand, tend to ask different questions and rely on different research methods to explain the human learning phenomenon. These inquiry attempts and research methodologies are less reported and very often ignored (Eisner, 1979; Schramm, 1977). Their attempt to study the human condition leads them away from measuring academic growth and take them into the affective areas of learning. These contrasting attempts to describe emotional and attitudinal growth find difficulty in using the traditional behavioral research methodologies, due to the fact that attitudinal and creative behaviors are often difficult to measure in valid and reliable ways.

The dominant influences of behavioral scientists and American technological enterprise can be traced through a historical study of educational technology. A review of the historical development of media integration in the nation's school systems will reveal the effects and influences of these two groups. This information is organized in the following way: First the reader will be presented with a view of the

historical development of the instructional technology field.
This will be divided in historical periods beginning at the
turn of the century and ending at the present day. Secondly,
there will be a review of many of the significant studies that
have affected the condition of the technology of instruction
today. The third area will be the reporting and
considerations of the research and opinions of noted educators
regarding the conflicting views of behaviorist and Gestalt
field psychologists, and finally a look at educational
attitudes presented by Morrow & Suid, the authors whose work
is being considered in the remainder of this study.

Historical Development of the Field

Of Instructional Technology

The Period of Emergence

Introduction

In the early years of the twentieth century educators
relied heavily on public and private funds for the provision
of instructional resources. School revenue was barely
adequate to provide children with facilities for "school" and
teachers with a meager existence. Instructional resources
beyond the bare essentials were housed in public libraries and
museums. Saettler (1968) states that the school museum was
the true antecedent of modern instructional technology in

American public schools. These museums were established in

large metropolitan area, and as resources became more readily

available, local agencies developed their own but often

inadequate collections. The existance of these libraries

found congruence with the instructional materials guidelines

presented by the NEA in 1886. The "acutal object" which was

the highest form of media effectiveness which is illustrated

in Figure 1 (see Figure 1).

The Early Years (1900-1935)

Later in this century the influence of Edgar Dale's "Cone

of Experience" directed teachers in the use of instructional

resources (as stated in Heinich, Molenda, & Russell, 1989).

Teachers were not without similar influence earlier in the

century. A parallel set of guidelines was given to teachers

and communicators by J. Adams in 1910 (Saettler). Adams

developed a more basic learning activity model which was a

forerunner to Dale's more complete and sophisticated model.

In his model (see Figure 2) Adams stated that the most

valuable learning activity in which a student can engage is an

encounter with the real object itself. The second alternative

to this experience is a representative model of the object

itself. In the absence of both, a teacher would do well to

present a diagram dealing with some aspect of the object under

consideration. The final and least effective media form is a

mere verbal description of that object (Saettler). J. J.

Weber in 1928 presented a revision of the earlier model and focused on the inclusion of picures or photographs in the instructional plan (see Figure 3). Dale's hierarchy of 1946 parallels Adam's and Weber's earlier "orders of merit" models, but Dale expanded it to reflect the expansion and ready availability of new technology. These parallel diagrams reflect this expansion of instructional technology.

(1)   Object
(2)   Model
(3)   Picture
(4)   Diagram
(5)   Experiment
(6)   Language
(7)   Printed or Written Material

Figure 1. Proceedings from NEA (1886)

(1) The real object, for which anything else is a more or less efficient substitute
(2) A model of real object
(3) A diagram dealing with some of the aspects of the object
(4) A mere verbal description of the object

Figure 2. Exposition and Illustration in
Teaching. (Adams - 1910)

(1) Actual reality, as we find it in a school journey
(2) Pseudo-reality, as exemplified by artificial models and exhibits
(3) Pictorial symbolism, as found in graphs and diagrams
(4) Verbal symbolism--similes, metaphors, and plain language

Figure 3. Picture Values in Education
(J.J. Weber - 1928)
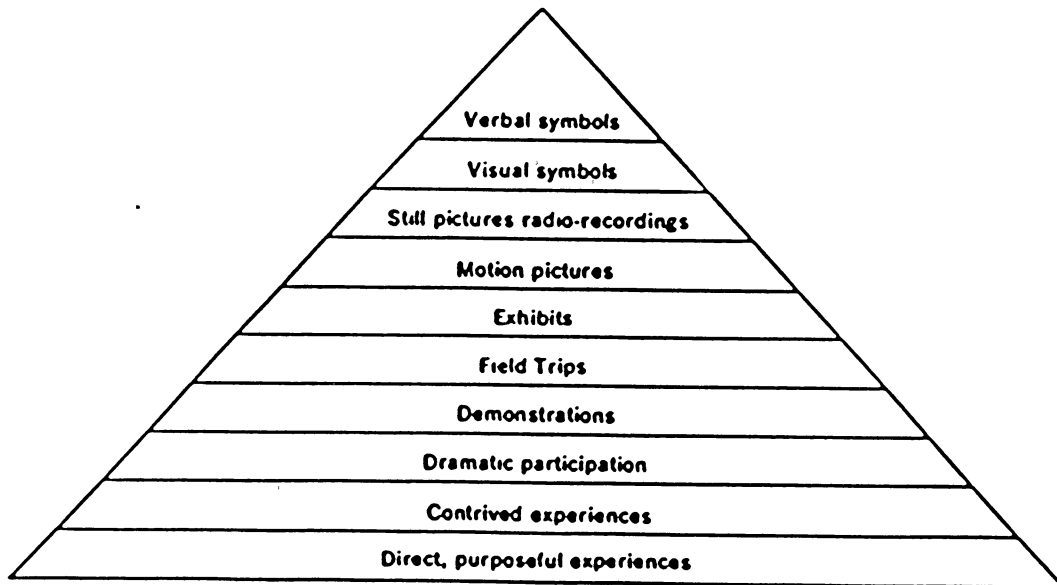
Figure 4. Audio-Visual Methods in Teaching
          Edgar Dale - 1954 Reproduction
          (Heinich, 1989)

In the early part of this period a number of textbooks on the topic of visual instruction were written. One influential textbook, according to Reiser (1987), was <u>Visualizing the Curriculum</u> by Charles Hoban Sr., Charles Hoban Jr., and Stanley Zissman in 1937. This book was not dissimilar to the thoughts and ideas expressed by Adams, Dale, Weber, et.al. Throughout the history of the Audio Visual Instructional Movement, the focus of the value of audio visual materials lies in their ability to present concepts in a concrete manner (Gagne, 1987 p.14).

The forty year period between 1910 and 1950 saw prodigious scientific technological advances that became readily available to classroom teachers for the enhancement of instruction. While science and technology were contributing audio visual teaching aids and equipment for the advancement of education, curriculum and learning theorists were engaged in study of the role that these new technologies would play in the educational process.

Instructional practices in early American public education were influenced by such notables as Lancaster, Pestalozzi, F.W. Froebel, J.F. Herbart. According to Saettler (1968) there are only a few tendencies in contemporary education that cannot be traced back to these individuals. The prevailing conception, that instructional methods consist principally for the purpose of developing techniques of transmitting information and of controlling learner behavior, was reinforced and elaborated in the monitorial system. Pestalozzi and Froebel were noted for their directions in the use of objects in teaching, while Herbart was known for his influence on teaching methodologies. Herbart (1776-1841), in an attempt to prevent teachers from using strict memorization and make no connections for the students, developed a fail proof lesson plan which consisted of five steps. Teachers would then systematically (technologically) approach the planning of lessons in order to help the students to make connection. These five steps were (1) preparation or reviewing old ideas; (2) presentation of new materials

and/or ideas; (3) association of helping students to associate old ideas with new; (4) identification of new principles and concepts; and (5) application or testing newly devised principles in practical situations (Welton, 1979).

The War Years (1935-1945)

Audio visual instructional methodology in the schools is given secondary consideration in the literature during the years of World War II. Due to the massive federal allocation of funds to the military for the war efforts, quick and efficient methods of training were to be developed. The use of motion pictures for massive training of military personnel received the attention of education reportings during that period of time. During the war years the U.S. Government purchased 55,000 film projectors for the military and spent $1 billion on training films (Olsen & Bass as cited in Reiser, 1987). Cumulative data show that during some of the most intensive thirty-day training periods, more than 200,000 prints of a 16mm training film were shown to military personnel.

The successes of this instructional technique has been attributed to the systamatizing of the curriculum and increased availability of instructional materials for public schools such as 16mm film. According to Charles Hoban, Jr. in Movies That Teach (as cited in Saettler, 1968) the U.S. Army

stated its four educational objectives to be accomplished with the use of motion pictures to be:

1. Orientation in the moral purposes for which the war was fought, the nature of our allies and our enemies, and the importance of the part played by various components of the Army.

2. Understanding of a habituation in self-control and proper conduct of the individual soldier.

3. Information on current material development and military progress on all fronts.

4. Instruction in basic technical subjects and skills (Saettler, 177).

The military solution to the problem "how to train effectively and efficiently large numbers of individual with diverse backgrounds" was generally perceived as successful by the American public. This success generated renewed interest in the school for the use of audio visual devices (Flinn, 1972; Heine et al.; 1982; Olsen & Bass, 1982; as cited in Reiser, 1987). Prolific research was generated as a result of this interest. A summary of this research appears in chapter four of this paper.

The Inception of Sytematic Instruction
The Bridge BetweenMovements

In 1958 the National Defense Education Act: Title VII gave a big boost to American schools by providing over $40 million for over 600 projects of media related activities (Reiser, 1987). This liberal funding was stimulated by

bureaucratic reaction to the Soviet launch of Sputnik. Defense anxiety of the general public and of school leaders capitalized on the military efficiency of WW II and took preventative measures in our American civilian educational program (Ryan & Cooper, 1985). It is the writer's opinion that the American love affair with post WW II and pre Viet Nam militarism allowed this liberal bequest to go unchallenged.

During this period of time, the late 1950s, the research and development efforts in the field of instructional technology turned to the new media form--television. The impact on learning had monumental possibilities in view of readily available television sets and access to the knowledge of recent gains made by the military in the use of sound motion pictures. Researchers were pre-occupied with the new technology and began to ask researchable questions that were not unlike those asked previously about simpler media forms. Complex expensive media like sound motion pictures and television were described as "big media" when compared and contrasted with slides, filmstrips, transparencies, etc. which became known as "little media" (Schramm, 1977). The research forms and questions asked in the field of instructional technology for big media were often replicating previous research on little media. The researchers, in so doing, began to articulate a division among media technologists and educators thereby creating an educational problem. As the results of volumes of research results accumulated with "no significant difference" findings, other educators finally

began to focus on the questions being asked. Schramm (1977)

writes:

> During the last few decades we have frittered
> away an enormous amount of research asking
> relatively useless questions about the media of
> instruction. Question one; "Can the media teach?"
> ... Question two: "Can they teach
> as well as a teacher?" ... Question three: "Is
> one medium any more effective than others?" Instead
> of continuing to ask grand and no longer useful
> questions (Can media Teach?, What is the best
> medium?) we should be well advised to ask the
> smaller sharper questions (How can we best USE a
> given medium for a given act of instruction? In
> a given situation what medium is more cost-effective
> than another? How do the symbolic coding systems of
> a given medium relate to what a student learns from
> it?)...if we want to make a practical contribution
> with media research, we can well try to illuminate
> the dark, confused area in which the selection of
> media for instruction takes place (Schramm, 1977 p.
> 15).

Research from "audio visual" scholarship gradually made room

for other types of research. No longer was the focus on

machines and learner reaction to these machines but was

broadened to include questions of media selection and cost

effectiveness. This language parallels that of military

terminology and jargon when reference was made to efficient

and effective training of Army personnel. A major question

emerged regarding the appropriateness of instructional

techniques that were most effective for the military during

war time. This question was, do the same principles apply to

the child sitting in the classroom during peacetime situations

(Reiser, 1987)?

American education was prepared to deal with this and

other similar questions. Educators had been influenced by

curriculum theorists Thorndike, Bobbitt, Tyler, Herbart, and a variety of others. Most of these writers viewed the educational process in a systematic way and have exerted considerable influence on the teaching profession.

Edward L. Thorndike is considered by some to be the father of the controversial standardized test (Oliva, 1988). Through systematic use of standardized measures, the individual student is attempted to be defined in terms of his relationship to the norms generated through the testing of his peers, and his growth can be monitored. The emphasis placed upon student competency testing in the current educational literature bears out the assertion that systematic standardized testing is common practice in today's schools.

Franklin Bobbitt in 1918 authored the book, Curriculum which has become a standard and a frequently cited textbook in graduate curriculum courses in our university teacher education programs (Zais, 1976). Bobbitt advocated scientific methodology in curriculum making, citing the application of measurement and evaluation techniques, diagnosis of problems, and prescription of remedies (Oliva, 1968). This often used contemporary language of medical jargon among educational professionals reveals a medical systematic prototype or paradigm in which the reality of these educational professionals is reflected. Through this language analysis the assumption about learners is that they are deficient and need to be ministered to by professional educators in a prescribed or systematic method (Dobson, 1981).

In (1949) Ralph Tyler suggested a systematic way of arriving at instructional objectives. Teachers in a methodical way break down learning tasks into bite-size pieces, describe the behavior to be performed, specify the testing conditions, state the minimal acceptance level, and classify the type of objective into a sophisticated classification scheme (Wiles & Bondi 1988). The instructional design model as developed by Banathy (1968), Kemp (1977), Carrol (as cited in George, 1982), et.al , declare the instructional objective, stated in behavioral terms, as being fundamental to the curriculum development process. Although use of instructional objectives stated in behavioral terms is not without criticism, their use continues to permeate the educational system today (Wiles & Bondi, 1988).

Teacher education programs were introduced to a systematic method of planning lessons. Herbart (as cited in Ornstein & Levine, 1989 & Welton, 1979) , as previously stated, gave a standard outline for the components of a good lesson. This model continues to guide pre-service education students in planning units of instruction and lessons to be taught in isolation in today's classrooms of teaching methodology (Ornstein & Levine, 1989).

Influenced by these writers, teachers in practice were ready to organize instruction in some systematic way that would result in effective and efficient learning. The results of the instructional efforts as modeled by the military and the above stated curriculum writers launched American schools

into a new educational era which was based on a systematic approach to learning and education.

The Audiovisual Instructional Movement (1945-1965)

According to Saettler (1968) extensive research into these problematic issues launched education into what may be described as the audiovisual instructional movement. This era spanned the years of 1945 to 1965. There was a steady growth curve in many instructional areas for the first ten years of this period. By 1955 schools were developing language labs, instructional television centers, teaching machines, classroom communication devices, etc. As a result, in the early sixties there was a movement toward a re-definition of terms in audiovisual instruction to encompass the terminology of language development and communications. During this period of time there was greater dependence on psychological theory and research.

The audiovisual instructional movement also brought about growth and expansion in other areas. One such area was in college and university teacher education programs. By 1959 there were five hundred and sixty schools of higher education which offered audiovisual courses for teacher education students, and in 1962 there were only twelve states which made no legal provision for the inclusion of audiovisual instruction in the teacher preparation curriculum. Graduate programs were expanding around the country and were granting

doctorates in audiovisual related fields of specialization.
By 1968 more than sixty institutions in thirty states offered
a minimum of one graduate course in each of the areas:
utilization of media, media production, and audiovisual
administration (Saettler, 1968). A list of textbooks that
were used in college classrooms is included (see Appendix A).

Reiser (1968) states that the significant influence for
this period was the provisions of the National Defense
Education Act: Title VII which was highlighted earlier in
this chapter. Filep and Schramm in 1970, as stated by Reiser
(1987), indicated that this funding would contribute to the
application of the systems approach to education, provide more
individualized instruction, and secure greater teacher
acceptance of the new media.

The professional aspects of audiovisual instruction made
great strides during this period of time. The National
Educators Association (NEA) had a department for educators
interested or specialized in audiovisual instruction called
DAVI (Department for Audiovisual Instruction). In 1965 the
NEA reorganized the committee structure within DAVI to broaden
its outreach and, they added a second journal. Its first
publication was "AV Communication Review" and "Instructional
Materials" was added to the title. The second publication was
later renamed "Audiovisual Instruction" (Saettler, 1968).

Saettler (1968) concludes his historical treatise by
stating that in spite of the rapid development of audiovisual
instruction there still appeared a discontinuity of the aAV

movement with the discipline of instructional technology. It
appeared that instructional theory and the rapid expansion and
availability of technology were not developing congruently.
He went on to predict that the future would begin to bring
congruence when instructional technology catches up with
scientific technology. His illustrative example was that
programmed instruction had been around for quite a number of
years (Montessorri, Pressey, Skinner), but that the machine
technology did not reflect the advances that these educational
theorists had made to the field of education.

According to Heinich, Molenda, and Russell (1989) the
advance of programmed instructional techniques served as the
introduction to the systems approach in education. The
analysis and breaking down of content into specific
instructional objectives, devising the necessary steps to
achieve the objectives, setting up procedures to try out and
revise the steps, and the validation of the program, was in
fact a small but effective self-instructional system and
thereby created a technology of instruction. In 1972 Gagne
(as cited in Zais, 1976) in connection to learning theory,
states that task analysis and sub-task identification create
an essential hierarchy. In order to learn readily or to
perform a super-ordinate task, one would first be required to
learn or master a subordinate task. This technology of
instruction was advanced by Ralph Tyler (1949), Benjamin Bloom
(1956), and Robert Mager (1961). Robert Gagne also further
advanced the systems approach consistently in subsequent

publications (Reiser & Gagne 1983). These educators and their publications have greatly influenced the field of education. Teacher education programs at the undergraduate and graduate levels continue to present components of Gagne in education psychology courses and Tyler, Bloom, & Mager influence the teacher planning process.

The Late Sixties and Early Seventies (1965-1975)

The systems approach was fully ingrained in the educational process by this period in American educational history. The military influence of the post war era, the influence of Tyler, Bloom, Mager, et. al., and the new influence of authors Banathy (1968) and Briggs (1970) would serve to further entrench educators in this educational approach. According to Reiser (1987) the systems approach literature grew rapidly as models for design of instruction were developed and numerous journal articles appeared which focused upon various aspects of the systematic process.

The literary references to audiovisual would the be replaced by the word "technology" as audiovisual integration into the instructional process were now seen as part of a larger system-- the technology of instruction. The names of professional organizations were changed in order to reflect this technology movement. The Department of Audiovisual Instruction (DAVI) and the National Society for Programmed Instruction became the Association for Educational

Communication and Technology (AECT) and the National Society
for Performance and Instruction (NSPI) respectively. These
name changes reflected a movement away from a focus on
audiovisual and programmed instruction as ends in themselves
to part of a larger system of addressing educational needs.
Graduate programs at major universities advanced programs for
post baccalaureate degrees in instructional technology.
Cognitive psychology appeared to be the driving force that was
leading this movement. Gagne (1980) stated:

> ...In developing programs of instruction, one
> must solve the problems of lesson design and media
> selection by reference to mental states and mental
> behavioral outcomes. (p. 7).

Many school systems adopted plans which would emphasize
the individualization of instruction. With the advance of
systematically breaking down learning tasks into smaller
components, it would now be possible to individualize
education. Individualization permitted the choosing of
instructional methods, media, and materials for each learner
in light of individual characteristics, and allowed the
selection of learning objectives for each learner (Reiser).
Although earlier models of individualization existed according
to Reiser (1987), the Individual System of Fredrich Burk in
San Fransisco in 1912 and the Dalton and Winnetka Plans of
Illinois in 1919 only operated in isolation. The advance of
individualized education did not accelerate until the late
1960s. It was during this period that a number of such
systems were developed. These systems include the

Personalized System of Instruction (PSI), Learning for Mastery (Carrol as cited in George, 1963), the Audio-Tutorial Approach, Individually Prescribed Instruction (IPI), Programmed Learning in Accordance with Needs (PLAN), and Individually Guided Education (IGE) (Johnson, 1985).

Although interest in individualized educational systems began to wain, systems theory still remains the dominant force that guides school thinking and teacher planning to this day. Many students who find it difficult to learn and perform in the regular classroom are provided with special teachers, resource personnel, and technological services which individualize a learning plan for the student. Through the efforts of legislators in the enactment of P.L. 94-142, these services are supported with funds from various sources (Ornstein & Levine, 1989). The provider of these funds allocated dollar amounts based on various testing devices which determine if all children are given equal opportunity to learn.

Important Research Studies

Throughout the historical development of instructional technology research was being conducted that had an impact on the practitioner's selection and use of instructional materials to enhance communication. The types of research questions being asked were operating with the assumption that there is a correct set of methods and materials that can

address all learning needs. A summary of the major studies and their sequence poses a cause-effect relationship with the movement in the field. The research questions being considered reflected the prevailing attitudes toward learning theory that dominated the field of education at that time. The results and implications of these studies continued to inspire more questions that were attempting to answer the questions of how children learn.

The reporting of significant research will address empirical studies of a media related nature that correspond to the media forms presented in Morrow and Suid's <u>Media and Kids</u> (see figure 5). Each segment of the instructional wheel (spoke) will initially be treated in isolation and finally from a multi-media perspective. It should be noted that in the original wheel design, there was no spoke for Computer Aided Instruction. In view of the technological advances since the publication of their book, the authors agree that the computer should also be considered as an additional spoke in the wheel (Morrow & Suid Interviews 88-89).
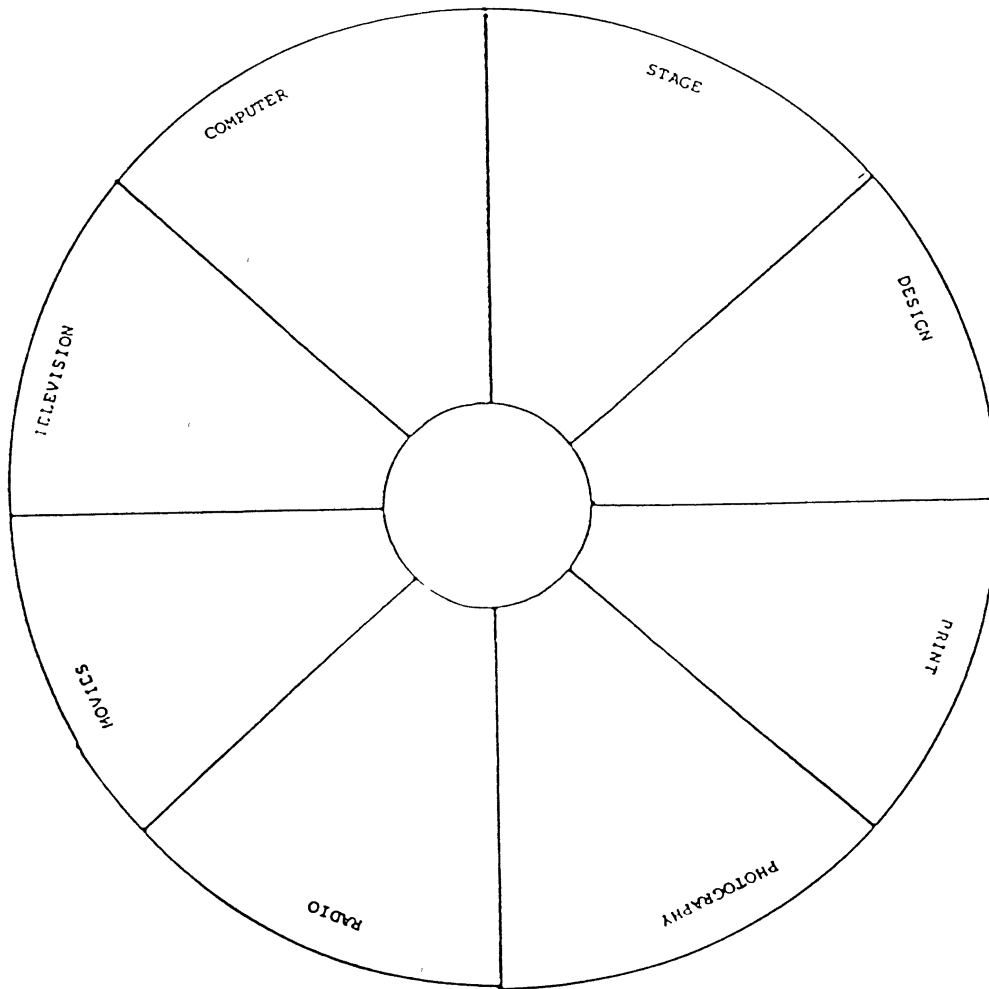
Figure 5. The Media Wheel by James Morrow
& Murray Suid

Stage and Design. According to the authors, Morrow and

Suid, these media forms are the most primitive modes of

communication. They represent the earliest symbol systems

known to man. In the absence of new and better technology,

man was limited to communicating with his body gestures,

spoken symbols, and etchings. Growth in this area was

attributed to man's capacity for remembering and accumulating

knowledge. Man's ability to grasp a writing or drawing instrument gave him another tool with which he could devise a new symbol system, the drawing. His dexterity and intelligence soon evolved into a written symbol system which allowed him to standardize characters to represent sounds.

In addition to the written word, stage presentations or drama soon became recreational as well as instructional. Studies of the ancient civilizations indicate the rapidity in the advancement of communication styles as these media forms developed in sophistication. It was not until early in the 20th century did empiricists begin to attempt to measure the impact of these forms on students when integrated into the teaching styles of educators.

Print. Morrow and Suid treat print as the "wildcard" medium. In the fourteenth century the printing press was invented. This new technology allowed the mass production of the written symbol system (design) and hurled man out of the dark ages into the modern communication era. As a wildcard medium, the educator must use it with all other media forms in order for them to be understood. Once a child learns to read the printed word, the power of the other media forms become manageable. In each of the subsequent forms being considered it is essential that the reader understand that print is a common variable in all testing situations. It would be rare that any testing would be void of the print medium. Even in the Michigan City, Indiana studies by Kelley in 1961, (Photography/Still Media) where pictures were employed as a

pure teaching device, the purpose of the study was to teach
reading (Moldstad, 1974). The following review of media
research treats each form in isolation and treats multi-media
experiences differently. In the true sense, none of the forms
can be treated in isolation, all learning will depend on print
as the wildcard medium.

Photography/Still Media. One of the less complicated and
inexpensive media forms is the inclusion of photos and still
media forms in the instructional process. According to
Seattler (1968) this form of supplemental teaching aid was
housed in children's museums as they were then quite
expensive. As photo and printing technology progressed, the
inclusion of still media rapidly entered the classrooms. This
photo representation of the actual object brought about some
empirical efforts which helped establish its role in the
instructional process.

Early pioneers such as Nelson Greene and J.J. Weber
experimented in the thirties as to the effects of still life
inclusion as aids. Their results led the way for Edgar Dale
to construct his chart of experiential learning and the
effects of symbolic representation. The studies which follow
included one in 1960 where Twyford reviewed Air Force training
studies where he used inexpensive photo mock-ups of planes and
compared them to the technology of flight simulators. The
former were cutaway photos, mock-ups, transparencies, and
manual illustrations while the latter were expensive
mechanical devices to simulate a plane. There was no

significant difference in this study as to the teaching effectiveness, but the cost of one was far greater than the other (Schramm, 1977). Also in 1960 Chance at the University of Texas (Moldstad, 1974) introduced two hundred transparencies into a lecture class in engineering descriptive geometry. Students with the transparencies scored significantly better on the final exam (P<.05) than those with conventional lecture. The subjects reported overwhelming preference for the use of transparencies and an average of fifteen minutes of teaching time was saved each class period. In Michigan City, Indiana, Kelley in 1961 found that first graders who had use of filmstrips scored significantly higher on the Gates reading test (P<.01) in word recognition and (P<.05) better in sentence oral reading than did those who did not have use of filmstrips. In 1965, according to Moldstad (1974), Glenn McCracken experimented using filmstrips combined with textbooks in Pennsylvania schools. In each case students with IQ scores of 80 to 100 moved from beginning reading courses to third grade testing levels.

These results also are supported with a common sense theoretical foundation. Teachers have adopted this as common practice in order to economize on teaching time and to stimulate student interest. Morrow and Suid feel that these issues alone are important for inclusion into the teaching/learning process. The research base for this ideas by 1969 was understood.

Instructional Radio.   Educational radio broadcasts were
much more common during the decade of the fifties and they
continued into the early sixties.   Morrow and Suid still
considered this media form valid for inclusion in their work
of Media and Kids in the late sixties.   Today these air wave
broadcasts rarely exist and have been replaced by the
commercially produced audio tape.   The authors refer to this
as the "black box mentality" in which educational messages are
packaged into unalterable boxes.   In either case the symbol
system of total audio stimulus remains.   This method of
cognition has earned a place in the teaching/learning
methodologies through some classical research.

In 1933 Lumley found that high school students learning a
foreign language developed superior pronunciation skills
through audio stimuli over those who received conventional
lecture exercises.   Music classes were conducted by radio
broadcasts in Wisconsin in 1942.   The Wisconsin Research
Project in School Broadcasting reported significantly better
test results in most areas of musical skill assessment for
those who were taught through this method than for those who
learned through conventional methods.   NHK in 1956 found that
the Japan Broadcasting Company used radio to teach a variety
of courses at a variety of grade levels.   The researchers
reported gains in every case at or above the level of
conventionally taught classes.   In 1962 Xoomsai and
Ratanamangala used a very large sample to study teaching of a
variety of courses at various grade levels.   Even though they

had "questionable" controls, the experimental group tested significantly better in some areas when subjected to the audio stimulus. Constantine in 1964 taught radio science to elementary school children. Significant gains were reported for those who experienced this method to the extent that fourteen to fifteen months of achievement were gained over the students receiving conventional study (Schramm, 1977).

It appears from these and other studies that the majority of students are affected by instruction with the broadcast or recorded stimulus. The inclusion of this form in the wheel is based on educational research and not solely on the uniqueness of this technological communication form.

Instructional Television (Films/Movies). As early as 1930 J.J. Weber conducted empirical field based studies on the effects of film in the improvement of information retention (Saettler, 1968). A plethora of studies followed as motion pictures and instructional films became more readily available. In 1939 Wise learned that adding film to instruction raised learning scores of experimentals over controls by a critical ratio of 2.00. Ten years later in 1949 Hovland, Lumsdain, and Sheffield experimented with military subjects and found that the experimental group scored about 50 per cent higher on post-tests than the control group who had not seen the training films. Wendt and Butts in 1960 decreased the time spent in instruction for 10th grade students in American history. The experimental group was given films in lieu of conventional instructional time and

still learned 86% as much as the total time group. Ash and Carlson a year later doubled the test scores of film viewers over those receiving equivalent information through a non-mediated approach. Gagne and Gropper in 1965 flatly stated that film materials are responsible for significantly higher gains over non-film control groups (as stated in Schramm, 1977 & Moldstad, 1974).

The use of instructional film sequences through the television media has established its validity through the above mentioned empirical studies and thereby becomes a legitimate media form for the enhancement of instruction. At the time of the original publication of the media wheel, illustrated in figure 5, television was the most technologically advanced media form. Shortly thereafter a new media form was introduced, computer assisted learning.

Computer Assisted Learning (CAL). In the early studies cited in this review, the terminology CAI (Computer Aided Instruction) appears instead of CAL as listed in the subtitle of this section. References to both terms in this section should be considered synonymous as CAL is a more frequently used term in many contemporary computer technology publications.

According to Schramm (1977), it appears that the earlier empirical evidence gathered in this area is closely linked to programmed instruction. Many of the computer software programs available to schools resembled the skill and drill practice that was advocated by Sidney Pressey and B.F. Skinner

in programmed learning. Morrow and Suid (interview) did not
see the computer as a legitimate spoke in the educational
media wheel at the time of their writing because of the method
associated with CAI (Computer Aided Instruction) i.e.
programmed learning. The tenants of CAI linked with
programmed instruction simply classified this method as more
print medium which followed a specific instructional model
i.e. programmed instruction. Most of the computer stimulus
was no more than print which could register correct or
incorrect answers and respond appropriately. Either response
generated more print; therefore, it could not be considered a
new media form. Since that time instructional methods,
programs, and technological versatility have caused the
computer to earn a place on the wheel. The student's ability
to interact with the machine, control its pace, select from a
variety of choices of activities, programming and debugging it
have communication possibilities. James Morrow himself
authored an educational program for the computer which he
hoped would engage the imagination and skill of the computer
user.

Some of the studies in CAL have attempted to established
it as a valid media form. Micro-computer and computer
assisted learning are relatively new in the field of
instructional technological research. Its educational
implications are prolifically under study at this time in
history. Several of the studies are representative of the

types of research questions and results which have been generated.

In 1968 R.C. Atkinson (as reported in Clark, 1983) noted that the computer appears to be a medium well adapted for instruction in intellectual skills. Not only can such complex equipment provide accurate feedback necessary for initial skill learning, it can also continue to present the learner with a succession of examples and thereby make possible extensive and varied practice.

R.C. Clark (1983) after extensive study of the literature failed to find any conclusive data which established computer assisted instruction as pedagogically better (in the sense that student who experience CAI perform better on tests of subject matter) than conventional instruction.

Computer assisted instruction was used in a study by P. D,Souza (1983) to test if speed and accuracy were enhanced in a basic keyboarding course at Ohio State University. There was no significant relationship found in this activity involving the psyco-motor domain of learning. A post experimental attitude survey indicated that most participants preferred the computer aided instructional methods over traditional lecture and practice methods. An examination of the means suggested that females, who received CAI, consistently outscored males, who received CAI. This gender performance difference was later studied by A.L. Ranken (1983) who found that in a similar study those who received CAI in keyboarding scored lower than those taught by traditional

methods.   Females, however, scored significantly higher than males.

   Multi-Media Learning.   The concept of multi-media learning is not presented by Morrow and Suid categorically in the media wheel.   One of the observations which the authors made is that adjacent spokes in the wheel are complimentary in a given multi-media situation.   Pairing is the common practice of communicators as they use the respective media forms.   An example of this is the combination of stage and design.   To enhance the communicative effectiveness of any message the writer/producer attempts to provide visual background to any dramatic presentation.   This leaves less to the imagination of the viewer and gives the tools necessary to the playwright to intensify the message being communicated.   The combination of design and print are the standards by which writers attempt to illustrate the messages being transmitted.   Print and photography are natural companions in that captions juxtaposition the image being presented.   Each of the accompanying pairs (photography/radio or tape; radio/movies; movies/television; and television/computer) can then be imagined as being interactive in the total instructional setting.

   Several important studies have been identified by Schramm (1977) and Moldstad (1974) in this regard.   In 1955 Romano subjected students in grades 5, 6, and 7 to a rotating shift of classes.   The experimental group was given the same instruction as the control group but the variable of projected

still and motion pictures was added. The experimental group averaged between 26 and 63% higher scores on six units measured. Positive attitude statements were also gathered from both students and teachers.

Bryan in 1961 (as cited in Schramm, 1977) used a small remote Nebraska high school to offer chemistry and physics courses using a variety of media methods. One group was presented instructional television segments and instructor correspondence, another group had tutorial personal visits from the instructor in addition to instructional television, while yet another group had a combination of all three variables. The third group learned the most according to post test results.

Whitted et.al. in 1966 compared automated multi-media self-study materials to conventional instruction to a group of Air Force trainees. The group with automated instruction scored significantly higher.

Edwards, Williams, and Rodrick in 1968 taught business college students typing and business machines in two groups. The first group used a laboratory supervised by a teacher using conventional methods, and the other group added the dimensions of programmed materials, sound tape loops, tape/slide sets, and drill tapes. The second group using the multi-media approach did significantly better than the other (p<.05) on end-of-term performance examinations (cited in Schramm, 1977).

According to Moldstad (1974) Sparks and Unbehaun in 1971 reported a study conducted at Wisconsin State University at LaCrosse to evaluate achievement of students using the audiotutorial program as compared with student performance in a conventional biology course. The results were measured through the ACT (American College Testing) service. The test results indicated that students in the experimental group (audiotutorial) did significantly better ($p < .05$) than students in the control (lecture-discussion) group.

Conclusion

The historical setting and empirical efforts of the scholarly community depict the background against which Morrow and Suid began their work. At that time research efforts were stimulated to find the ideal functioning use of a variety of media forms and the most effective possible combinations. Programmed instruction and audiotutorial methodology appeared to be the only alternative to the use of conventional systematic instruction. This conventional instructional methodology had evolved into a technological systems approach where the new technology was viewed as support for direct teaching. Morrow and Suid in Media and Kids present an alternative to both systematic instruction and the audio-visual (audiotutorial) methodology. This alternative model will be treated in the remainder of this study.

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CHAPTER III

MEDIA AND KIDS

THE TEXTUAL

ANALYSIS

Publication History

In 1977 a publication from Hayden Publishers,
Media and Kids (Morrow & Suid 1977) was released to the
educational public. The authors, James Morrow and
Murray Suid united their efforts to create this book.
Upon its release Morrow began to use it as a textbook for his
part-time teaching assignment at Tufts University. According
to Morrow the book only sold eight to nine thousand copies
(Morrow, Unpublished Interview, 1988). This was not a
prediction of the wide spread exposure that his previous
publication, The Grammar of Media (Morrow, 1976) received.

Morrow's original ambition was not to publish a textbook
to be used as a text for a college teacher education
classroom, but rather to serve as a handbook for teachers to
use for classroom enlivening. Murray Suid, on the other hand,
was prompted to create the staff development workshops, from
which the content of the book evolved, available to teachers
in practice. This prompting came from Bob Boynton who

assisted Morrow and Suid in their workshop productions and was just beginning his association with Hayden Publishers.

In an attempt to market <u>Media and Kids</u>, Hayden Publishers sent professional review copies to schools of education at colleges and universities. According to Morrow (Interview, 1988) some schools adopted it as a supplementary text for teacher education media courses while others used it as a primary text. The scope of the content of <u>Media and Kids</u> did not lend itself toward the teaching of the practical operations and use of audiovisual equipment, but rather to serve as a theoretical foundation builder for the integration of media into the instructional process and as a media production guide. Other publications at this time were receiving wide spread use and are still being used today. A listing of some of these publications is appended (see Appendix A). The scope of these additional publications primarily include practical applications of media use in teaching along with theoretical foundations of media integration as a secondary consideration. Many of these texts treated instructional theory on the basis of the traditional models of systematic instruction. Morrow and Suid's publication attempted to provide an alternative instructional approach in terms of how the learner is to be regarded. While many of the standard texts approached the learner as the object of mediated instruction, Morrow and Suid expected teachers to regard their students as producers as well as consumers of information. <u>Media and Kids</u> provided a

contrasting point of view as to how and why media should be integrated into the instructional process. The similarities and differences in these approaches will be treated in chapter four of this writing.

About the Authors

Introduction

The importance of the book <u>Media and Kids</u> lies in the acceptance of the ideas and principles set forth in its pages. In order for the book to be chosen from alternatives, several factors must be present. One of these factors is the reputation (s) of scholarship or name recognition of the author (s). Another factor is the marketing strategies of the publishing company. The quality of <u>Media and Kids</u> lies in the philosophical paradigm represented by the authors, Morrow and Suid. The purpose of the following biographical narrative is to reveal the structures through which their unique paradigms were developed. Included will be indicators from both Morrow and Suid's personal and professional lives. It is through this exposure that an analysis of this philosophical paradigm can be developed.

<u>James W. Morrow</u>. James Morrow was born in Philadelphia, Pennsylvania on March 17, 1947 and has experienced his entire personal life and professional career in the northeast part of the United States. He is currently residing in State College,

Pennsylvania where his wife, Jean Pierce Morrow is on the staff at Pennsylvania State University. He received his B.A. from The University of Pennsylvania in 1969; his M.A.T. from Harvard in 1970.

Walt Disney was his childhood hero. His junior high and high school experiences found him heavily engaged in the production of super 8 mm movies. The early 60s decade found schools giving many opportunities for students to use a variety of media forms to enhance communication. He attributes this media culture to Marshall McLuhan who influenced many educators to visualize the use of media in a different way.

Morrow entered the University of Pennsylvania in 1965 as a communications major with no desire to teach. In the summer of 1966 he was hired to create a film documentary of an innovative summer school program for the college of education at the university. He became acquainted with Murray Suid during this experience and would later link up with Suid for the co-authorship of educational materials.

Morrow was graduated with his B.A. in 1969. Murray Suid by this time was teaching and had completed his Masters degree in education at Harvard's College of Education. Morrow picked up on Suid's motivation and entered Harvard's Master Teacher Program also.

While at Harvard Morrow was strongly influenced by Rudolph Arnheim, who Morrow describes as a visual arts person with a Gestalt field psychological base. During his student

years at Harvard he began teaching in a school that was called the Cambridge Pilot School of Harvard College of Education. It was during this time that Morrow met his wife, Jean Pierce.

Several years later Morrow was working as motion picture writer, director and editor, for Odradek Productions in Westford, Mass. Suid, who was then teaching in the Philadelphia School System, began to "fire up" Morrow about getting involved in education. This relationship secured a training position for Morrow in the Philadelphia Schools as a trainer of teachers for instructional television. In the Spring of 1968 Morrow, Suid, and Suid's wife, Roberta conducted a teacher workshop for about twelve to fifteen teachers on Saturdays. According to Suid, it was out of this workshop that the ideas for the media wheel grew. While working together in the Philadelphia Schools, Morrow and Suid began to develop the instructional media wheel. The wheel was first published in 1968 in "Media and Methods". Continual work with the conceptual ideas developed in the wheel spawned the development of the book, Media & Kids.

In the early seventies Murray Suid moved to California for a position as a staff writer for Learning magazine, a publication for teachers in grades K-8. Their writing efforts would now be conducted by mail. In 1977 their book, Media and Kids, was published by Hayden Publishers.

James Morrow subsequently went to work for the Newton, Mass. public school system. Bob Zeebe, coordinator of English, hired Morrow to train teachers in the use of Super 8

movies for English teachers in the system. Shortly thereafter Morrow took a position in the Chelmsford, Massachusetts school system while continuing to write and publish at a prolific rate. A bibliography of his education related publications during this time period is included (see Appendix B).

Following his work in writing for the field of media and education, James Morrow began writing science fiction novels. His first novel, <u>The Wine of Violence</u> (1981) was published by Ace Books and was a main selection of the Science Fiction Book Club. His second novel, <u>The Continent of Lies</u> (1984) was published by Holt, Reinhart, and Winston. The third, <u>This is the Way the World Ends</u> is now in the process of being published by H. Holt & Co. New York.

<u>Murray Suid</u>. Murray Suid was raised in Cleveland Ohio. He met his wife, Roberta, while enrolled in the PhD. program at Harvard University. They are currently living in Palo Alto, California where Murray teaches writing courses at San Jose State University and Roberta is president of Monday Morning Books Inc. whose publications are distributed through Good Apple, Inc.

Suid received his bachelor degree from Brandeis University, Waltham, Massachusetts in 1964 with a major in psychology. The professional education career of Murray Suid began in 1966 when he taught algebra and English at Windsor Mountain School in Lennox, Massachusetts. He was not certified in either of these areas but fulfilled the teaching needs of a school with a shortage of certified teachers. It

was in this school that he assisted a student in the production of a movie. This experience sparked his interest in media production and prompted him to enroll in graduate studies at Harvard. In 1967 he was graduated from Harvard Graduate School of Education in Cambridge, Massachusetts with a Masters in Education. Suid subsequently enrolled in the PhD. program of Harvard but did not complete his studies. It was there that he met Roberta, who was receiving her masters in teaching degree. They were married, and both continued their professional teaching careers.

In the fall of 1967 he became a junior high school teacher and curriculum writer for the board of education of the Philadelphia, Pennsylvania public school system. He continued in this work place until 1972. In the early seventies he joined the writing staff of <u>Learning</u> magazine, a new publication for teachers of grades K-8, and moved to Palo Alto, California. He continues to work there as a staff writer for Learning Magazine, and he also works as a free-lance writer and teacher workshop leader. He presented workshops and delivered keynote addresses for five hundred conferences and workshops during this period. He continues to present teacher writing workshops which number about ten each year. Suid is currently setting up a major series of writing workshops in California (September 1989). Since 1983 he has been on the teaching faculty of San Jose State University. Suid teaches in the Journalism Department, continues writing

and workshop presentations, but is not in a tenure track position.

When asked about the significant influences on his educational philosophy and motivation for career directions, Suid stated that David Mallery, former teacher at Germantown Friends School and current director of studies for the National Association of Independent Schools in Philadelphia, Pennsylvania, was the primary motivational force in his life. It was while teaching and curriculum writing for the Philadelphia School System that Murray Suid, James Morrow, and Roberta Suid began working together. The three of them were leaders in staff development workshops for the area teachers and it was there that they became acquainted with Mallery. One of Mallery's co-workers, Bob Boynton, had earlier become associated with Morrow and Suid through the publication of the book <u>Movie Making Illustrated.</u> Morrow and Suid's second book was published with Boynton and Hayden Publishers under the title of <u>Media and Kids</u>. Boynton later left Hayden Publishers and helped form Boynton-Cook Publishing Company. Boynton retained the copyright for <u>Media and Kids</u> when he left Hayden Publishers. Hayden Book Company was later bought out by Heinemann Educational Books Inc. The copyright on <u>Media and Kids</u> was returned to Morrow and Suid (Suid, Interview July 1989). A list of the published articles and books by Murray Suid is compiled and presented (See Appendix B).

About the Publication

Media and Kids (1977) is a softbound book with ten
chapters and one hundred forty-three pages. The sub-title for
this book is "real world learning in schools." The authors
hold the term "real world" to be synonymous with "practical."
It was their intent to train teachers to train children in the
skills necessary to be producers of educational materials in a
non-linier manner. They advocated that the student be
directed to produce as well as consume educational materials
in multi-media dimensions (Morrow, 1988). Chapters one and
two deal with the theoretical background upon which the
authors hope the teachers will reflect upon before using the
practical section of the book. Chapters four through nine
deal with practical training in the production of media-rich
educational materials. Chapter ten attempts to synthesize the
experiences of teachers and children as they interact in the
educational environment. The book was in print from 1977-1982
during which time it sold eight to nine thousand copies
(Morrow, 1988).

Educational Premise and Conceptual Framework

Introduction. In the introductory essay the authors set
forth their educational premise. The "AV approach" and "Neo-
McLuhanism" are what the authors describe as the most commonly

used approaches to the integration of instructional resources into the curriculum. The AV approach stands for media usage by educators for the sake of supplementing textbook learning (Saettler, 1968) and Neo-McLuhanism, is the approach to education which follows the leadership of Marshall McLuhan. McLuhan advocated that media be used to enriching the environment through sensory stimulation and content engagement (McLuhan, 1964). While the AV approach treats content as the message to be communicated with AV equipment, the idea of McLuhanism would treat content with secondary importance. The sensory experiences in which one may be engaged in the learning process is of primary importance (McLuhan, 1964). In contrasting the two approaches the authors present their views which become stated as **not** a synthesis of the two approaches but rather as an alternative (Morrow,p.1).

Morrow and Suid visualize the classroom as an active place where production in all media is regarded as a natural way to learn. Children should be solving problems in arts and sciences not only through reading and writing (overworked media forms) but in production of audio scripts for radio and television shows, and the use of a variety of media forms. The primary distinction between the AV approach and the Media Wheel approach is that the learner (in the former context) sits passively and presumably soaks up knowledge from other people's learning material, versus the learner who actively conceives, researches, and executes his own learning materials (Morrow & Suid, p.1).

The impact on curriculum, as the authors view it, is that media production should occur in a classroom's ongoing program, and not just in special film making courses, after school photography clubs, or one-shot communication units. A focus on the amassing of information, which underpins the AV approach, is replaced with another ultimate reward. The reward of media production lies in a different domain, the domain of wit and imagination and in making contact with people (Morrow & Suid, p.2).

"That American educators should have been fascinated and adoptive of the ideas of Marshall McLuhan is no surprise and is really quite rational," state the authors (Morrow & Suid, p.2). Students in English classes and English teachers found that the bookish approach to education had many drawbacks. Movies were being released that presented classical literature in a new media form and students were no longer illiterate in terms of content. English teachers found discussions lively and now engaging normally non-contributing students. Many of these teachers found film to be the communication medium of preference when compared to the time honored tradition of print exposure. At the Sixth Annual Fordham University Film Conference the authors noted the attendance of teachers and teacher educators. McLuhan articulated his observations about this event in the following ideas. He stated that today's kids are growing up with extraordinary depth and involvement in a unique, non-linear environment defined by the new electronic medium, meaning television. The environment has

endowed them with a set of perceptual predispositions which are quite different from and truth-to-tell, "better" than those of their local teachers, parents, and McLuhan experts. These are the children of a post-literate society. The teacher who ignores this fact is riding for a fall. These teachers should be called "POBS" (print oriented bastards).

A group of reactors challenged McLuhanists with the idea that the electronic media usage statistics should be cause for alarm rather than elation. With students becoming more engaged with the electronic medium, there is a decreasing amount of interest in reading and writing and that a sensory imbalance is also being created by the "SOBS" (screen oriented bastards).

Morrow and Suid's reaction to these conflicting points of view is the foundation for the media wheel as an instructional model. They recognized that students are able to understand and appreciate film and television programs and for that reason spend almost six hours each day in viewing. In contrast they are spending less time in reading because they are not able to understand and appreciate books. They begin to question the imposing of an inappropriate medium (print only) on the students and identify a reversal in educational theory.

Finally they advocate the power of production in the domain of the student as a producer (p. 6). In a quotation of Theodore Rozak (non-supported) the authors embrace the phrase "gate crashing the creative life". This exposes the purpose

of media production for kids in that production becomes the

creative outlet needed by the individual learner. This

production becomes the motivation for learning as the learner

presents his own creation to a captive audience. The authors

quote Jacques Tourneur's comments in *Cinefantastique* (Summer,

1973) to capture the emotions involved in creative

productions,

> Every time you see a film that you like, somebody
> stayed up at night, somebody didn't sleep, somebody
> was fussy...Good pictures don't just happen. If a
> picture is well-written, the guy worked hard. He
> didn't just write it off the cuff...he worked. If
> it's the direction, it didn't just happen; somebody
> worried about it (Morrow & Suid, p.6).

The authors continue to present their thinking in a

reaction to Tourneur's statements. They state,

> That, I think, is worthy and accurate insight
> into he demanding, idiosyncratic, uniquely
> rewarding world of media production, an insight
> worth bringing into our classrooms and communicating
> to our students. It has a lot to do with people,
> only a little to do with the senses, and nothing
> to do with spraying images on the wall (reference
> to McLuhanism).

Discussion. The authors provide the background necessary

to understand the role that media will play in the learning

process of children. Much effort was expended in an attempt

to get the reader (teachers) to embrace the idea of perceiving

learners as creative beings and capable of being producers as

well as consumers of media. The arguments are also made which

combat the popular thinking of McLuhan and behaviorists who

(at that time and still continue) dominate the instructional

practices in most classrooms. This was evidenced by the media
events which were popular at the end of the sixties and the
type of AV instruction received in teacher education programs
at most colleges and universities. Teacher education media
courses continued to cling to traditional behavioral teaching
methods.

Analysis of Chapter 1

The "Wheel" is presented to the reader for the first
time. The authors initially describe the wheel as a picture
of the history of communication. The suggested curriculum
model is here presented:
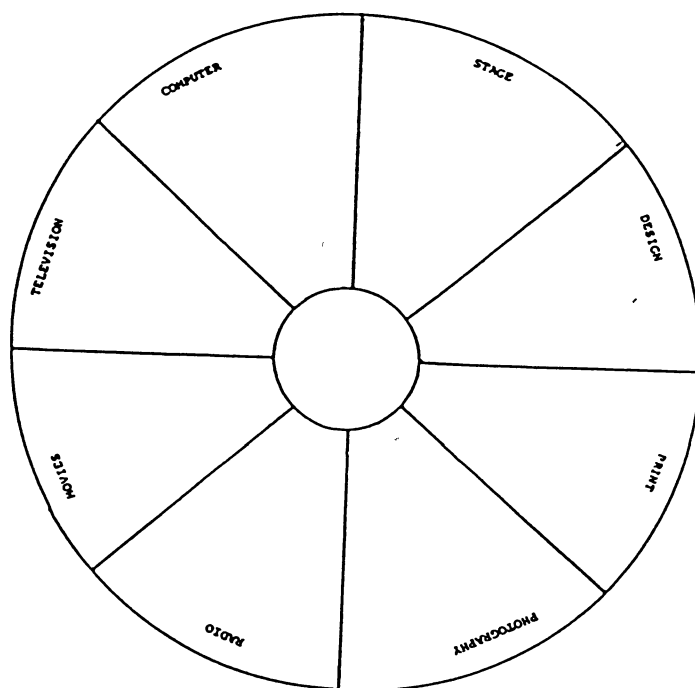
Figure 6. The Media Wheel by James Morrow
& Murray Suid

Each of the spokes of the wheel is described in the following chart:

STAGE: Gestures, Speech, Movement

DESIGN: Drawing, Graphics, Painting, Sculpture, Architecture, Crafts

PRINT: Written Words, Numbers, Symbols, and Signs such as $, ? &, #, =, +

PHOTOGRAPHY: Prints, Slides, (transparencies), Half-tone reproductions

RADIO: Recorded Music, Sound Effects, Dramatic and Comedic Dialogue, and all the other dimensions of sound which radio helped define.

MOVIES: Sound and Silent, Animated and Live-action

TELEVISION: Broadcast and Closed-circuit, Live and Videotape.

At the center of the wheel (hub) is the statement of content or content objective which will be addressed by the various media forms in both presentation and production formats. The wheel is to be thought of as the framework for any curriculum unit of instruction. The construction of the unit suggests that each spoke be filled in with the resource or production idea that will best facilitate the learning of the content in the center. The process requires that the teacher creates two wheels: a Presentation-Wheel which leads to reaction and a Production-Wheel which leads to active problem-solving and creation. It is not implied that the media rich environment of presentation and production be an

unplanned or pot-luck event. The author's intentions are that each medium be valued for its own special properties and integrity and that no one form be treated as any better than the other. The authors amplify on the word "reaction" used to describe the behaviors of students in response to the presentation wheel. Informal discussion is advocated which is free, possible passionate give-and-take in which primary reactions clash and illuminate one another. In similar manner, the production wheel should provide the environment for fellow students to react/reflect on presentations of other student presentations of their own personal creative productions.

Discussion. This proposed methodology flies in the face of McLuhanesque ideology. The statement at the end of their quote, "has nothing to do with spraying images on the wall" implies that their multi-media exposure is not merely pot-luck/saturation exposure but a well planned program to treat content in a variety of media forms. Supplementing this is their statement that "no one media form is better than another." This confronts the instructional design specialists, Kemp, Banathy, and Gagne, who attempt to research and find the most appropriate media form to support learning in specific situations.

Herein lies the argument. An alternative model of instruction such as this deserves consideration in view of the criticism that many of the Gestalt Field psychologists, visual literacy proponents, and hermeneutic, and critical

investigators level at behavioral psychologists and system theorists.

What **is** advocated by the authors is active reflection in both the presentation and production areas. This reflective posture is consistent with the ideas currently promoted in educational settings. Praxis i.e. action with reflection, along with reflective teaching, learning, and thinking are contemporary terms used in many educational in-service and pre-service teacher education settings of today. These terms represent the language used by Posner (1985), Friere (1970), Green (1973) and a variety of other writers.

The ideas for the involvement of students in this process was stimulated from Harvard's professor Rudolph Arnheim studies in the sixties. Arnheim gave a pencil and paper to students and asked them to make drawings of various concepts such as democracy, youth, good marriage, bad marriage, freedom, and others. The results were that most participants could not simply recreate a mental image but had to think through, clarify, or even discover some personal feelings. This type of reflective activity is what Morrow & Suid interpret as "learning through conscious activity".

Analysis of Chapter 2

_____The title of chapter 2 is "The Pedagogical Question". In terms of literacy the authors state that most of the regular subjects in school are less often *done* than *read about*. A

frightening number of students, especially in urban schools, are *"severely retarded"* (Morrow, p.17) in literacy, reading several grade levels below norms. The authors go on to state that,

> "A school system that depends so heavily on reading as the primary way to learn are failing these kids. Students who fail reading and writing are not just failing a subject; they are failing their school's chosen mode of communication, and the contents of *all* their various courses and subsequently denied access to learning (Morrow, p.17)."

The authors state that a multi-media approach can help these kids be learners in school. They do not intend to imply that teachers are relieved of the obligation to teach print skills, it merely questions the school's wisdom in making learning contingent upon print skills (p. 17).

The philosophy of production. When regarding students as producers, the authors state that no one ever learned how to read from just making a film or a tape recording. A varied exposure to other media forms enables them to perceive, communicate, and learn and continues to reinforce them through their successes in the "non-print" forms. This media experiential learning style is captured in their statement, "Learning is not strictly a matter of reading and writing, but reading and writing are not strictly a matter of reading and writing either" (p.18).

Quality Control. The process of media production on the part of the learner is a commitment to the end product. A quality product goal engages the student in a self motivated

posture. Under a teacher's direction, motivation, and training, a student can engage in a creative learning process using new or alternative tools of communication. A teacher's demand for commitment to a quality product (as described by Tournier) keeps students focused on the knowledge goals upon which the hub of the wheel is built. A radio program, stage play, video documentary needs a paper outline and a script. Without such a script or outline in hand, it is impossible to evaluate a kid's media production idea before film, time, or other valuable resources are expended on it. Without the script, it is difficult to be sure that a student really has an idea. The more chance, according to the authors, a student gets to hack around, the more contempt they will acquire for the medium, and less motivated they will be to do anything substantive with it.

Classroom Essentials. The teacher in any classroom who engages in multi-media production must attend to the environment, student involvement, readiness, creativity, technology, and the audience. There must be a commitment to create a physical atmosphere in the classroom conducive to production. Acoustics, lighting, backdrops, and other appropriate environmental considerations are essential. In terms of involvement, it is important to begin with the message and not the medium. Keeping this content focus will provide the direction for thinking which students need. Several management suggestions are offered to teachers in how to engage students in active involvement. In terms of

readiness the authors suggest the pre-requisite skills (in the form of a scope and sequence chart) necessary for students to be producers for various media forms. The concept of creativity will be addressed separately. In terms of technology the authors assure teachers that if they can drive a car, maintain a fish tank, run a washing machine, that there is no machine in a school that they can't also learn to operate, and subsequently teach a student how to operate. As far as availability is concerned, most media directors will assist a teacher who can demonstrate a need and a plan to use various pieces of media equipment. An audience is always required. If a group of student producers never are allowed to demonstrate, project, or perform their creation, than motivation will soon be killed and the goal of self expression has failed. No project should go unpresented for the sake of the self image of the producers, and for the sake of content and goal retention during the project development phase.

    Creativity. The developmental aspects of creative expression are presented by the author. A model of increasing originality was devised and presented to the readers. There are five developmental levels of creativity. Level 1 is *copying*. This is observed when the child simply observes someone else's work and duplicates it. Level 2 is *imitation*. The child at this level does not have someone else's work in front of him, but he supplements his recollection with new bits and pieces. An example of this may be when a child recreates a Peanuts cartoon with all the same characters but

gives them new names or characteristics. Level 3 is *parody*.
Here the child takes the basic elements from another source
and makes fun of them. An example of this is taking a TV
commercial about "Cheer" detergent and making up a new
commercial about "Sorrow" detergent. Level 4 is *influenced
originality*. Here the student has many ideas of his own but
his direct inspiration is readily apparent. He may draw a
Peanuts like comic strip with a Peanuts type dialogue, but his
story is original and his characters do not resemble the
characteristics of the original Peanuts characters. Level 5
is *uniqueness*. At this level the child is not being guided by
a single influence but by a multiplicity of thoughts,
impressions, and feelings gained through his experiences with
real life and art.

A student does not pass through these stages of
creativity in developmental increments as described by Piaget.
The child may enter any of the production phases at any of
these levels based on his prior experience with this media
form. The goal of the teacher is to identify at which level
the student is creatively operating and challenge him to move
up one level on the incremental scale. This teaching strategy
also enables the student to explore hidden talents and reaches
into the depts of creative thinking.

Discussion. The models and teaching strategies presented
in chapter 2 by the authors are exciting challenges to
classroom teachers who wish to stimulate their students into
higher levels of thinking, greater intellectual engagement

with educational concepts, and creative efforts to communicate their ideas. The helpful suggestions given to teachers in forms of management techniques (if followed) make this form of teaching and learning possible. These broad and high level goals will be treated later in terms of how they impact schooling. In an attempt to discover the source of the developmental model of creativity, this writer learned that the authors were operating at the level of influenced originality. They could not identify specifically from where this model came, or even the ideas which it represents. When probed about their own study of the creative development aspects of learning, both authors yielded to their earlier influences of Rudolph Arnheim and the Harvard experience.

Chapters 3-10

The remainder of this book categorically considers all of the media forms in the spokes of the wheel. Each chapter is dedicated to the development of teacher skills in managing a project focused on a specific media form. A teacher who would accept the suggestions for the presentation and production of each media form, would be able to create a media rich-classroom environment. Content remains the focal point of the curriculum model and attention to a varied media format would enhance learning in all curriculum areas.

Conclusion

The ideas, methodologies, and management techniques presented by Morrow and Suid in their book Media and Kids provide an alternative teaching plan for a teacher or school system who adopts its principles. At the time of its publication, teachers were engaging in McLuhan type media experiences in which the content in the curriculum was sacrificed at the expense of the media form itself. The authors describe these types of experiences as "blowing kids' minds with mixed media shows, featuring simultaneous presentation of slides, movies, and rock music" (p.1). In later years when the schools were politically instructed to *return to the basics*, the multi-media approach, as advocated by Neo-McLuhanists, was branded as time-wasting activities. What was important was the systematic use of instructional media to enhance the acquisition of content.

It presently appears that the philosophy of engaging students in a media rich environment, where curriculum content is the focal point, represents the compromise which many educators and media specialists may be seeking. The remainder of this study will deal with the potential impact that this model could have on today's schools in terms of curriculum change and its social implications if adopted.

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CHAPTER IV

THE INTEGRATION OF THE MEDIA WHEEL

IN AMERICAN SCHOOLS TODAY

The Conditions of Schooling and

Curriculum Design

Introduction

The media wheel is a model of instruction that could be
and has been employed in the classrooms of American schools
for the teaching of all subject material. It reflects a
philosophical point-of-view which is congruent with some
teaching beliefs and practices exposed by a variety of
curriculum writers. A variety of these beliefs/practices
paradigms have been described by Joyce (1980), Dobson (1981),
et. al, and stimulate the assumption that this model of
instruction would find congruency with certain philosophically
inclined education professionals. Chapter IV deals with the
hypothetical utilization of the media wheel as an
instructional model within the field of American education
today and attempts to identify wheel technology with several
educational paradigms.

The conditions existing in the schools and classrooms around our country have been exposed through a variety of curriculum analysts. The historical/analytical work of Herbert Kliebard (1985, 1987), John Goodlad (1979), Michael Apple (1988), Kenneth Sirotnik (1988) and others will provide the analytical framework for discussion of the media wheel as a viable instructional model. Kliebard provides the context in which to consider the utilization of a model such as the media wheel by Morrow and Suid. John Goodlad provides the current context of the conditions of schooling in which this model may/would find or not find compatibility. Sirotnik develops the possibilities in which the model could provide a desirable alternative to existing instructional methods. Finally Michael Apple treats modern technology and how the microcomputer, while being considered the most recent spoke in the media wheel, fits into the instructional plans of American educators. It is through these structures that the media wheel finds its place in schools of the eighties, nineties, and into the twenty-first century.

In the way of introduction Kliebard provides American education with a historical perspective of curriculum development. He describes the struggle within the American curriculum and concludes that there were/are *three currents* of American curriculum thought that have assumed dominant roles in the thoughts of teaching professionals since the turn of the century. Each of these currents will be used as a backdrop for the discussion of the media wheel.

Historical Background in Which the Three Currents Enter

The classical curriculum dominated the early years of our existence as a country Components of that curriculum were dialectical studies in Greek, Latin, Chaldean, Hebrew, and Arabic but also with musical accomplishments, physical prowess, knowledge of metals and precious gems, and even of casting of artillery. It resembled the metaphorical Sabre-tooth curriculum as described by J. Abner Peddiwell in 1939 (in Ryan & Cooper, 1984), when the curriculum's only purpose was to provide mental discipline to perform later in-life unknown adventures. New Fist, the main character of the metaphor, is struggling with his pedagogical mentors in pre-historic times. Each one of the mentors has a different value for the courses in which New Fist must enroll. *Woolly Horse Clubbing* was no longer important for young cave dwellers to take because the woolly horses had migrated to the north. There were those sages in the village who believed that this training must continue because of the personal discipline it required. Similar arguments were made in the early years of the twentieth century by curriculum workers. There was an unrestful attitude about the value of an ancient curriculum for a nation that was beginning to industrialize.

In later years a depression, vice in the cities, labor unrest, corruption in government, and "undesirable" immigration led to unrest where many saw the schools as the

vehicle for healing a fragile society. The Committee of 10 under the leadership of Charles Eliot recommended in 1893 that classical languages be replaced with modern language because it is simply practical. The committee's recommendations appeared to be a compromise but were not sweeping enough to appease those who were calling for a utilitarian curriculum. This desire to reform was later seen as the "progressive education movement" (Kliebard, 1987,p. 34). The Progressive Education Association (PEA) developed from the faculty of teachers at Columbia University was epitomized by the advocation of Count's "Dare the Schools Build a New Social Order". Another outgrowth of this era was the wide adoption of a series of 14 social studies textbooks written by Harold Rugg. Kliebard exposes this movement and its reactions by describing the struggling of the American curriculum efforts. Three currents evolved; the social efficiency ideal, child development theories, and social meliorism. Each of these are here presented and discussed.

The Social Efficiency Ideal

Advocates of the social efficiency ideal sought to build a tight connection between what was studied in school and the everyday lives of people. The Cardinal Principles Report of 1918 was the outcome of this movement. A utilitarian model for secondary schools was developed and nationally acclaimed. This idealism promised to create a more orderly society.

According to Wiles and Bondi (1989) this design was referred
to as vocational education, and more recently has been
identified as career education.

Discussion

According to Morrow and Suid, the authors of <u>Media &
Kids</u>, any concept, process, or skill under consideration in a
classroom is generally chosen from a pre-determinied set of
guidelines. This could be the content suggested by the
adopted text, school curriculum guide, or teacher decision.
Advocates of a utilitarian curriculum would most likely view
the curriculum delivery system as one that *trains* students to
perform tasks that can be used again in a functional setting.
The only life skill which the authors suggest is the ability
to communicate with a variety of media forms. In order for
students to use media forms in a production setting, they must
first develop the skills in using a variety of audio and
visual communication devices. Morrow & Suid state that most
of life outside of the classroom is saturated with other modes
of communication other than print. With the print medium
being overworked in schools, teaching practice should use
media forms that replicate real-life experiences. Skills in
using multiple media forms with competence will assist the
student currently and in the future to take advantage of the
variety of media forms available.

Human Developmental Ideology

Theories about stage development in children were
espoused by many behavioral and social psychologists. One of
these ideas was the *cultural epoch* theory in which human
development paralleled the development of civilization as a
whole. Myth and legend were introduced to young children
because early civilization was pre-occupied with these ideas.
Later man evolved into the savage era and later into the
agricultural era. Human growth and development curriculum
parallels sought to lead student through the same periods.
The ultimate strategy was to connect the path of development
of the child with the curriculum. Psychologist G. Stanley
Hall for example felt that play was essential for the child
under age 8. After that time they should be engaged in
factual memorization as they were unable to reason until a
later age (Kliebard, 1985). Supporters of this idea would
structure curriculum in similar teaching learning paradigms.

Emerging within this movement was the popular acceptance
of human growth a developmental theory from Swiss
psychologist, Jean Piaget (Bassett, 1978). Piaget attempted
to describe the stages of development in the thinking
processes from childhood to adulthood. His stages were
labeled as sensori-motor control (birth to two years) ,
concrete operational (seven and over), and formalized thinking

(after age 11). Also emerging at this period of curriculum influence was Maslow's hierarchy of basic needs. Mazlow states that the basic needs from lowest to highest are physiological needs, safety needs, belongingness and love needs, and self-actualization needs (Bassett, 1978). Higher needs need not be demonstrated until the lower ones are met.

Discussion

Morrow & Suid address the developmental aspects of students in view of the instructional model, the media wheel. The cultural epoch theory finds compatibility with the design of the wheel in that the entry level (stage) represents the first form of communication known to man. In the absence of a symbol system with which to communicate, early man relied upon gestures (pantomime) in order to warn others of an approaching sabre-tooth tiger. As man's ability to communicate advanced drawings (design) were discovered on cave walls where a permanent message was left for future inhabitants of that cave. The symbol system of letters or characters to represent sounds or concepts developed and became standardized. With advancing technology man was able to mass communicate through the print mode. With the advance of the printing press, these symbols were able to be replicated and inform masses of people (print). Images were then able to be captured and reproduced (photography) which becomes the next media form under

development and consideration. Man had advanced to the point of communicating a visual point of view through a mechanical medium. Radio, movies, and, television followed quickly. The authors make the point that continual use or overworking of one medium, print, the student is denied the advancements or richness made available through technology in experiencing the environment in often times superior ways. The also are quick to point out that when the communication forms are combined in adjacent developmental positions (stage & design), (design & print), (print & photography) we are able to address multiple dimensions of stimuli and th hereby increase the vicarious experience or engagement with the object or idea represented in this symbol system. The authors do not advocate that each media form be presented in the succession with which they were developed, or that all media forms be used with all content areas, but that the practical dimension of the form's use is more costly and progressively abstract as one proceeds in an ascending fashion on the wheel (Morrow & Suid, 1977, p. 9-10).

Another dimension that relates well to developmentalists are the levels of creativity through which students progress. Morrow & Suid devised a model of development on an increased originality continuum. The stages consist of these five levels of development: copying, imitation, parody, influence originality, and uniqueness. Teachers are directed to identify the type of creative ideas that the student is attempting to express through various media. If the student displays simple copying, duplication of someone else's work,

than they should be motivated to progress one step on the scale and offer their own idea to someone else's format. The example of this would be for children to draw a "Peanuts" cartoon with Charles Shultz's characters but adding the student's own dialogue. From this level the student should be guided to move into parody, taking the basic elements of one source and making fun of them. This is followed by influenced originality. The student here may use the cartoon format but will create their own characters and add script that is their own. Finally the student will offer a unique way of communicating that does not replicate another person's content or style.

Social Meliorism

Contrary to the position endorsed by the child-study (developmentalists) advocates, Albion Small, insists that educators "shall not rate themselves leaders of children, but as makers of society". "Education," he claimed, "connotes the evolution of the whole personality, not merely of intelligence" (Kliebard, 1985, p. 39). Small was an American sociologist who was a colleague at the University of Chicago with John Dewey. John Dewey and George Counts, were well-known leaders of the subsequent reformation of curriculum. From this social efficiency ideal came the introduction of vocational education on a massive scale. These social efficiency idealists believed that occupational training,

which was essential in an industrial society, would depend on the schools for future workers.

Discussion

Morrow and Suid's publication of <u>Media & Kids</u> fails to address the values of social meliorism. In personal conversations with the authors, this writer finds that the purposes of the enriched educational experience are not for the future formation of an individual but to serve as communication outlets for the present. Suid states that all students who experience the media rich curriculum are not going to become excellent movie makers or famous poets. Most probably will not, but some might become just that. Most of the students, when exposed to the variety of media forms, will allow these future poets or movie makers to discover that potential and interest at an early age. The primary emphasis is on the individual's ability to develop and improve their communication skills with all of the current media forms. Although this writer views communication skill improvement as the betterment of society, the authors content that this development is not for the purpose of creating a better society, but to furnish individuals with the skills of communicating with a variety of expressive forms in the present.

From the above stated motives it appears that the authors, Morrow and Suid, are more concerned with the

development of the individual rather than the remaking of society. Morrow projects what he envisions the future society to be in his novel <u>The Continent of Lies</u>. There is no vision of a morally superior or inferior society, but one that is more dependent on electronic medium of idea exchange. His view is that man becomes increasingly dependent on the electronic medium and that the best way to cope with the new age would be to be knowledgeable about and comfortable with the advance of communication technology.

American Schools in Actuality

In a recent landmark study by John Goodlad, the conditions of schooling across American were revealed. One of the interesting problems uncovered in this study is the difference between actual teaching practice in the classroom and preferred styles of teaching. The following data concerns teaching practices in the sample of American schools studied in the Goodlad report: Students in the classrooms made very little decisions about their own learning even though they perceived themselves as doing so. Ninety per-cent of the junior high classrooms in and eighty per-cent of the senior high classrooms were found to be almost entirely teacher dominated in terms of seating, grouping, content studied, materials used, space and time utilization, and learning activities. In this same group seventy-five per-cent of the class time was spent on instruction and nearly seventy per-

cent was "talk" usually teacher to student. Teachers out-talk the students by a ratio of three to one. Barely five per-cent of the instructional time was designed to create students' anticipation of needing to respond. Not even one per-cent required some kind of open response involving reasoning or perhaps an opinion from a student (Goodlad, 1984, p.229).

Sirotnik (1988) goes to the Goodlad (see figure 7) studies to support the contrasting values in education. What teachers, parents, and students perceive as important in education are not reflected in teaching practice. What teachers, parents, and students perceive to be important goals of education (critical thinking skills being one of them), and what they perceive the schools to be emphasizing are represented in figure 7. Each group of school participants report what they choose to be the ideal values in education. Participants were then asked to record what they perceived the school's emphasis to be.

		Function							
		Intellectual		Social		Personal		Vocational	
Level & Data Source	N	Apparent	Ideal	Apparent	Ideal	Apparent	Ideal	Apparent	Ideal
Elementary									
Teachers	278	78.5	48.9	12.2	14.0	6.1	33.5	3.2	3.5
Parents	1653	68.9	57.6	13.6	9.3	11.4	24.5	6.0	8.6
Students	1565	61.4	47.1	11.1	13.8	11.9	17.3	15.5	21.8
Junior High									
Teachers	392	64.4	46.7	16.3	13.9	8.7	29.3	10.7	10.1
Parents	5099	56.3	51.1	19.5	9.5	11.2	21.1	13.0	18.2
Students	4655	64.1	38.0	11.7	13.4	11.2	18.3	13.1	30.3
Senior High									
Teachers	653	52.2	45.6	18.0	9.9	6.8	29.7	23.0	14.8
Parents	3961	43.1	46.5	19.0	8.7	10.2	19.3	27.8	25.5
Students	6727	61.6	27.3	10.2	15.9	13.2	25.6	14.9	31.1

Table entries are percentages
N average number of respondents

Figure 7. Teacher, Parent, and Student Views of the Single Most Emphasized Apparent and Ideal Functions of Schooling.

It is as if there are no goal at all for the development of
critical and creative thinkers. Goodlad states "We are not
without goals for schooling. But we are lacking an
articulation of them and a commitment to them." To summarize
the description of educational practice Sirotnik (1988) states
"teachers spend most of their time talking to the class or
monitoring students as they work on written assignment;
students, thus, spend most of their time presumably listening
to the teacher or doing in-class assignments". When viewing
student-initiated interaction with teacher (both of these seem
essential to the development of critical and creative
thinking)

> any type of student-initiated interaction with the
> teacher represents one-third of the time in
> elementary classes and only one-fifth of the time in
> secondary classes. Much of that time is spent in
> the instructional context, responding to the
> teacher...in a relatively neutral affective
> environment with less then three per-cent of the
> time characterized by a positive or negative tone
> (p. 61).

Sirotnik (1988) states that the teaching practices
reflected in the Goodlad studies tend to support another
curriculum goal,

> to develop in students the abilities to think
> linearly, depend upon authority, speak when spoken
> to, work alone, become socially apathetic, learn
> passively and nonexperientially, recall information,
> follow instructions, compartmentalize knowledge, and
> so on (p. 62).

Opportunities for Change in American Schools

Sirotnik calls into question the connection American education is making between commonly stated goals and the practices observed in the classroom. One of these goals which represents the paradox is the goal statement, *"To develop students' mental capabilities to store and retrieve information and follow instructions for the use of information"*, and a contrasting goal statement, *"To develop students'capacities to be critical and creative thinkers."*

Sirotnik states that in order to effectively meet both of these goals the type of classroom instruction must vary greatly. If both of these goals are treated equally, than the type of classroom instruction which students' receive should reflect teaching styles equally proportional to the values which these goal statements represent. Some have a perception of school as being *"benign agents of socialization"* and some hold schooling to be *"malignant agents of social control."*(Mannian and Jefferson in Kliebard, 1985, as cited in Sirotnik, 1988). As one perceives schooling, the value of the curriculum goals and teaching practices begin to reflect the values of those who hold these perceptions.

Whatever practice in the classroom may reflect critical thinking development, according to Sirotnik, it represents the lower level of Bloom's taxonomy of critical and independent thinking which enables students to make judgments and decisions in a wide variety of life-roles and intellectual

activities. It does not however treat critical thinking as a dialectical process of reflective thought and communication, of competent discourse between people having both common and conflicting values, needs, and human interest.

Sirotnik (1988) states

> My hope resides mostly in the vast latent reservoirs
> of power and caring represented in the millions of
> teachers, administrators, district staff members,
> and college and university-based educators who can
> be empowered to engage in school improvement
> practices through critical inquiry (p. 63).

Discussion

From the Goodlad studies and from the thinking of people as Sirotnik, there is not so much a need for a supportive attitude from classroom teachers as there is for time and management techniques. Morrow & Suid's book, while being consistent with the desires of many educators to provide higher level thinking techniques in the classroom, provides the management ideas and structure necessary for classroom implementation. If critical thinking skills are the goals of parents, teachers, students, and the general educational public, then classroom methods must conform to a posture of promoting these skills. If the desire is there, than in-service opportunities and publications such as <u>Media</u> <u>and Kids</u> need to be available to teachers. However, some political questions yet remain.

Sirotnik goes on to provide a definition of critical inquiry and provides some questions on which educators need to reflect before going on with teaching as usual or before initiating reform. His definition of critical inquiry:

> ...a rigorous time-consuming, collaborative, informed, school-based dialectic around generic questions such as: What is going on in the name of X? (X is a place-holder for things like educational goals and schooling functions; institutional practices like the use of time, tracking students, and achievement testing; organizational practices like leadership, decision making, and communication, etc.) How did it come to be that way? Whose interests are being (and are not being) served by the way things are? What information and knowledge do we have--and need to get--that bear upon the issues? (Get it and continue the dialogue.) Is this the way we want it? What are we going to do about all this (Get on with it.) (p.64).

Finally, as educators, we need to be critically (and perhaps painfully) aware of what we say we do, what we actually do, and the political and ethical contexts in which we do it.

The Future and the Role of the Microcomputer

When judging the number of empirical studies which have been conducted on the role of the micro-computer in the classroom, it is definite that Morrow and Suid would have addressed the new technology as another spoke in the wheel (Morrow interview, 1988). In view of the recommendations from recent studies of schooling, which point to the new technologies as panaceas of educational excellence, Michael

Apple, curricularist from the University of Wisconsin, gives educators some insight. Apple (1988) states that we are in the midst of another educational bandwagon that is stimulated by government and industry. The bandwagon is pulled in the direction of a technological workplace, and carries a heavy load of computers as its cargo (p.290). Schools are in the middle of the legitimate purview of technological restructuring and that there is a close linkage between the needs of a growing technological society.

With so much emphasis on computer technology in the schools today, we are in danger of overworking one medium. Morrow and Suid have previously cautioned educators about the danger of the over emphasis on "print" for a semi-literate society. Today we face the same dangers for a socially disadvantaged group called the poor, who do not have access to this technology. Apple enlightens us in saying that school personnel should be cautious of the bandwagon when a number of political, economic, and ethical issues are considered. His question is "Will the growing focus on technological expertise, particularly computer literacy, equalize or further exacerbate the lack of social opportunities for our most disadvantaged students?" The impact of the current bandwagom motion will be that we will witness the creation of enhanced jobs for a relative few and de-skilled and boring work for the majority.

Apple also identifies another disadvantaged group of students who are caught in the technological revolution of the

computer. Females also may be denied access to equal educational opportunities if computers are the central focus of mediated instruction. How is this possible? Apple states that there is a movement to rationalize and control the act of teaching and the content and evaluation of the curriculum.

> Many curriculum reforms have only a very tenuous
> hold currently. This is in partly due to economic
> difficulties and partly due as well to the importing of
> American styles and techniques of educational management
> styles and techniques that have root in industrial
> bureaucracies and have almost never had democratic aims
> (p.297).

The effect of these reforms will be the de-skilled and de-powering of a considerable number of teachers. Because they have little formal training or time for it, relatively few will have the curriculum decision making skills in order to utilize the new technology effectively. This lack of staff development is attributed to *gender* (where males have more access to training vs. females who have primary parenting responsibility, also two out of every three computer literate individuals are boys in our schools) *economics* (where middle class private and public schools provide access to hardware and software 66% in affluent areas have computers where less that 40% in poorer areas have them) and *societal pressure* (where hardware costs are reduced to schools because of the potential software market ((this too is problematic because of the lack of well developed software linked with the curriculum)) and social pressure to be an instrument for developing technological skills for a perceived technological

dependent society and the coupling of needs of the home and school (C.F. Apple, 1988).

Perhaps these questions would be well for educators to consider if computers are going to be treated in isolation from the rest of mediated instruction. Apple (1988, p.306) states that a considerable portion of the curriculum should be organized around questions considering social literacy.

> Where are computers used? What are they used for? What do people accurately need to know in order to use them? Does the computer enhance anyone's life? Whose? Does it hurt anyone's life? Whose? Who decides when and where computers will be used. Yet, as I have shown, the new technology does not stand alone. It is linked to transformations in real groups of people's lives, jobs, hopes, dreams. For some of these groups, those lives will be enhanced. For others the dreams will be shattered. The new technology is here. It will not go away. Our task as educators is to make sure that when it enters the classroom it is there for politically, economically, and educationally wise reasons, not because of powerful groups who may be redefining our major educational goal in their own image (p. 307).

Conclusion

What remains from this discussion of the role of media in today's schools are this writer's questions concerning the effectiveness of instruction using the media wheel methodology. Will its use provide equal access to the curriculum for all groups of children? Will a more literate, sensitive, humane, individual be given nourishment from wheel like curriculum methodology? These questions will be

addressed in the final chapter in the conclusions and
recommendation for future research.

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CHAPTER V

THE MEDIA WHEEL: SUMMARY AND IMPLICATIONS

FOR FURTHER CONSIDERATIONS

AND RESEARCH

Introduction

The media wheel as a model for instruction was given
birth in a pedagogical era when innovation and experimentation
in instructional styles was looked upon more favorably. The
field of instructional technology at the time of the
publication of <u>Media and Kids</u> was departing from the
experiential approach to learning which was characteristic of
a utilitarian approach in American schools. Educators were
curious but rejecting of the ideas of free expression as
advocated by McLuhan. A large number of national studies were
beginning to depict American schools as non-productive in
terms of creating a literate society. The publication of
<u>Media and Kids </u>came at a time of economic and technological
resurgence, desire for reform in American schools (post
Sputnik), and from the influences of Marshall McLuhan and
Rudolph Arnheim. Since that time economic support for schools
has been returned to the local school system, where there is
more competition for limited resources, technological research

is dominated with computer usage, and the reform movement has become focused on improving standardized test results through the acquisition of large bodies of information. The use of varied audio visual equipment and methodologies, departure from the traditional methods of instruction (teacher talk and fill-in-the-blank student paper work), and an unsureness of the role of computer technology in the classroom challenges the educational undertakings of American teachers. To consider the alternative instructional approach advocated by the authors in <u>Media and Kids</u> is challenging for the classroom teacher however, at the same time it may also be a welcomed instructional tool. The implications for the use of this model may provide some answers to many theoretical questions. Future research into the model's effectiveness in achieving current educational goals may provide results which make this model more inviting to a classroom teacher.

The Challenge

One liability for the adoption of the model is author or designer credibility. Chapter III has demonstrated that the authors were well educated, subjected to the creative motivations of reputed educators, and deeply committed to the finding of improved strategies for children's learning. They continue to work in the areas of creative communication using a variety of media forms. What is lacking is the authors' subjection of this model to scholarly debate and scrutiny.

The model needs to be presented to the educational public for dialogue and for the purpose of gathering other potential implications .

Another challenge for the classroom teacher attempting to use the media wheel as a model of instruction is compatibility with the or the re-writing of curriculum goals. Goals for cognition are best addressed through a variety of instructional techniques. Much research has supported the idea that there are a variety of learning styles among students, and that performance has been improved when the students have been exposed to a larger assortment of instructional methods and techniques. With the large body of research available on the various media forms and their effectiveness, and the diverse cultures and learning styles present in today's classrooms, teachers would be wise to avail themselves of these rich resources. A model which focuses on both cognitive and affective areas of learning through teacher presentation and student production would certainly merit scrutiny. For those who insist on empirical evidence of the model's merit, research into the model's effectiveness in bringing about cognitive achievement using current standards of measurement would also lessen the risk if it were proved equally effective or even superior in some aspects.

A third challenge is the political scrutiny with which classroom teachers must contend. A media rich classroom is relatively expensive and, teachers would be required to defend the need for this equipment. A media rich classroom needs

time for creative development. Criticism would be hurled upon the practitioner for conducting activities where its value had been lebeled as being non-productive. This time, according to the critics, would be better spent in time-on-task academic engagement and in memorization. The methods would very likely be misunderstood by contemporary critics who must answer be accountable for test scores. Research into the positive correlations between efficiency of time spent, academic gains, and positive attitudes toward learning would help silence the critics who would regard this approach as non-productive.

Perhaps a final challenge to teachers would be to consider the merits of using Morrow and Suid's model while being under the pressure of standards of measurement associated with the accountability movement in education. Do the goals of creative expression, reflective learning, critical thinking, problem solving skills, and self-esteem and awareness, as presented by the authors, earn high priority among those who are willing to risk deviance? If there are such teachers, than curriculum study is necessary for them to be able to articulate and defend the goals which they have embraced.

Conclusion

If the model presented by Morrow and Suid is to be judged as meritorious, then systems design people would be required to re-think the systematic scheme which now dominates the

field of instructional technology. They must be willing to seek ways to integrate the tenants of student production which are currently lacking emphasis in the instructional design models. There is currently no evidence in the instructional design models of Kemp (1977), Banathy (1968), Gagne (1974), et.al. which suggest that student production is vital to the learning process. The only direction for teachers in the systematic model is labeled "selection of appropriate learning resources". Implicit in this statement is teacher, not student selected resources. Giving students the choice of instructional activities and resources is not currently advocated by instructional design specialists.

The unbridled advances of the uses of microcomputer technology in the classroom setting is the final area of concern. If the computer represents the most recent spoke in the media wheel than, considering CAL (Computer Assisted Learning) within the framework of the wheel provides new opportunities for study of the role of computers in education. Where the educational focus in recent years has been on computers and their uses, little has been done to measure it against the other currently existing media forms. If the computer is seen as supporting content, and the computer is also treated equally from a production and presentation perspective, than the computer serves no more important role in education than stage, design, print, photography, radio, movies, or television. In this context educational excellence does not belong only to those who are the economically

privileged who can afford computers. All students access to a variety of media forms to support various areas of content will result in educational excellence for all.

Ideas similar to those proposed by Morrow and Suid have been implemented into the curriculum (See Appencix C). It would be appropriate and commendable to investigate the successes as perceived by school personnel in several of these settings in order to further discover the inadequacies and potential for success in using this model. It would also be appropriate to identify field settings where observations in a controlled setting could be conducted to compare what, if any, educational teacher or student generated goals are better achieved through this instructional model than through traditional instructional design models.

The approach of the media wheel as an instructional model is humane, supported by the task force for the President's Commission on Instructional Technology (de Lone, 1970), and has the potential to enliven the teaching learning process. Its use promises to make learning more fun, provide better communication skills, and unleashes the creativity within students which is often stifled in American schools today.

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APPENDIXES

APPENDIX A

LIST OF COMMON PUBLICATION

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MEDIA COURSES

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APPENDIX B

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APPENDIX C

REPORT ON THE USES OF THE MEDIA WHEEL

AS A MODEL OF INSTRUCTION

The following is a report of the various field sites where evidence of the use of the media wheel was found. This listing is appended for the purpose of demonstrating that Morrow and Suid's ideas have been read and experimented within a variety of settings.

In parochial education a secondary religion series entitled <u>Patterns of Dynamics and Strategies</u> (Heyer, 1969) made available to Catholic High Schools in the early seventies used the media wheel format to approach religious issues confronting the youth of the day. A Lutheran elementary school in the Detroit area (Interview, Dr. Mark L. Joyce, principal, 1986) designated a portion of their instructional day for certain groups of children to use the wheel as the instructional design model.

In order to find evidence of the media wheel's use in public education, an on-line computer search of the ERIC Resources in Education and Current Index to Journals in Education data base as well as Dissertation Abstracts was conducted. The purpose was to determine if other schools had experimented with or implemented this model of instruction,

and/or if other scholars investigated the possible uses of the media wheel. The data search was set for the period 1966 to 1989. Only two documents were found in which the appropriate term "media wheel" appeared in the abstract.

One of these papers (Brannan, 1978) was presented at the annual meeting of AECT in Kansas City, Missouri in April of 1978. Brannan advocated the use of this model in working with academically handicapped adolescents. A case study was presented where a boy achieved academic success through his elevated self-worth and high motivation. In a description of the program Brannan states,

> Students and teachers move through a variety of
> learning modes in a media-oriented curriculum.
> While print underlies each medium and is explicitly
> taught, learning with the wheel is not contingent on
> print skills. Students with long histories of
> failure with print are able to achieve using
> expression in other media to improve in reading and
> writing (p.5).

The other reference was a support paper in a report to the U. S. President and Congress' Commission on Instructional Technology in 1970 (de Lone, 1970). Richard de Lone is an Alfred North Whitehead Fellow at the School of Education, Harvard University. At the time this paper was written and presented to the President's Commission on Instructional Technology "To Improve Learning", de Lone was the assistant to the superintendent of the Philadelphia public schools. His report recommended that the approach to learning, modeled in district two of the Philadelphia school system, be considered as an alternative to the technological approaches which are in

current practice in most schools. The Morrow & Suid media

wheel was the instructional structure for teachers in this

system. His rationale for the needed change are in these

words,

> The challenge for instructional technology, as
> for education in general, is to devise and
> institutionalize an anti-institutional approach to
> education: an educational program that aims at the
> growth of students, not of test scores; growth in
> their ability to explore, to discover both
> themselves and the world around them and make
> connections between the two. This means making
> students active participants in education; it means
> changing the one-way authoritarian relationship
> which prevails in most classrooms between instructor
> (whether teacher or programmed instruction or
> machine) and student. It means making the teacher's
> role catalytic, not prescriptive (p.6).

2

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