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ABSTRACT
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diffusion in hopes of increasing the implementation and utilization of
innovative instructional products and practices. The application of diffusion
theory to instructional technology is useful for examining how media literacy
proponents can apply the diffusion of innovations theory to increase the
adoption of media literacy programs in schools. An overview of diffusion
theory and its application to instructional technology provides a framework
from which to examine how diffusion theory can be applied to media literacy
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Applying Diffusion Theory:

Adoption of Media Literacy Programs in Schools

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Applying Diffusion Theory:

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Abstract

Recent research indicates that 48 of the 50 states have school curricula

frameworks that contain one or more elements that call for some form of media literacy

education. Such findings indicate that media literacy is slowly becoming an integral part

of school curricula. However, full adoption of media literacy programs has yet to occur.

Instructional technologists are effectively using Everett Rogers' theory of innovation

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of innovations theory to increase the adoption of media literacy programs in schools. An

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Applying Diffusion Theory:

Adoption of Media Literacy Programs in Schools

In the article, "Diffusion Theory and Instructional Technology," Surry and Farquhar (1997) explain that disciplines ranging from agriculture to marketing have used diffusion theory to increase the adoption of innovative products and ideas. The discussion focuses on how instructional technologists are using the theory of innovation diffusion in hopes of increasing the implementation and utilization of innovative instructional products and practices. The application of diffusion theory to instructional technology is useful for examining how media literacy proponents can apply the diffusion of innovations theory to increase the adoption of media literacy programs in schools. Therefore, an overview of Surry and Farquhar's (1997) article will provide a framework from which to examine how diffusion theory can be applied to media literacy programs[1].

Diffusion of Innovations Theory

Before elaborating on instructional technology diffusion theory it is important to understand the tenets of general diffusion theory. Everett M. Rogers (1995) is the best-known scholar in the area of diffusion research. His book, Diffusion of Innovations (4th ed.), is the most often cited work dealing with diffusion. As Rogers points out, diffusion

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[1] Media literacy programs may range from a one-week unit on critical viewing skills to a well-designed curriculum that spans a student's entire elementary and secondary educational career to anything in between. Such programs are guided by the overall goal of creating media literate students. "A **media literate person**—and everyone should have the opportunity to become one—can decode, evaluate, analyze and produce both print and electronic media. The fundamental objective of media literacy is critical autonomy in relationship to all media. Emphases in media literacy training range widely, including informed citizenship, aesthetic appreciation and expression, social advocacy, self-esteem, and consumer competence" (Aufderheide, 1993, p.1).

is not a single, all-encompassing theory. It is several theoretical perspectives that relate to the overall concept of diffusion; it is a meta-theory.

Diffusion is the process by which an innovation is adopted by members of a certain community. There are four factors that influence adoption of an innovation. These include 1) the innovation itself, 2) the communication channels used to spread information about the innovation, 3) time, and 4) the nature of the society to whom it is introduced (Rogers, 1995). The work of Ryan and Gross (1943) in rural sociology is cited as the beginning of diffusion research. They used interviews as their main method of data collection. This has been a trend in diffusion research since. Rogers (1995) explains that there are four major theories that deal with the diffusion of innovations. These are the innovation-decision process theory, the individual innovativeness theory, the rate of adoption theory, and the theory of perceived attributes.

The Innovation-Decision Process Theory

The innovation-decision process theory is base on time and five distinct stages. The first stage is knowledge. Potential adopters must first learn about the innovation. Second, they must be persuaded as to the merits of the innovation. Third, they must decide to adopt the innovation. Fourth, once they adopt the innovation, they must implement it. Fifth, they must confirm that their decision to adopt was the appropriate decision. Once these stages are achieved, then diffusion results (Rogers, 1995).

Individual Innovativeness Theory

The individual innovativeness theory is based on who adopts the innovation and when. A bell-shaped curve is often used to illustrate the percentage of individuals that adopt an innovation. The first category of adopters is innovators (2.5%). These are the

risk-takers and pioneers who lead the way. The second group is known as the early adopters (13.5%). They climb on board the train early and help spread the word about the innovation to others. The third and fourth groups are the early majority and late majority. Each constitutes 34% of the potential adopting population. The innovators and early adopters convince the early majority. The late majority waits to make sure that adoption is in their best interests. The final group is the laggards (16%). These are the individuals who are highly skeptical and resist adopting until absolutely necessary. In many cases, they never adopt the innovation (Rogers, 1995).

Theory of Rate of Adoption

The theory of rate of adoption suggests that the adoption of innovations is best represented by a s-curve on a graph. The theory holds that adoption of an innovation grows slowly and gradually in the beginning. It will then have a period of rapid growth that will taper off and become stable and eventually decline (Rogers, 1995).

Theory of Perceived Attributes

The theory of perceived attributes is based on the notion that individuals will adopt an innovation if they perceive that the innovation has the following attributes. First, the innovation must have some relative advantage over an existing innovation or the status quo. Second, it is important the innovation be compatible with existing values and practices. Third, the innovation cannot be too complex. Fourth, the innovation must have trialability. This means the innovation can be tested for a limited time without adoption. Fifth, the innovation must offer observable results (Rogers, 1995).

Instructional Technology and Diffusion Theory

Surry and Farquhar (1997) suggest that educational technologists should study

diffusion theory for three reasons. First, educational technologists do not know why

technological innovations are, or are not, adopted. Some blame teachers and a resistance

to change, while others blame bureaucracies and lack of funding. By studying diffusion

theory educational technologists may be able to explain, predict and account for factors

that influence or impede adoption and diffusion of innovations. Second, instructional

technology is inherently innovation-based. As technology advances, so do the

instructional materials produced as a result of such advancement. These materials need

to be introduced and diffused into the educational system. Therefore, understanding the

best way to present innovations for potential adoption is necessary. Third, educational

technologists may be able to develop a systematic model of adoption and diffusion. Such

models have been useful in instructional development; therefore, it seems wise to explore

the factors that affect diffusion and attempt to build an effective model of diffusion

(Surry & Farquhar, 1997).

Macro-level Approach

Surry and Farquhar (1997) explain that instructional development theorists, like

theorists in almost all disciplines, approach diffusion research from a macro-level or a

micro-level. Surry and Farquhar call the macro-level approach systemic change. The

underlying philosophy in systemic change is the desire for complete educational reform

(i.e., school change). Systemic change is about organizational and structural change. It

does not deal with changes to individual parts; it is concerned with revamping the entire

institution. Reiguluth's (1987) Third Wave Educational System is an example of a macro-level approach to educational reform.

Micro-level Approach

Product utilization is the micro-level approach to instructional development. The concern in product utilization is for a specific set of potential adopters. Change is not intended for the entire educational structure; it is intended for various parts within the structure that will benefit the most from innovations (Surry & Farquhar, 1997). Burkman's (1987) user-oriented instructional development process is an example of the product utilization approach.

Determinism and Instrumentalism

Surry and Farquhar (1997) broke down systemic change and product utilization into two sub-categories. These sub-categories are determinism (developer-based) and instrumentalism (adopter-based). These two philosophical perspectives guide many instructional developers. Determinists and instrumentalists differ on the basis of autonomy and continuity. Determinists believe that change is out of human control. They suggest that change in society is a result of technologically superior systems and products replacing inferior systems and products. They also believe that change is not a slow, evolutionary process. They think it is a discontinuous process marked by revolutions that move society forward by leaps and bounds (Surry & Farquhar, 1997).

Determinists are divided on their view of technological morality. Some suggest that technology is positive and uplifting. They believe technology will eventually cure all of the ills of humankind. Utopian determinists include Karl Marx, Marshall McCluhan, and Alvin Toeffler. Dystopian determinists view technology as inherently evil. They

think that technology will over time lead to the moral, intellectual and physical destruction of humankind. Jacques Ellul (1964), author of The Technological Society, and George Orwell (1949), author of 1984, are two of the most famous dystopian determinists (Surry & Farquhar, 1997).

Instrumentalists, on the other hand, see technology as a tool that is under human control. Levinson (1996) offers the knife metaphor. The knife can be used for good or evil, just like technology. For instrumentalists human interaction and social aspirations, not technological superiority, guide change (Surry & Farquhar, 1997).

Surry and Farquhar (1997) discussed instructional development in terms of the deterministic and instrumentalistic philosophies. Developer-based theories see the product developer and producer as the primary cause for change. The focus is on the notion that anything technologically superior will eventually take over what is technologically inferior. Developer-based theories are limited because they do not recognize that technologically superior does not mean better or more effective for the user (Surry & Farquhar, 1997).

Adopter-based theories recognize and are guided by the fact that the end user is the most important element for change (Surry & Farquhar, 1997). Burkman's (1987) user-oriented instructional development process focused on the adopter. The process had five steps: 1) identify the adopter, 2) measure the adopter's perceptions of the innovation, 3) develop a user-friendly product, 4) inform the adopter about the innovation, and 5) provide user support. Burkman's (1987) process shows the importance of the user because the user is central in each step.

Surry and Farquhar (1997) conclude their article by arguing for an instrumentalist approach to instructional development diffusion theories. They believe that diffusion of innovations in educational technology will always be a slow, evolutionary process, not a revolutionary leap. In addition, the user of the product should be the focus of the innovation from the beginning stages of development to the diffusion of the innovation. Surry and Farquhar (1997) caution that if one adopts the instrumentalist view, one must not completely dispose of the deterministic philosophy. Technological superiority should not be sacrificed because the focus is on the end user. It is necessary to continue to develop superior products and systems. However, the adoption and implementation of such products and systems will be a direct result of how integral a part of the process the ender user is (Surry & Farquhar, 1997). An understanding of Rogers' (1995) diffusion theory and Surry and Farquhar's (1997) application of diffusion theory to instructional development will help with an examination of how media literacy has followed the diffusion theory model.

Media Literacy as a Technological Innovation

Rogers (1995) defined diffusion as "the process by which an innovation is communicated through certain channels over time among the members of a social system" (p. 35). He described an innovation as any new idea, practice, or object considered new to an individual (Rogers, 1995). Rogers (1995) primarily discussed technological innovations. He explained that "a technology is a design for instrumental action that reduces the uncertainty in the cause-effect relationships involved in achieving a desired outcome" (Rogers, 1995, p. 35). He made it clear that a technology is

information, not just equipment. Most technologies have hardware and software components (Rogers, 1995). The hardware aspect consists of "the tool that embodies the technology as a material or physical object," and the software aspect consists of "the information base for the tool" (Rogers, 1995, p. 14).

Based on Rogers' definitions, media literacy is a technological innovation because it is considered to be a new idea by potential adopters. The concept of media literacy has been evolving for several years, but it is being "marketed" as a fresh idea in its present form. Educators, interests groups, and parents have recognized a need for increased media savvy among young people. Therefore, the notion of media literacy is being presented as a new and fresh idea to potential adopters. A parallel example is the concept of scientific literacy. Science courses consistently have been part of the educational process; however, President Bill Clinton and Vice President Al Gore (1994), in the foreword of their report, Science in the National Interest, called for an increase in scientific literacy. The President's and Vice President's initiative to raise the level of scientific and technological literacy reshaped and molded the notion of scientific literacy into its present form and created a technological innovation. Media literacy is also a technological innovation because it possesses hardware and software components. Hardware components include the media used by individuals to receive messages (e.g., newspapers, magazines, radio, television, film, and computers). Software components include the myriad of resources (e.g., books, videos, CD-ROMs, instructional activities, etc.) that are used for media education.

Applying Diffusion Theory to Media Literacy

Given that media literacy is a technological innovation it is useful to apply the tenets of diffusion theory to better understand media literacy's diffusion into the social system for several reasons. First, diffusion theory provides a framework that helps media literacy proponents understand why media literacy is adopted by some individuals and not by others. Like educational technologists, media literacy supporters can use diffusion theory to explain, predict and account for factors that increase or impede the diffusion of innovations. Diffusion theory helps the media literacy community identify qualities (i.e., relative advantage, compatibility, etc.) that will make the innovation of media literacy more appealing to potential adopters. The diffusion framework also provides a closer look at the communication channels used to spread the word about media literacy, how much time it should take, and what the society of adopters is like. Second, media technologies are constantly changing and introducing new hardware and software components. Therefore, it is imperative to have a solid understanding of how to introduce these new ideas into the social system. Diffusion theory helps further such understanding. Third, diffusion research provides several successful models that can be used to develop a successful diffusion campaign for media literacy.

As noted earlier, four factors influence adoption of an innovation: 1) the innovation itself, 2) the communication channels used to spread information about the innovation, 3) time, and 4) the nature of the society to whom it is introduced (Rogers, 1995). A closer look at media literacy as an innovation follows.

The Innovation Itself: Media Literacy

The theory of perceived attributes suggests that an innovation with the following five attributes will more likely be adopted by individuals. The five attributes are 1) relative advantage, 2) compatibility, 3) complexity, 4) trialability, and 5) observability (Rogers, 1995).

Media literacy's relative advantage

The relative advantage of media literacy training is the increase in students' ability to access, analyze, evaluate, and produce media messages. Students are constantly inundated with a barrage of media messages every day. Too often they do not know how to distinguish accurately one media message from another. Media literacy training provides students with critical viewing and thinking skills that help them detect message biases and persuasion techniques as well as recognize social and cultural values that are being communicated in media messages. Furthermore, media literacy training teaches students how media messages are constructed and produced. As students become aware of how media messages are created, their ability to evaluate and analyze them increases.

A possible assignment for students might be to produce a television commercial. The objectives of the assignment would include students 1) gaining a better understanding of the production process and the construction of a media message, 2) learning to operate video cameras and editing equipment, 3) evaluating the potential effects of their commercial on their audience, and 4) learning to work cooperatively. Student groups would choose an approved product, conduct the necessary research, identify the target audience, and write the script. These tasks would illustrate the enormous amount of work necessary to create the foundation of a television commercial.

They would learn that the most important stage in production is the pre-production

process because it outlines what must be completed during the subsequent phases of the

production. After writing the script, students would need to videotape the appropriate

footage and edit the commercial. During shooting students would realize how tedious

commercial production is. In addition, they would realize the need for cooperation

among the camera operator, sound team, and lighting team. The postproduction process

would be instructive because it would illustrate the power of editing. Students would

realize they have a great deal of control over how their product and actors are portrayed

in the commercial. Their choice of camera angles and edit decisions can communicate

blatant and subtle messages. During this stage of the assignment is when media literacy

skills would be developed more fully. Teachers would discuss with students why they

made the choices they did, ask what messages they hoped to convey, ask what the impact

of the message would be on the target audience, and ask the class if the commercial

achieved its objectives. Moreover, students would better understand the choices made by

videographers and editors and see that much of the footage is never used. This

assignment would prove useful in helping students better understand how to construct a

media message as well as provide students with improved skills in evaluating and

deconstructing media messages.

Empirical evidence of the relative advantage of media literacy training on

children's cognitive processing skills and ability to evaluate media messages is available

in scholarly works like those of Singer, Zuckerman, and Singer (1980), Kahn and Master

(1992), Austin and Johnson (1997a, 1997b), and Yates (2000). Furthermore, the New

Mexico Media Literacy Project has conducted thousands of workshops for teachers and

parents that show the effectiveness of media literacy training and how to develop such skills. In addition, there are numerous on-line resources, like the Media Literacy On-line Project and the Center for Media Literacy, that help promote the development of critical viewing skills in the schools and the home.

Media literacy's compatibility

In addition to media literacy training's relative advantage, potential adopters need to know how compatible such training is to existing values and practices (Rogers, 1995). Ironically, schools have been teaching a form of media literacy for years. If one examines almost any English literature class, one would find critical analysis and evaluation of classic novels taking place. For example, students may engage in an in-depth analysis of Mark Twain's classic, The Adventures of Huckleberry Finn, and Stephen Crane's novel, The Red Badge of Courage, in high school. They may be taught to identify main themes, analyze metaphors, and understand point of view. Media literacy training teaches similar concepts. For example, a classic film like Orson Welles' "Citizen Cane" can be used to teach traditional literary concepts. As part of an in-depth analysis, students could write a paper that focused on the themes of control and power in the film. Furthermore, an essay explaining the metaphorical significance of the sled, "Rosebud," would be thought provoking and instructive. It is clear that the same concepts are being taught, but the major change is the medium. There are additional elements, like lighting, sound, and cinematography, that are part of the story telling process in film, but the literary concepts remain. Therefore, teachers do not have to change the fundamental ideas in their classrooms to incorporate media literacy training. They just have to include different media.

Kubey and Baker (1999) examined all 50 state curricula frameworks and found that 48 states contained one or more elements that called for some form of media literacy education. Media literacy components appeared most frequently in language arts and communication arts curricula. For example, Florida's Sunshine State Standards spell out media literacy related requirements. The standards in theater for Pre-K through twelfth grades include subsections that deal with aesthetic and critical analysis and applications to life. The aesthetic and critical analysis standard is "The student analyzes, criticizes, and constructs meaning from formal and informal theater, film, television and electronic media" (Florida Department of Education, 1998). The applications to life standard states, "The student understands applications of the role of theater, film, television, and electronic media in everyday life" (Florida Department of Education, 1998). It is clear that Florida's Department of Education deems critical analysis of media important. Teachers are required by the state to incorporate media literacy training in their classrooms; therefore, the compatibility of media literacy training to existing values and practices is quite evident.

Media literacy's complexity

Potential adopters should not perceive media literacy training as a complex activity (Rogers, 1995). As noted earlier, teachers can continue to use similar instructional practices to teach media literacy skills; teachers just need to incorporate other media besides books. The notion of media literacy (i.e., critical viewing skills) has existed since the early 1970s when there was concern over the impact of television violence on children (Brown, 1991). Several seed projects were developed and implemented by the U.S. Office of Education, but the projects lost funding and did not

continue. One problem with the USOE projects was the lack of teacher training on how to implement the media literacy lessons (Brown, 1991). However, since 1990 there has been a large increase in the literature dealing with media literacy. More and more people, communication scholars, educators, and the general public, are aware of media literacy. Today there are books dedicated to media literacy (Silverblatt, 1995; Potter, 1998). Therefore, the implementation of media literacy training has been made easy by the myriad of resources available to teachers. The Center for Media Literacy maintains a web site that is full of resources that can used as part of a unit lesson or as stand alone materials. Videotapes like Buy Me That!, produced by Consumer Reports, and CD-ROMs, like Understanding Media, produced by the New Mexico Media Literacy Project, are engaging multimedia resources available for use. Instructional activities can be found in books like Media Alert!: 200 Activities to Create Media-Savvy Kids (Summers, 1997) and Changing the World Through Media Education (Rosen, Quesada, & Summers, 1998). All of these resources make media literacy training anything but complex.

Media literacy's trialability

The attribute of trialability is important for an innovation like media literacy training because potential adopters want to know if the benefits it claims to have really exist (Rogers, 1995). Media literacy training can be easily implemented on a trial basis. For example, almost any teacher can devote a unit lesson to teaching media literacy skills without sacrificing precious time and resources. Since several states have media literacy standards, it is easier for teachers in those schools to implement a media literacy lesson because they are following curriculum guidelines.

Health education is important for all students, and it is an excellent area to incorporate media literacy skills. The Sunshine State Standards require that students in grades 3-5 know "how the media influence the selection of health information, products, and services" (Florida Department of Education, 1998). Perhaps a teacher could educate students about nutritional messages in the media and determine if media literacy training makes a difference. One such assignment is useful for elementary and middle school students. Students select one episode from their favorite television program and record what each character eats and drinks. Student records are then summarized to create a chart that graphically depicts the food and drink consumption of popular television characters. Using the chart to guide the discussion, the teacher can ask students about the nutritional value of the food and drink consumed by the characters, how often the characters snack, if the characters eat on the run, and where the characters frequently eat. Other topics might explore the relationship between the types of foods eaten and a character's lifestyle, size, and weight (Considine & Haley, 1992).

Media literacy's observability

The assignment discussed above also provides an excellent opportunity for media literacy training to be observed. Observability is the fifth attribute important to potential adopters (Rogers, 1995). If teachers can see a change in the students' recognition of positive and negative health messages during and after media literacy training, then adoption is more likely. A follow-up to the assignment might be to ask students to list the foods they typically eat at the end of the media literacy lesson and then have them do the same thing six weeks later. A comparison of changes in eating habits provides observable results that might be attributable to media literacy training. Potential adopters

can also "observe" the effectiveness and benefits of media literacy training by examining

the history of media literacy training in United States and other countries. Brown (1991)

offers an excellent review of the national and international critical viewing skills

programs. Other research studies (Singer, Zuckerman, & Singer, 1980; Kahn & Master,

1992; Austin & Johnson, 1997a, 1997b; Yates, 2000) have empirically tested the

effectiveness of media literacy training. The potential for the adoption of media literacy

standards into existing school curricula is greatly enhanced because media literacy

possesses the attributes of relative advantage, compatibility, reduced complexity,

trialability, and observability.

Communication Channels

The previous discussion focused on the innovation itself. To further understand

how media literacy might be diffused and adopted it is necessary to turn to the

communication channels used to transmit information about media literacy. Rogers

(1995) defined a communication channel as "the means by which messages get from one

individual to another" (p. 18). The nature of the relationship between individuals

determines how successful the innovation is transmitted from source to receiver and the

effect of the transfer (Rogers, 1995). Rogers (1995) explained that mass media channels

are the most rapid and efficient means of communicating to a large number of potential

adopters, but interpersonal communication is more effective in persuading potential

adopters to accept a new idea. Face-to-face communication among individuals of the

same socioeconomic status and educational level increases the potential of acceptance

even more. For example, a teacher in a middle school who has implemented the health

and nutrition unit based on media literacy skills discussed above will be more convincing

to another middle school teacher about the effectiveness of media literacy training than a report on the national news. Although scholarly writings and curriculum resources provide an abundance of information about the effectiveness and benefits of media literacy training, a majority of potential adopters will be more influenced by conversations with their peers. This highlights the importance of conferences and workshops. At such meetings individuals with similar interests and of similar status can discuss media literacy training and share stories about how it has worked well in a variety of situations. Rogers (1995) stated, "This dependence on the experience of near peers suggests that the heart of the diffusion process consists of modeling and imitation by potential adopters of their network partners who have adopted previously. So diffusion is a very social process" (p. 18).

Time

A third important factor in the diffusion process is the element of time. Time is often ignored in other behavioral research. The inclusion of time in diffusion research is one of its strengths, but the measurement of time (often through individual recall) has been criticized (Rogers, 1995). Nevertheless, time is involved in three of the four theories that deal with the diffusion of innovations: 1) innovation-decision process theory, 2) the individual innovativeness theory, and 3) the rate of adoption theory.

Time and the innovation-decision process

The innovation-decision process is the process through which an individual learns about an innovation, forms an attitude, adopts or rejects, implements the new idea, and confirms the decision to do so. Rogers (1995) identified five main steps in the process: 1) knowledge, 2) persuasion, 3) decision, 4) implementation, and 5) confirmation. A

macro-level perspective of media literacy suggests that the innovation is still in the knowledge stage of the process. Media literacy advocates have been working hard to make teachers, administrators, and parents aware of media literacy training and the need for media literacy skills. Interest groups like the Center for Media Literacy, the New Mexico Media Literacy Project, and the Media Education Foundation are among those who are working to spread information about media literacy. Others involved in the effort include the national Parent-Teacher Association (PTA) and Cable in the Classroom. These two groups formed a partnership to help provide cable television to schools so that it can be used to teach critical viewing skills and enhance other educational practices. The National Communication Association has been a catalyst for writing media literacy standards that can be incorporated into existing school curricula. As noted before, 48 of the 50 states have media literacy components in their curricula.

The efforts to promote media literacy are large, but the entire country is not convinced. There are still individuals and groups who oppose teaching about television. Several surveys noted that a majority of teachers said they did not have time to use nor teach about media in their classroom. They were too busy teaching the basics of reading, writing, and arithmetic (Lloyd-Kolkin & Tyner, 1988; Wulfemeyer, Sneed, Van Ommeren, & Riffe, 1990; Yates, 1997; Tuggle, Sneed, & Wulfemeyer, 2000). It is evident that media literacy is far from full acceptance and adoption in the United States. Media literacy is moving toward the persuasion stage. As more and more individuals form a favorable attitude toward media literacy, the likelihood of deciding to adopt will increase.

For media literacy advocates the goal is to make the United States a media literate nation. The diffusion of media literacy on a national scale is in the early stages. However, if one adopts a micro-level perspective and examines a specific state, then the diffusion of media literacy is more advanced. The goal of the New Mexico Media Literacy Project was to make New Mexico the most media literate state in the nation by the year 2000 (NMMLP Newsletter, 1996), and by all accounts it has reached its goal. Currently, New Mexico has media literacy standards as part of its school curricula. Teachers are providing media education to their students. The state has passed through the knowledge, persuasion, and decision stages of the innovation-decision process and is in the implementation stage. Some might argue the state has passed the implementation and is in the process of confirming its decision to create a media literate citizenry. An examination of how media literacy has diffused itself into the state of Mexico is helpful as the innovation of media literacy diffuses itself throughout the country. Opinion leaders can use New Mexico as well as states like Florida, Texas and Massachusetts as models for increasing the adoption of media literacy on a national scale.

Time and individual innovativeness

The innovation-decision process is influenced by individual innovativeness. Rogers (1995) defined innovativeness as "the degree to which an individual or other unit of adoption is relatively earlier in adopting new ideas than the other members of a system" (p. 22). Some individuals adopt a new idea much earlier than others do; these are the innovators.

Innovators actively seek new information and are able to cope with the uncertainties that accompany new innovations. Innovators often have greater exposure to

mass media channels and their interpersonal networks extend far beyond their local area. Early adopters accept an innovation soon after the innovators (Rogers, 1995). Individuals like Elizabeth Thoman, Kathleen Tyner, David Considine, Wally Bowen, and Renee Hobbs would be considered early adopters of the media literacy concept. They are some of the premier scholars in the field of media literacy today and advocate the inclusion of media literacy training in school curricula.

The early and late majorities follow the early adopters. The early majority is slower to accept the innovation, but do so more rapidly than the late majority (Rogers, 1995). The states that have included media literacy standards in their curricula would be considered an early majority. The late majority will be those states that adopt such standards in the future. Those who are the last to adopt or who never adopt media literacy standards will be considered the laggards. Laggards rarely accept new innovations. Members of each group of adopters typically share common characteristics like socioeconomic status, exposure to mass media, and a limited or wide network of interpersonal channels (Rogers, 1995).

Time and the rate of adoption

The rate of adoption is the third area in the diffusion of innovations that involves time (Rogers, 1995). Adoption of innovations is slow and gradual at the start. This is evident with media literacy. Many teachers and administrators have been reluctant to adopt media literacy. However, there is a change in the climate and more and more schools are accepting media literacy as an integral part of the educational process. The adoption of media literacy is growing rapidly, which is consistent with the rate of adoption theory. The rapid growth will taper off eventually and decline slightly. The

cumulative frequency distribution over time will resemble a s-shaped curve (Rogers, 1995). As more individuals perceive media literacy training to possess greater relative advantage and compatibility, and the like, the rate of adoption will likely increase.

The Nature of Society

The fourth and final factor, which influences the diffusion of innovations, is the nature of the society to whom the innovation is introduced. The "society" is known as a social system. Rogers (1995) defines a social system as "a set of interrelated units that are engaged in joint problem-solving to accomplish a common goal" (p. 23). Members of a social system can be individuals, informal groups, or organizations. Educators in elementary and secondary schools are members of the social system working together to create a more media literate society. Diffusion of media literacy within this social system is dependent upon the social structure, norms within the system, and opinion leaders (Rogers, 1995).

Social structure

Within the social system of educators there is a diverse group of individuals who act and react differently. Therefore, social structure is necessary within the system to provide regularity and stability and to be able to predict others' behavior with some degree of accuracy (Rogers, 1995). Communication structure is also an important part of a social system. Not all members of a social system communicate equally with each other. Typically, members who are most alike tend to communicate with each other. As a pattern of communication develops it becomes easier to predict individual behaviors, including when an innovation will be adopted (Rogers, 1995). For example, teachers within a school tend to communicate with each other more often than they do with

administrators. Therefore, when a teacher adopts a new idea it is more likely other teachers will adopt the idea because they are of like mind.

Norms

A social system's structure facilitates or impedes diffusion of an innovation (Rogers, 1995). Norms within the social system provide guidelines for acceptable behavior and also affect diffusion. These guidelines can create a barrier for the diffusion of an innovation. For example, the norm in elementary school is to teach the basics of reading, writing, and math. Establishing the foundation of these fundamentals is essential and accepted by educators nationwide. The norm of teaching the basic fundamentals impedes the adoption of teaching media literacy skills because teachers already have an established and important task. Surveys have indicated teachers do not feel they have the time to teach media literacy skills because they are hard pressed to get through the basics (Lloyd-Kolkin & Tyner, 1988; Wulfemeyer, Sneed, Van Ommeren, & Riffe, 1990; Yates, 1997; Tuggle, Sneed, & Wulfemeyer, 2000).

Opinion leaders

Opinion leaders also influence the adoption of innovations. Opinion leaders are individuals who provide advice and information about an innovation to members of the social system (Rogers, 1995). These individuals tend to support the norms of the social structure and serve as a model for others. Opinion leaders are at the center of the communication network and reach a large number of people via the interconnected flow of information (Rogers, 1995). W. James Potter is an example of an opinion leader in the social system of educators. He is the author of Media Literacy, and an outstanding and respected scholar in the communication field. His book and other works promote the

idea of media literacy and its importance to education and society. Potter is an opinion

leader because of his status in the communication field and because he works within the

social structure.

Conclusion

This examination of the diffusion of media literacy has focused on the innovation

itself, the communication channels used to spread information about the innovation, the

impact of time, and the nature of the social system that is to adopt media literacy. It

appears that as an innovation media literacy has the potential for full adoption within the

social system of educators. However, media literacy has to be approached from an

instrumentalist (adopter-based) perspective (Surry & Farquhar, 1997) in order for it to

survive. The adopters in this case are classroom teachers. If there is a grassroots effort

among classroom educators, then media literacy will continue to prosper. The four

USOE seed projects failed in part because the teachers did not know how to implement

the program and use materials they were given (Brown, 1991). While there must be a

focus on the students in designing media literacy curricula, instructional developers must

focus on the teachers because they are the ones that are going to have to use them. As

Surry and Farquhar (1997) noted, adopter-based theories deal with slow and gradual

adoption of innovation. This describes media literacy, but the exciting part is that the rate

of adoption is steadily progressing. Empirical investigations that assess the effectiveness

of media literacy training and media literacy programs within schools will only enhance

the adoption of this latest educational innovation.

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