

Editors: Jiwon Yoon

MEL Working Paper No. 202

Media Literacy as an Independent and Interactive Variable In the Knowledge Gap Hypothesis

Michael RobbGrieco

The paper was written for Communication Theory II class, taught by Prof. Carolyn Kitch during Spring 2007.

Published by Media Education Lab, Temple University, School of Communications and Theater, Media Education Lab, 1A Annenberg Hall, Philadelphia PA 19122.

Please cite as:

RobbGrieco, M. (2007). Media literacy as an independent and interactive variable in the knowledge gap hypothesis. *Media Education Lab Working Paper Series*, Retrieved DD.MM.YYYY, from http://www.mediaeducationlab.com/

Media Literacy as an Independent and Interactive Variable In the Knowledge Gap Hypothesis

Michael RobbGrieco

<u>Abstract</u>

This paper envisions media literacy as a central factor in the process of differential acquisition of knowledge from media, and proposes directions for research to substantiate the claim. Broadly defined, media literacy is the ability to access, analyze, evaluate and create content in a variety of media forms (Aufderheide, 1993). The knowledge gap hypothesis proposes that members of a social system with higher socioeconomic status or educational attainment acquire more knowledge from an increasing information flow into the social system than members of lower strata (Tichenor, Donohue, & Olien, 1970). Researchers have found many factors to affect knowledge gaps, including content domains, channel influence, social conflict, community mobilization and structure, and individual motivational factors (Finnegan & Viswanath, 2002). This paper suggests research questions and hypotheses interjecting media literacy skills and education into the mix of variables predicting knowledge gaps.



Introduction

As every educator knows, introducing more information does not always result in greater knowledge acquisition for all learners. The knowledge gap hypothesis addresses a phenomenon that has troubled public educators of diverse student populations from time immemorial (e.g., see essays in Orrill, 1997). The hypothesis (Tichenor, Donohue, & Olien, 1970) proposes that members of a social system with higher socio-economic status or educational attainment acquire more knowledge from an increasing information flow into the social system than members of lower strata. Although media literacy education explicitly seeks to affect students' abilities to access, analyze, evaluate and produce media texts (Kubey, 2004), researchers have yet to consider the role of media literacy skills in testing the knowledge gap hypothesis. This paper envisions media literacy as a central factor in the process of differential acquisition of knowledge from media, and proposes research to substantiate the claim.

As this paper will show, media literacy education addresses several of the major factors and conditions that researchers have claimed to affect knowledge gaps, including content domains, channel influence, community mobilization, the structure of communities, and individual motivational factors (Finnegan & Viswanath, 2002). Media literacy skill levels and experience with media literacy education are likely to interact with variables of each of these other factors and conditions identified in knowledge gap research. Media literacy skills and education may also act as a set of independent variables that widen, close or maintain knowledge gaps. From a review and synthesis of knowledge gap research and media literacy research, this paper seeks to conceptualize media literacy skills and education as interactive and independent variables that affect the process of differential acquisition of knowledge from media. From these new conceptualizations of variables predicting knowledge gaps, research questions and hypotheses will be proposed. Finally, this paper proposes ideas for research designs to test the role of media literacy in affecting knowledge gaps.

<u>Literature Review</u>: Knowledge Gap Research

Since the first empirical studies in the sociology of communication after World War II, researchers "have frequently observed that information and knowledge seldom spread equally to all groups within social systems" (Viswanath & Finnegan, 1996, p.



188). Inequalities in knowledge acquisition present serious problems for health and political communication and education in a democratic society (Finnegan & Viswanath, 2002; Donohue, Olien, & Tichenor, 1987; Olien, Donohue, & Tichenor, 1983). In 1970, Tichenor, Donohue, and Olien synthesized the implications of several prior studies in their knowledge gap hypothesis:

"As the infusion of mass media information into a social system increases, segments of the population with higher socio-economic status tend to acquire the information at a faster rate than the lower status segments, so that the gap between these segments tends to increase rather than decrease." (pp. 159-160)

In their original study, Tichenor, Donohue, and Olien (1970) studied information disseminated in print media, and analyzed data by demographic variables at the social-structural level of analysis defining SES as level of education. This study inspired more than 100 communications studies over the past 37 years seeking to understand how an array of variables predict the widening, narrowing and perpetuating of knowledge gaps between social groups with similar exposure to information delivered through particular media channels. "The continuing concern of this line of research is about knowledge and its control as the basis of social power and social action...knowledge inequities are a profound concern in democratic social systems" (Viswanath & Finnegan, 1996, p. 189).

Studies by Gaziano (1983), Gaziano and Gaziano (1996) and Viswanath and Finnegan (1996) methodically reviewed more than 90 studies through the 26 year history of research literature related to the knowledge gap hypothesis from its original, formal articulation in 1970 through 1996. These studies identified four categories of variables at the social-structural level of analysis that numerous studies have corroborated as predicting knowledge gaps: content domains (the specific area of knowledge, such as health risks due to smoking); channel influence (print, television, etc.); social conflict and community mobilization (controversial topics, issues championed by community activists or church groups, etc.); and community structure (diverse/homogeneous, rural/urban, etc.). Beginning with studies by Ettema and Kline (1977), researchers have also found variables predicting knowledge gaps at the individual-psychological level of analysis, such as motivation, relevance, cognitive schemata, threat, and interest. Gaziano



(1995) warns researchers against mixing levels of analysis, and recommends adherence to the social- structural focus of the original hypothesis (p. 17). However, Viswanath & Finnegan (1996) encourage a nuanced view that seeks links between the two distinct levels of analysis (pp. 190, 203).

In the *Theoretical Framework* section below, this paper will discuss the specific findings of some studies in each of these categories in greater detail along with suggestions interjecting media literacy skills and education into the mix of variables predicting knowledge gaps. For further consideration, Viswanath and Finnegan (1996) list each knowledge gap study from 1970 to 1996 in terms of its findings of present/enduring or absent/narrowing gaps, its contingent variables, its levels of analyses, and its study designs--all in a single, concise chart (pp. 193-196). Before discussing particular studies and research possibilities, this paper will introduce the media literacy literature.

Literature Review: Media Literacy Education

In 1992, at the Aspen Institute's seminal conference for national (U.S.) leadership in media literacy, an enduring conceptualization of media literacy emerged defining media literacy as the ability to access, analyze, evaluate and create content in a variety of media forms (Aufderheide, 1993). In 1998, a symposium of essays in the *Journal of Communication* described media literacy "as a pedagogical tool in schools, as a value for an informed citizenry, as a variable or a context for research, as a critical/cultural issue, and as a public policy concern" (Rubin, 1998, p. 3). By 2001, 40 states had included media literacy outcomes in their frameworks for student assessment in K-12 schools, an increase from just 12 states five years earlier (Hobbs 2006a; Kubey, 2001). Despite this rapid growth in the formal adoption of related media literacy outcomes for students, few studies have proposed formal measures for media literacy skills.

In the 15 years since the Aspen Institute conference, researchers and educators have advocated a variety of different approaches to media literacy education, which differently elaborate and emphasize the four dimensions of media literacy—to access, analyze, evaluate and create media content. Many approaches emphasize textual analysis



skills, including recognition of production techniques, aspects of genre, and psychological processing of signs and stimuli (Silverblatt, 2001; Potter, 2004; Hobbs, 2001). Advocates of textual analysis approaches to media literacy education draw from rich traditions in semiotics, screen theory and literary theory, often with the intention of demystifying the production process and emancipating learners from textual power (Piette & Giroux, 2001). Potter (2004) has proposed a cognitive theory of media literacy encouraging awareness of psychological processes and drives as a means to mitigating media effects. Advocates from critical cultural studies orientations disparage the relative safety and de-politicized positions of textual analysis approaches (Lewis & Jhally, 1998). From a perspective sometimes dubbed critical literacy, these educators and researchers recommend greater focus on the ideological and historical contexts of media production and on producers' intentions relative to the benefits afforded to consumers (Hobbs, 2006a).

While all of the above approaches emphasize skill development in order to resist media power, and are thus dubbed "protectionist" (Kubey, 2001, p. 4), other approaches emphasize the development of media production skills (Buckingham, 2003; Jenkins, 2006) in order to prepare students for full participation in democratic society and for the new technological demands of evolving job markets. By placing the means of media production in the hands of students, these advocates seek to free students' meaning making processes from teachers' ideologies (Buckingham, 1998), and to celebrate creativity (Jenkins, 2004). Despite these various emphases, all of these approaches involve developing abilities to access, analyze, evaluate and create messages in a variety of media forms.

According to Hobbs (2001), a key hope for media literacy educators lies in the expansion of the concept of literacy to incorporate popular culture texts and knowledge. Thus, analysis of advertising, entertainment and news media may compliment and augment the development of traditional literacy skills. A quasi-experiment comparing groups of high school juniors in New Hampshire supported this hypothesis (Hobbs & Frost, 2003). Focusing on textual analysis skills, the study presented one of the few scales for measuring media literacy skills. A few other scales have conceptualized media literacy skills in terms of specific knowledge content domains, such as media portrayals of alcohol (Austin & Johnson, 1997) and tobacco (Primack, Gold, Land, & Fine, 2006;



Banerjee & Greene, 2006) products.

Recently, a handful of sustained empirical qualitative studies have sought to describe best practices in media literacy education. Hobbs (2006b) describes and critiques the teaching and learning observed in a media literacy themed English class, mandatory for all grade 11 students at a public high school in New Hampshire. Goodman (2003) shares the triumphs and travails of his high school classes in video production advocating social change. Kist (2005) profiles, compares and contrasts diverse approaches to media literacy education from observations and interviews in six vastly different school settings scattered across North America.

As I propose how media literacy skills and education might predict knowledge gaps through the next sections, I will refer more specifically to certain aspects of these theoretical views, qualitative studies, and empirical measurements of media literacy skills and education.

Theoretical Framework: Incorporating Media Literacy in Knowledge Gap Concepts

Media Literacy skills can be conceptualized and measured at the individual level in terms of individual skills (Hobbs & Frost, 2003). Thus, media literacy skills will be discussed in relation to individual motivational factors proposed as variables predicting knowledge gaps. Media literacy education can also be conceptualized at the social-structural level by comparing groups of people who have experience in media literacy education with groups of people in the social system who do not.

Because media literacy education is now common in U.S. schools, but inconsistently implemented, experiences with media literacy education will not align regularly with SES groups in most social milieu. In other words, in a given district, it is likely that some schools implement media literacy and others do not. Or, within a state, some districts may implement media literacy education while others do not. Even when state standards include media literacy outcomes, where and how media literacy education happens in the curriculum may vary from school to school. Thus, media literacy may be practiced at some inner city public schools, but not at affluent suburban schools, and vice versa. Therefore, media literacy may merit study as an independent demographic variable predicting knowledge gaps.

For reasons deriving from particular theoretical views and qualitative studies of



media literacy education (elaborated below), experience with media literacy education and media literacy skills will be discussed in relation to variables of content domains, channel influence, community mobilization, and community structure that studies have shown to predict knowledge gaps between social groups.

Media Literacy Skills and Motivational Factors Predicting Knowledge Gaps

Ettema and Kline (1977) introduced motivational factors as variables predicting knowledge gaps. "They argued that gaps between higher and lower SES groups were not necessarily due to the effects of less formal education or economic deprivation, but to different levels of motivation, interest and salience in specific topics" (Finnegan & Viswanath, 2002, p. 370). Knowledge gap research considering motivational factors has been inconsistent; about half of the results from more than 20 studies through 1995 support the significance of motivational variables as greater factors in predicting knowledge gap than SES (Gaziano & Gaziano, 1996; Viswanath & Finnegan, 1996). Despite the mixed results, consideration of individual motivational factors remains important for producers of public information campaigns seeking to design and distribute messages more evenly and effectively across target populations (Finnegan & Viswanath, 2002, p. 371).

Media literacy education may affect a student's motivation for acquiring knowledge. Qualitative studies of adolescents engaged in media literacy education attest to their increased motivation to learn from various media and their increased intellectual curiosity (Hobbs, 2006, p. 34, 56; Goodman, 2003, p. 62; Michie, 1999, pp. 90-104). Media literacy education extends critical thinking, analysis and knowledge building to the media forms and texts most relevant to students in their lives outside school:

"Media education generates a degree of enthusiasm and enjoyment that is all too rare in contemporary schooling; it offers a form of educational practice that is not just engaging for students, but also intellectually rigorous, challenging and relevant to their everyday lives."

(Buckingham, 2003, *Preface*, p. x)

Potter's *Theory of Media Literacy* (2004) postulates that media literacy education can teach students to improve "the degree of their generalized motivations for learning, and hence their overall willingness to confront new messages" (p. 152). Existing knowledge



gap studies consider personal interest in topics, but not general interest in learning from media that may be sensitized for individuals by media literacy. Since media literacy education may influence individual motivation for acquiring knowledge, it should be measured as part of interest variables in research on knowledge gaps.

One's analytical media skills may also affect the individual's ability and likelihood to acquire knowledge from any given information campaign. Media analysis skills include the ability to recognize the purposes, contexts and production techniques of media messages (Silverblatt, 2001; Buckingham, 2003; Hobbs, 2001). In a quasi-experimental study of adolescent media literacy skill acquisition, Hobbs and Frost (2003) employed quantitative scales and tests to measure a variety of media literacy skills, including critical listening (radio), critical viewing (news), and recognition of advertising purposes and techniques. Such media literacy skills become cognitive tools for knowledge building from a variety of audio, visual and digital media messages just as print literacy skills allow knowledge building from print sources (Potter, 2004). Therefore, individual media literacy skills may be an important variable for predicting knowledge gaps.

The observations above suggest the following the research questions for future knowledge gap studies:

RQ: Do media literacy skills interact with individual motivational factors in predicting knowledge gaps?

RQ: Does an individual's degree of media literacy skill factor significantly in predicting levels of knowledge he or she will acquire from an information campaign?

For these questions, media literacy skills must be specified and operationalized, and a scale for measuring media literacy skills should be employed. The scale could be more abstract and applicable to various topics, or more content-based (see below for discussion of media literacy and content domains). The following hypotheses proceed from these research questions:

Hypothesis: Individuals for whom the topic of an information campaign is not particularly salient or interesting, but who have high levels of media production and analysis skills, will increase their knowledge from exposure to the information campaign to a greater extent than individuals



without topical interest who have weaker media literacy skills.

Hypothesis: The knowledge gap between people with individual interest and people without individual interest in a given information campaign will be less pronounced for people with high level media literacy skills than for people with low level media literacy skills.

Media Literacy, Content Domains and Channel Influence

Channel influence on knowledge gaps has been of interest to researchers from the inception of knowledge gap hypothesis. Tichenor, Donohue and Olien (1970) discussed knowledge gaps from print information and wondered whether the same messages in different media might produce different results. A few studies have shown that television campaigns have narrowed (compared to print-only campaigns) or, in rare cases, reversed knowledge gaps predicted by the original hypothesis (Gaziano & Gaziano, 1996). Since media literacy education seeks to improve students' knowledge and understanding of media channels themselves, it stands to reason that media literacy skill levels interact with channel influence on knowledge gaps.

Knowledge gaps have been studied with relation to specific content domains, such as facts about political candidates, smoking or heart disease (Viswanath & Finnegan, 1996). Media literacy skills have also been measured with respect to specific content areas. Primack, Gold, Land, & Fine (2006) combined input from media experts, health practitioners and educators to design a scale measuring students' "smoking media literacy" (SML). Austin and Johnson (1997) found that students who had media literacy education in classes with a specific focus on alcohol advertising displayed finer analytic skills in deconstructing alcohol ads than students who had studied ad analysis in media literacy education without a focus on alcohol ads. These media literacy skills become cognitive tools for building knowledge in these specific content areas (Potter 2004). Thus, media literacy skill related to the specific content domain of an information campaign could be considered as a variable predicting knowledge gaps. The following hypothesis proceeds from this rationale:

Hypothesis: Knowledge gaps between SES groups for individuals with high levels of media literacy with respect to a certain content domain will be narrower, with respect to knowledge from an information campaign



related to that content domain, than gaps between SES groups for individuals with low levels of media literacy.

Media literacy production skills and experience may also affect knowledge acquisition and knowledge gaps. For example, students who engage in reflective practice in designing video public service announcements for real audiences may become more attentive to the messages of public service campaigns that they consume from television (Buckingham, 2003; Banerjee & Green, 2006). Goodman (2003) and Michie (1999) attest to this development for their economically disadvantaged pupils in particular, which should be of special interest for knowledge gap researchers. Hypotheses should be tested involving media literacy production skills and experience as a factor predicting knowledge gap. For example,

Hypothesis: Experience with media literacy based production activities involving public service announcements (or other information campaign simulations) will narrow knowledge gaps predicted by variables of interest in and salience of actual public service information campaigns.

Media Literacy Education, and Community Structure, Boundedness and Mobilization

In order to better understand the uneven socio-economic distribution of knowledge observed in most studies involving the original knowledge gap hypothesis, many knowledge gap researchers have considered factors at the social structural level (Viswanath & Finnegan, 1996). Researchers have found knowledge gaps influenced by community structure in terms of cultural diversity or homogeneity, and rural versus urban settings (Gaziano & Gaziano, 1996). Although the influences of such social structural features can not be altered by the designs of information campaigns, the relationship between community structure and media literacy deserves some consideration. Aspects of media literacy, such as critical analysis or information access skills, are likely to be facilitated or stunted by macro-structural features, such as the variety of media and the exchange of cultural perspectives available in a community. Conversely, the general media literacy skill levels of a community and the media literacy education practiced by a community may influence differential knowledge acquisition at the structural level; for



example, given comparable distribution of the same messages, knowledge gaps may be less pronounced across a more media literate community than a less media literate community (or vice versa). Knowledge gap research should pursue questions considering media literacy as an aspect of community structure:

RQ: How do knowledge gaps compare between structurally similar communities that have differing general media literacy levels or educational practices?

RQ: How do gaps in media literacy skill levels in a community relate to SES, media resources, and other social structural influences?

Viswanath, Rosicki, Fredin, and Park (2000) found the relevance and salience of media messages for particular communities, or community-boundedness, to be a significant factor influencing knowledge gaps. This social structural level concept involves several components, including the framing of an issue by media power or by community interest groups, as well as the motivation and interest of the community (p. 34). Their study found knowledge gaps to be more likely for groups to which an issue is less consequential (and vice versa). These researchers also considered community ties as an important variable related to community-boundedness. Community ties involve investment (length of residence, property ownership, etc.) and civic engagement (pp. 29-31). Critical approaches to media literacy education call attention to how media power and community interest groups frame interest and motivation (Lewis & Jhally, 1998; Hobbs, 2006a), and students' critical media literacy skills have been formally measured in some studies (Hobbs & Frost, 2003; Austin & Johnson, 1997). Goodman (1999) discusses youth media production as civic engagement situating young people as active participants in their communities (p. 104). Research also emphasizes the capacity of media literacy education to engage otherwise reluctant learners (Hobbs, 2006b) and economically disadvantaged youth (Goodman, 1999) in community activity and discussion of media beyond the classroom, at home and in the larger community. Therefore, research questions and hypotheses as to how media literacy education may influence community boundedness and community ties are important for future research on knowledge gaps:

RQ: How does media literacy interact with the influence of community-boundedness on differential knowledge acquisition?



RQ: Does media literacy education affect the perception of topics in media as relevant or controversial to the community?

Hypothesis: Gaps in knowledge between higher and lower SES members are less likely to appear among those who are involved with media literacy education compared to those who are not.

The latter hypothesis recasts the hypothesis posited by Viswanath, Rosicki, Fredin, and Park (2000, p. 32), replacing "those who have stronger ties to the community" with "those who are involved with media literacy education" using the rationale that media literacy education promotes community ties, as supported by research cited above.

McDevitt and Chaffee (2000) bridge analytical levels in their study of the effects of a grade 5-12 civics curriculum as they observed how curriculum effects passed from students to their families. The study used a "primary-group model," which describes "the family as mitigating the influence of social structural institutions such as schools and mass media" (p. 261). The results of the study showed that the civics curriculum stimulated increased political information-seeking and knowledge from news media in students who in turn stimulated increased political information-seeking and knowledge from news media in their parents. The impact was greater for low income families, thus narrowing the knowledge gap related to political issues. This finding has exciting implications for media literacy education.

As mentioned above, qualitative researchers have reported how media literacy education inspires otherwise reluctant learners (Hobbs, 2006b) and economically disadvantaged youth (Goodman, 1999) to discuss media concepts and knowledge beyond the classroom, at home and in the larger community. This data supports the proposals of several theories and philosophies of media literacy education that claim parental involvement and community involvement in student learning as central tenants (Buckingham & Sefton-Green, 1994; Hobbs, 2001; Goodman, 2003). In light of McDevitt and Chaffee's research (2000), media literacy education may have real potential to narrow the gap between families of high and low SES with regard to political information-seeking and political knowledge acquisition. Each of the hypotheses from the McDevitt and Chaffee study (2000), recast for media literacy curriculum instead of civics curriculum, merit the focus of future research (see Appendix A).



Media Literacy, Schemas and Differential Knowledge Acquisition

Oddly, few studies involving the knowledge gap hypothesis discuss the psychological processes that might explain how and why people of different social strata acquire knowledge differently. As mentioned above, most studies considering motivational factors have tended to posit individual psychological factors, such as personal interest and salience, as competing with social-structural variables (SES) to explain knowledge gaps. However, a few studies have employed the educational psychology concept of schema, not only to explain the individual process of knowledge acquisition, but also to explain why differential knowledge acquisition favors people of higher socio-economic strata and to consider the educational conditions that may narrow or widen gaps (Fredin, Monnett & Kosicki, 1994; Neuman, 2007).

Schemas are the cognitive building blocks that people use to organize and understand new knowledge by classifying "incoming bits of information into similar groupings" (Neuman, 2007, p. 32). Schema develop through experience and are transmitted culturally through formal and informal learning situations (Fredin, Monnett & Kosicki, 1994, p. 178). However, cultural resources for organizing knowledge are not evenly distributed:

"Key material resources and interpersonal experiences that are common in higher income homes are not available and are unlikely to be available for children in poverty settings. And it is these key experiences that children from low income communities lack—vital background knowledge for developing concepts and schemas—not their ability to learn that puts these children at a great disadvantage." (Neuman, 2007, p. 38)

Neuman (2007) emphasizes that socio-economically disadvantaged learners have special needs to develop schema from content knowledge instruction governed by conceptual organization since reinforcement of such schema is less available for these students outside school. She warns that knowledge gaps will persist and widen unless educators can provide disadvantaged students with schema-building, content-rich instruction.

Media literacy approaches typically include five or six core concepts (see, e.g., Kubey, 2004; Ofcom, 2004) that students apply in the production and analysis of a variety of media texts. This model allows "repeated practice of familiar concepts... increasing the likelihood of transfer and extending understanding" (Neuman, 2007, p. 35).



In fact, many media literacy educators teach explicitly for transfer of skills (Hobbs, 2006b, p. 8). Furthermore, media literacy education often emphasizes meta-cognition, understanding how we learn from media (Hobbs, 2006b, p. 126; Potter, 2004), which may make high level concepts more accessible for students who do not have such abstract thinking reinforced at home due to socio-economic disadvantage. Perhaps most importantly, media literacy education opens the curriculum to popular media texts, which all students encounter more often in their everyday lives (Buckingham & Sefton-Green, 1994; Buckingham, 2003; Hobbs, 2006b). The focus on popular texts opens up the curriculum to capitalize on the existing knowledge structures common among low-SES students for the development of schema, which in turn may help organize new knowledge from other contexts in a variety of areas. In short, media literacy education makes schema-building, content-rich instruction happen. The question for knowledge gap research to answer is, "Does schema-building through media literacy education help to narrow knowledge gaps between high and low SES students?"

Suggestions for Future Research Designs

A variety of research designs could test the hypotheses and pursue the research questions that follow from considering media literacy among the variables explaining knowledge gaps. Since the most drastic differences in media literacy skills are likely to be most pronounced in relation to the presence or absence of media literacy education, I will briefly propose two general research approaches for examining media literacy as a factor in knowledge gaps of students in particular school contexts.

Researchers could measure the knowledge acquisition of students in different school districts exposed similarly to a common public information campaign. For example, a state-wide information campaign for healthy eating habits will reach some districts in Pennsylvania that have implemented extensive media literacy education in school curricula as well as others that have not. These districts and schools therein could be matched according to similar SES distributions among students. Knowledge gaps between SES groups with respect to the campaign could be compared between the communities with and without media literacy education.

On a smaller scale, researchers could measure knowledge acquisition of students within a school. For example, some school districts offer media literacy classes as



electives. Researchers could compare the differential acquisition of knowledge from a district-wide information campaign. A study could compare differences in knowledge gaps between students who take media literacy courses versus those who do not.

These designs would require a great deal more specification for implementation, but the above descriptions of general research scenarios introduce new possibilities for pursuing the research questions and hypotheses that this paper has introduced for considering media literacy as a factor in knowledge gap.

Conclusions and Possible Implications of Future Research

Media literacy skills and education affect knowledge acquisition from various media. As this paper has discussed, the development of media literacy skills may not be bound to SES since media literacy education is currently implemented sporadically and variously in the United States. Thus, researchers should consider media literacy as an independent variable predicting knowledge gaps. Researchers should also consider the interaction of media literacy skills and educational experience with the influence of other variables that may predict knowledge gaps, including content domains, channel influence, social conflict, community mobilization and structure, and individual motivational factors. Such consideration should be addressed at both individual levels and social-structural levels of analysis. The results of such research considering media literacy as a factor in knowledge gaps could yield important implications for the future implementation of both media literacy education and public information campaigns.

If research were to show that knowledge gaps between SES groups were narrower among people with better media literacy skills or more media literacy educational experience compared to those with less media literacy skill and experience, such results would be a boon for advocates of media literacy education. For media producers, such results may suggest how information campaigns could capitalize on existing media literacy skills and education in particular audiences. Such results may also persuade media producers to initiate media literacy education components as part of their campaigns (some commercial campaigns already do so; see, e.g., the *Dove Campaign for Real Beauty*, 2007). If research finds that media literacy has an insignificant effect on knowledge gaps, or perhaps exacerbates knowledge gaps between SES groups, such results will lead to important questions about who media literacy education serves and



how educators implement media literacy education. Either way, considering media literacy as an interactive and independent variable in predicting knowledge gap will benefit our understanding of both the benefits of media literacy education and the phenomenon of differential knowledge acquisition.



Appendix A:

Hypotheses for Curriculum Effects on Knowledge Gap (McDevitt & Chaffee, 2000)

Reconsidered for Media Literacy Curricula

H1a: A student's exposure to a media literacy curriculum will lead to increases in student-parent discussion and increases in student's frequency of newspaper reading, frequency of TV news viewing, attention to campaign news, and election knowledge.

H1b: Curriculum effects will be stronger among low-SES students than among high-SES students.

H2a: Student curriculum exposure will lead to increases in the parent's newspaper reading, frequency of TV news viewing, attention to campaign news, and election knowledge.

H2b: Curriculum effects on parents will be stronger in low-SES families than in high SES-families.

H3a: The curriculum will indirectly account for increases in parental attention to news and knowledge via stimulation of student-parent discussion.

H3b: The intervening effect of student-parent discussion on parent knowledge will be stronger in low-SES families than in high-SES families. (McDevitt & Chaffee, 2000, pp. 264-268)



References

- Aufderheide, P. (Ed.), (1993). *Media literacy: A report of the national leadership conference on media literacy*. Aspen, CO: Aspen Institute.
- Austin, E. W. & Johnson, K. K. (1997). Effects of general and alcohol–specific media literacy training on children's decision making about alcohol. *Journal of Health Communication*, 2, 17-42.
- Banerjee, S. C. & Greene, K. (2006) Analysis versus production: Adolescent cognitive and attitudinal responses to antismoking interventions. *Journal of Communication*, 56 (4), 773-794,
- Buckingham, D. (2003). *Media education: Literacy, learning, and contemporary culture*. Malden, MA: Polity.
- Buckingham, D. (1998). Media education in the UK: Moving beyond protectionism. *Journal of Communication*, 48, 33-43.
- Buckingham, D., & Sefton-Green, J. (1994). *Cultural studies goes to school*. London: Taylor Francis.
- Christ, W. G., & Potter, W. J. (1998). Media literacy, media education, and the academy. *Journal of Communication*, 48, 5–15.
- Ettema, J. S., & Kline, F. G. (1977). Deficits, differences and ceilings: Contingent conditions for understanding the knowledge gap. *Communication Research*, 4, 179-202.
- Donohue, G. A., Olien, C. N., & Tichenor, P.J. (1987). Media access and knowledge gaps. *Critical Studies in Mass Communication*, *4*, 87-92.
- Dove Campaign for Real Beauty (2007). Retrieved from: http://www.campaignforrealbeauty.com/
- Finnegan, J. R., & Viswanath, K. (2002). Communication theory and health behavior change: The media studies framework. In K. Glanz, B. Rimer & F. M. Lewis (Eds.), *Health behavior and health education* (pp. 361-388). San Francisco, CA: Jossey-Bass.
- Fredin, E., Monnett, T., Kosicki, G. (1994). Knowledge gaps, social locators and media schemata: Gaps, reverse gaps, and gaps of disaffection. *Journalism Quarterly*, 71 (1), 176-190.



- Gaziano, C. (1995). *A twenty-five year review of knowledge gap research*. Retrieved April 10, 2007 from ERIC database.
- Gaziano, C. (1983). Knowledge Gap: An analytical view of media effects. *Communication Research*, 10, 447-486.
- Gaziano, C., & Gaziano, E. (1996). Theories and methods in knowledge gap research since 1970. In M.B. Salwen & D.W. Stacks (Eds.), *An integrated approach to communication theory and research* (pp. 127-143). Mahwah, NJ: Lawrence Erlbaum Associates.
- Goodman, S. (2003). *Teaching youth media: a critical guide to literacy, video production, and social change.* NY, NY: Teachers College Press.
- Hobbs, R. (2006a). Multiple visions of multimedia literacy: emerging areas of synthesis.
 In M. McKenna, L. Labbo, R. Kieffer, & D. Reinking, (Eds.), Handbook of Literacy and Technology, Volume II (pp. 15 28). International Reading Association. Mahwah, NJ: Lawrence Erlbaum Associates.
- Hobbs, R. (2006b). *Reading the Media: Media literacy in high school English*. NY: Teachers College Press.
- Hobbs, R. (2001). Expanding the concept of literacy. In R. Kubey, (Ed.), *Media Literacy* in the information age: Current perspectives. Information and behavior volume 6 (pp. 163-186). New Brunswick, NJ: Transaction Publishers.
- Hobbs, R. & Frost, R. (2003). Measuring the acquisition of media literacy skills. *Reading Research Quarterly 38* (3), 330-355.
- Jenkins, H. (2006). Confronting the challenges of participatory culture: Media education for the 21st century. Retrieved October 29, 2006, from http://www.digitallearning.macfound.org/site/c.enJLKQNlFiG/b.2108773/apps/nl/content2.asp?content_id=%7BCD911571-0240-4714-A93B-1D0C07C7B6C1%7D¬oc=1
- Jenkins, H. (2004). Media literacy goes to school. Retrieved October 29, 2006, from Technology review: http://www.technologyreview.com/articles/04/01/wo_jenkins010204
- Kist, W. (2005). *New literacies in action: Teaching and learning in multiple media*. NY, NY: Teachers College Press.
- Kubey, R. (2004). What is media literacy and why is it important? *Television Quarterly*,



- *34* (3/4), 21-27.
- Kubey, R. (Ed.). (2001). *Media literacy in the information age*. New Brunswick, NJ: Transaction Publishers.
- Lewis, J., & Jhally, S. (1998). The struggle over media literacy. *Journal of Communication*, 48, 109-120.
- Livingstone, S. (2004). Media literacy and the challenge of new information and communication technologies. *The Communication Review*, 7 (1), 3-14.
- McDevitt, M. & Chaffee, S. (2000). Closing gaps in political communication and knowledge: Effects of a school intervention. *Communication Research*, 27 (3), 259-292.
- Michie, G. (1999). *Holler if you hear me: The education of a teacher & his students*. NY: Teachers College Press.
- Neuman, S. B. (2007). Overcoming the knowledge gap: The case for content-rich instruction. *Education Leadership* (in press). Retrieved March 3, 2007 from: http://www-personal.umich.edu/~sbneuman/pdf/knowledgegap.pdf
- Ofcom (2004) Ofcom's strategies and priorities for the promotion of media literacy: A statement. On WWW at http://www.ofcom.org.uk/consult/condocs/strategymedialit/ml_statement/strat_prior_statement.pdf. Accessed 03.07.
- Olien, C.N., Donohue, G.A., & Tichenor, P. J. (1983). Structure communication and social power: Evolution of the knowledge gap hypothesis. In E. Wartella & D.C. Witney (Eds.), *Mass communication review yearbook 4* (pp. 455-462). Beverly Hills, CA: Sage.
- Orrill, R. (Ed.). (1997). *Education and democracy: Re-imagining liberal learning in America*. New York, NY: College Board Publications.
- Piette, J. & Giroux, L. (2001). The theoretical foundations of media education programs. In Kubey, R. (Ed.), *Media Literacy in the information age: current perspectives. Information and behavior volume* 6 (pp. 187-198). New Brunswick, NJ:

 Transaction Publishers.
- Potter, W. J. (2004). *Theory of media literacy: A cognitive approach*. Thousand Oaks, CA: Sage Publications.
- Primack, B. A., Gold, M. A., Land, S. R., & Fine, M. J. (2006). Association of cigarette smoking and media literacy about smoking among adolescents. *Journal*



- of Adolescent Health, 39(4), 465-472.
- Rubin, A. M. (1998). Media literacy. Journal of Communication, 48, 3-4.
- Silverblatt, A. (2001). *Media literacy : Keys to interpreting media messages* (2nd ed.). Westport, CT: Praeger.
- Tichenor, P. J., Donohue, G. A., & Olien, C. N. (1970). Mass media flow and differential growth in knowledge. *Public Opinion Quarterly* 34, 159-170.
- Viswanath, K. & Finnegan, J. R. (1996). The knowledge gap hypothesis: Twenty-five years later. In B. Burleson (Ed.), *Communication yearbook* (Vol. 19). Thousand Oaks, CA: Sage Publications.
- Viswanath, K., Rosicki, G., Fredin, E. & Park, E. (2000). Local community ties, community-boundedness, and local public affairs knowledge gaps.

 Communication Research, 27 (1), 27-50.