Speaking of media literacy, network producer and documentary host Linda Ellerbee remarks, “It ought to be taught in elementary school—how to watch television. Teach them what a commercial is really selling them” (Bianculli, 1992, p. 158). Ellerbee articulates a perspective that elicits fierce opposition; skeptics argue that perceiving and understanding the audio and video collage of television is nothing like the cognitive activities involved in reading. Joshua Meyrowitz (1985) states flatly, “Understanding visual symbols has nothing to do with literacy”. To underscore the ease of accessibility of television, he offers evidence from ratings demonstrating that adult programs are enjoyed by children and vice versa. It is important to note that Meyrowitz uses the term “visual literacy” somewhat interchangeably with media literacy, as do others (Messaris, 1994).

Those critics who argue that media literacy is not the same as literacy are correct in their rejection of the implied metaphorical correspondence; the elusive first time viewer, upon first confronting an action-adventure program has no linguistic symbols to decode, no letters to recognize, no grammatical rules to master in order to recognize that someone is chasing or being chased. One of the consequences of applying the literacy label is an automatic invocation of print as the logical opposite of video; the opposition emanates from a belief (to be examined in detail later) that video experiences displace reading. Regardless of the validity of the claim, there is accumulating evidence of interdependence among media in the construction of narratives by viewers and readers. Marsha Kinder (1990) makes a strong argument for interdependence in her study of intertextual relationships among books, television, video games and film in the construction of the Teenage Mutant Ninja Turtle narrative. Another author suggests that this intertextuality is facilitated by the growing tendency of cross-ownership of media: the comic, the movie and the toy are all made and marketed by the same media agglomerate (Turow, 1992). We can acknowledge differences among media without rejecting the notion of media literacy. If the metaphor has substance, it will emerge in its explanatory power and the extent to which people recognize the problems which gave rise to the metaphor.

WHAT DOES IT MEAN TO BE MEDIA LITERATE?

There are two components of the definition implicit in the opinions cited earlier: teaching people to be critical consumers of entertainment and advertising fare, and teaching them to gain more insight and information from what they watch. In terms of the former position, a recently developed curriculum for high school students lists at least three general components of television literacy: (a) awareness of one’s own relationship with the medium, including awareness of viewing habits and the categories of programming, (b) understanding the television industry and the conventions of television production, and (c) the critical-function, including awareness of the stereotypic distortion exhibited by many entertainment programs and the ways in which programming shapes our social customs and attitudes (Singer, & Singer, 1992). In a recent survey an evaluation of 26 critical viewing intervention and research programs for school children across the world, virtually every effort described embodies one or more of these three dimensions (Brown, 1991). Television is seen as a powerful force that needs counteracting with special training; to be a “critical” viewer is to be well trained in a kind of Deweyan skepticism.

Much less developed is the latter view of media literacy: improving the skills of viewers to extract more from the content than they typically do. While there has been some recent activity in this realm, the focus has been on viewers with some type of cognitive impairment, such as learning disabilities or emotional disturbance (Sprafkin, Gadow, & Kant, 1988; Sprafkin, Watkins, & Gadow, 1990). One study of the impact of viewing instructions on retarded adolescents and...
nonretarded fourth graders found that forewarning them that they would be tested after viewing produced no effects, but for both populations, instructions to watch “for fun” resulted in fewer propositions learned from the program than for all other conditions (Raynolds, 1991). While the majority of critical viewing programs has been conducted with children of preschool or elementary school ages, one educator provided “ideological decoding” training for adults and concluded that a program of how to “read between the lines” of television portrayals of politics, news events, and social issues was successful in elevating critical viewing skills in college students, but his evidence is entirely anecdotal (Brookfield, 1986). In a more formal investigation employing a lecture approach, seventh graders demonstrated more extensive learning of content from educational television programs than did controls (von Kolnitz, 1986). The effect was particularly pronounced for students with high intellectual abilities (teacher designated).

Taken together, what these studies demonstrate is that it is possible to increase the amount and kind of information that people extract from the medium of television; whether these changes transfer to the everyday viewing context and whether they can overcome family patterns resistant to effortful viewing remain as unsolved problems for future research. In this context the work of Gavriel Salomon and the concept of AIME (amount of invested mental effort) is relevant; although there is convincing evidence that young viewers’ and readers’ investment of mental effort mediates what and how much they learn from television or print, there is need to clarify the role of mental effort for a definition of video literacy (Salomon, 1984). The conclusions of several studies suggest that television is often seen by viewers as inherently easier to decipher than print, which is why they invest less effort in viewing, but as one critic points out, observers globalize “television,” ignoring the vast differences among formats and programs that they would acknowledge with respect to reading (Neuman, 1991). The literate viewer allocates AIME in the necessary amount for the appropriate category of program and learning goal, just as a reader allocates more AIME for a textbook than for a comic. Along with the critical function, then, we must include the concept of efficiency in a definition of media literacy; the literate viewer is one who can derive an adequate amount of information from each opportunity.

An additional dimension that has not been included in the goals of existing theory and research in the area is the set of skills involved in applying prior knowledge to the context of a television presentation, and the related skills of applying the fruits of media literacy to the world. In this regard there are several similarities among readers and viewers: both must be able to apply prior knowledge to a text or to a program to acquire new meanings, resolve ambiguities and account for missing information (Neuman, 1991). In the case of a young viewer, prior knowledge of a “cops n’ robbers” script for television programs will determine the amount of novel information that can be acquired (Collins, 1983). In terms of applying television or reading-derived information to social situations, a kind of “editor” must be part of the literacy equation or the cultivation of media-distorted information can occur (Signorieilli, & Morgan, 1990). For the heavy viewer of many entertainment programs, the world is exaggerated in numerous ways; a literate viewer knows the difference between a satire like The Simpsons and a documentary about family life. In the majority of families and school reading programs, the distinction between fiction and reality is applied much more diligently to books than to television.

At this point, our definition of media literacy includes at least five dimensions: (1) awareness of one’s own relationship with media, (2) knowledge of how media organizations shape their fare, and the conventions of production for each, (3) a critical-ideological awareness, (4) the role of effortfulness, and (5) relationships among prior knowledge, media comprehension and the “real” world. As Brown’s (1991) survey illustrates, critical viewing research programs designed for children have concentrated much more on the first three than on the last two. In light of these dimensions, it is important to examine the rationale for efforts to increase media literacy. Primary among these has been the frequently voiced concern about the impact of television viewing on early readers. Media literacy programs, especially those that incorporate the first dimension of increasing awareness of media consumption patterns, have as one goal the reduction of television viewing and the increase of reading.

TELEVISION AND READING

Prior to the 1980s, the dominant conclusion of the majority of investigations of television’s impact on reading was a simple, significant and straightforward negative association. More recent research has added complexity and some clarity to the elusive relationships among school achievement, reading comprehension, and extracurricular television viewing. One of the more frequently investigated hypotheses is displacement: Does TV viewing negatively affect the development of reading by taking the place of other activities? The question breaks down into two components: (a) Is there evidence that indicates that if children were not watching TV they would be reading or be engaged in other scholastically beneficial pursuits? and (b) Is there evidence that displacement results in the erosion of reading ability?

In terms of the first question, there is little evidence in support of a direct displacement effect, and some indirect evidence against it. Neuman (1988) examined the school performance data and self-reports of leisure time activities for over 2 million school children from 8 states, and found no impact of television on either school-related or leisure reading. She concludes that TV viewing is tied to a different set of gratifications than leisure reading, sports or time with friends. In a two-wave survey of high school students, Gaddy found weak displacement effects, and even weaker negative relationships between viewing and reading (Gaddy, 1986). In explaining his finding of small but consistently negative associations he...
concludes that if television displaces as little as 15 minutes per day of homework, its negative impact on school achievement would be large, over time. He also found TV viewing to be the smallest predictor of academic achievement among all those that were measured.

With respect to whether displacement, when it does occur, results in decreased reading performance, Williams (1986) found, as have other investigators, that the introduction of television into the social system resulted in an initial displacement of traditional activities. During this early introductory period, there was evidence for decreased school achievement, with a relatively rapid recovery and an accommodation of the medium into other leisure activities. More recently, Mutz, Roberts, and van Vuuren (1993) found evidence for functional reorganization of time in an 8-year panel study of fifth graders following the introduction of television in South Africa. Initially, television displaced movie attendance and radio listening, with no subsequent return to previous levels of these activities over the long term. There was no evidence of displacement of academically important activities from both individual and aggregate analyses. In these few studies, there is mixed evidence of displacement, and when it has been observed, long-term impact on reading ability is highly dependent upon subgroups and amount of viewing.

Direct Effects

Although she did not find a global displacement effect of television, Neuman (1988) did find a pronounced curvilinear relationship between time spent with television and several measures of reading comprehension and vocabulary. Elementary school children who watched TV between 2 and 4 hours per day exhibited no great differences in reading ability; those who watched 4 or more hours per day showed a steady decline in reading and vocabulary. The effect is not as dramatic for high school students, since they watch less television than their younger counterparts. The only published metaanalysis of the literature regarding TV viewing and reading (23 articles, 1274 correlations) concludes that while the overall correlation of TV watching and achievement is negative but small, the effect of viewing is increasingly deleterious up to a level of 40 hours (Williams, Haertel, Haertel, & Walberg, 1982). A review of 30 years of research reveals a similar trend across a number of studies, and concludes that 3 hours per day of viewing may be the critical peak in the decline of reading ability (Reinking, & Wu, 1990). Apart from hours of viewing, the review posits a cyclical attention sampling pattern when young children watch television, with more efficient sampling as children age (as children approach school age, for example, they pay more attention to regular television content than they do to commercials). In an investigation of attention to reading, Imai, Anderson, Wilkinson, and Yi (1992) find that first and third graders in reading lessons exhibit patterns of attention that bear some similarity to TV watching: they stop allocating attention when content becomes incomprehensible, just as children do when watching television. As Anderson (1992) summarized the lack of evidence for a negative impact of
television on reading, “It is likely that attending to television does not constitute useful practice for developing the internal control necessary for sustaining active attention to difficult (and probably boring) academic content.”

Impulsiveness and persistence have been studied in an experimental manipulation where 6-year-olds’ viewing time was reduced by half over a 6-week period. Greater impulsivity and more reading and coloring book activity were observed in those children who watched their usual amounts, while impulsivity was decreased in the television restricted group (Gadberry, 1980). When second graders watched Sesame Street for 8 days in school, they showed significantly less task perseverance for a school task than did controls (Salomon, 1984). Children’s ability to wait quietly, a variable related to task accomplishment and persistence, has been found to be negatively associated with heavy viewing, particularly when viewing was not mediated by parents discussions (Desmond, Hirsch, & Nicol, 1988; Singer, Singer, Desmond, Hirsch, & Nicol, 1985).

As is apparent from even a cursory examination of this domain, what is lacking is an adequate theoretical framework to organize results and to stimulate further research. The term “concentration deprivation” is frustrating, in that it connotes a general mindlessness resulting from prolonged exposure to television, for which there is scant evidence. There is evidence that people allocate less mental effort to television than they do to reading, but there is also evidence that this can be modified by instruction (Kubey, & Czikszentmihalyi, 1990; Salomon, 1984). In terms of young children, one of the most disturbing aspects of the research to date is that few investigations have concentrated on children in the first and second grades, where reading begins. A critical period alluded to earlier may be the time when heavy viewing does the most damage to young readers. Only one study has examined the relationship in viewers of this age group, and concluded that kindergarteners and first graders who were heavy viewers of television were less capable initial readers 1 year later than were their lighter-viewing counterparts (Singer et al., 1988). In this study, as in most other studies where IQ was measured, there were correlations among viewing, IQ, and reading-related skills that are difficult to unpack in a manner that provides a causal explanation, but as was alluded to earlier, when IQ is controlled for, the negative association between viewing and reading remains. When IQ is a predictor, it is the more intelligent viewers who exhibit the strongest negative effects of viewing. What might occur during this formative time that renders the heavy viewer a less capable reader in later years? One component that may suffer is the child’s ability to visualize characters and events in a written or spoken story in a manner that allows for memory, reflection, and internalization. In other words, the child begins to “frame” narratives in a television-like manner, where events are more important than motives or the inner states of characters in stories. An ongoing study of children’s story comprehension suggests that 6-year-olds who saw audiovisually presented stories based more inferences about the story on characters’ appearance and actions than did those who read stories (Brown, 1991). It is clear that the possibility of “narrative deprivation” needs further investigation. A large part of reading comprehension is the ability to reflect on the events and inner states of actors in a story, and as Singer has suggested, the pace of television does not allow much time for reflection (Singer, 1976). There is also evidence of a tendency for “scripted” television viewing to interfere with comprehension of viewing (Collins, 1983). Finally, in a 3-year panel study of children aged 6–9, the heaviest viewers of television comprehended less of a program immediately after viewing than did lighter viewers, and this effect continued throughout the second year of the study (Singer et al., 1988). Taken together, these results suggest that heavy viewing during the hypothesized critical period may have negative implications for both television and reading story comprehension.

Until there is more research directed at the early reader-viewer, the bulk of evidence points to television viewing as one of several factors in the decline of reading comprehension in the past decade. As has been argued for viewing and aggression, it is also important to consider the aspects of these relationships that may be masked in the aggregation of results and debates over effect sizes; one disruptive child in a classroom may produce a chain reaction of tremendous import for the entire class (R.Kubey, personal communication, November 20,1992). Similarly, one poor reader may demand inordinate amounts of time from a teacher at the expense of other students. Comstock and Paik’s (1991) exhaustive analysis of the recurring negative correlation among viewing, reading and other concomitants of scholastic achievement concludes that, “There is no question that the amount of time spent viewing television by American children and teenagers is negatively associated with their academic performance” (p. 86). They, however, do not posit displacement as the only, or even the major contributor to the association: “The evidence supports a three-factor process in which large amounts of viewing not only (a) displace skill acquisition but also (b) interfere with further practice, or skill development and maintenance, and (c) lower the quality or value by decreased capacity of practice done in conjunction with television” (p. 136). In analyzing nine large-scale multivariate studies of the relationships among extracurricular factors and several indicators of academic achievement (including math and grades), they find that when the other predictors (s.e.s., ability, parents’ education, special academic programs, etc.) are controlled for the negative association with television survives in six studies, and where it does not, the relationships are negative but not statistically significant. They argue for a “modest but important” causal relationship and an independent contribution to lowered achievement by television viewing. With respect to “practice in conjunction with television,” Armstrong and Greenberg’s (1990) finding of deficits in college students’ performance of cognitive tasks done with a television on in the room is supportive of the relevance of the factor; the evidence points to a suppression of cognitive capacity, as opposed to
distraction or heightened arousal. It is reasonable to assume that if adult cognitive task performance is hampered by an operating television set, children with developing cognitive capacity will be diminished more severely; homework done in front of a television will suffer. When relationships among homework, television viewing and parental influence were measured in a large national sample of high school students, homework had a direct impact upon achievement (positive) and television was negatively associated, though smaller in influence (Keith, Reimers, Fehrman, Pottebaum, & Aubey, 1986). Results of causal modeling indicated that there was no evidence that homework displaced television viewing but that the obverse was true; as in other studies cited earlier, the effects of television were most pronounced for high achievers. There was no evidence of parental involvement in encouraging homework or in decreasing television viewing; the authors point out that such involvement would have more impact with younger children.

In adult college students there is evidence that reading leads to increased vocabulary learning, while television exposure does not (West, & Stanovich, 1991). When intellectual ability (measured by S.A.T. scores) was controlled, casual reading by college students predicted vocabulary and cultural literacy, while television predicted only cultural literacy. Vocabulary, spelling ability, and verbal fluency have all been associated with print exposure, even when reading comprehension is controlled (Stanovich, & Cunningham, 1992). Why does experience in reading increase our linguistic knowledge base when experience with electronic media does not? An investigation of the linguistic complexity of media reveals that the majority of television programs employs a 4th-grade vocabulary; novel words are present in many categories of print (Hayes, & Ahrens, 1988). Neuman argues that the idea that leisure reading is better for children than leisure viewing may be a reflection of a “literacy bias” on the part of educators and caregivers (Neuman, 1991). The evidence suggests that reading leads to information gain that is relevant to scholastic achievement; television does not.

Based on the hypothesized critical period for television-related deficiencies, the research reviewed above suggests that those critical viewing programs designed to repair deficiencies in concentration, narrative comprehension, and other skills associated with school performance will be most effective with children in grades K-2; programs specifically targeted at reducing displacement of reading for older children are likely to be ineffective; the magnitude of displacement effects is small, and existing programs have not demonstrated their effectiveness. In light of the consistency of the viewing-achievement relationship and the fact that sheer consistency in multivariate studies is only one indicator of viewing-to-achievement causality, the impact of leisure viewing on these processes remains as the rationale for critical viewing programs at the elementary school level.

Other Dimensions of the Concept

As the previous review suggests there is more to the concept of media literacy than critical viewing, and there is more to critical viewing than the improvement of reading. Although the primary rationale for American intervention programs has been television’s potential impact on learning and achievement, there are other areas where the dual-edged sword of criticism and enhancement of learning have been applied. Aggression is one candidate for modification of television effects; the majority of critical viewing programs has attempted to heighten children’s awareness of the unreality and inherent danger of televised aggression. One intervention that has been praised because of its focus on media-depicted aggression and its consequences for imitation is Huesmann’s program, but even in light of his success, he warns about the intractability of aggressive media content (Huesmann, Eron, Klein, & Fischer, 1986). Other areas where arguments for effective intervention have been advanced include gender and ethnic stereotyping, and advertising. Virtually all critical viewing programs in Brown’s (1991) survey address gender and race issues but, again, from a critical or protectionist perspective. In the case of both gender and ethnicity, we can say that virtually every intervention program reviewed has demonstrated gains in awareness of television stereotypes and stereotypic and inaccurate portrayals. As is also the case with every program, we cannot say whether these gains persist beyond the few days, hours or weeks in their evaluation periods, or whether children transfer these lessons to everyday viewing. The same conclusion is true of advertising, but there have been many more programs with similar results: impressive but short-term gains.

Moving beyond the American model, Canada and Australia have implemented large-scale programs of media education that encompass all the goals of the American system but with the additional dimension that was earlier designated criticalideological. In Australia these programs have been in place, and recent evaluation data suggest that they have merit in terms of attaining some long-term goals (McMahon, & Quin, 1992). Their successful implementation is one factor in the development of a media literacy movement in the United States, led primarily by educators with some support by television networks and cable operators and moderate support by PBS affiliates in the larger cities. The major difference between the path to implementation in the United States and other countries is that in the United States there is far less consensus among the scholarly community for a need for media literacy intervention, and paradoxically, there is a greater reliance on the academic community for approval of such programs. The result is that grant proposal approvals and endorsements for the activists from the research community have not been forthcoming. One important reason for this tension is that media educational activists have focused on the deficit model, promoting their programs as prophylactics for a host of diseases that have not been supported by existing media research.
There is no doubt, however, that media literacy as an educational movement is “in the air.” In 1992 alone there were five international conferences on the topic; two at the Annenberg School for Communication at the University of Pennsylvania, and one each at the Aspen Institute in Maryland, in Guelph, Canada and in Bitburg, Germany.

What is clear from the interactions of researchers and activists at these meetings is that the goals of the groups have been so different, and their educations have differed so much that necessary dialogue among them will be a long time coming. One issue that has the potential to unite them is the temporary abandonment of the deficit model, and a shift toward an acquisition model.

One problem inherent in such a shift is that the deficit model gets good press; media literacy activists are the first to admit that public fear of negative media effects is a politically correct entry into program acceptance by school administrators and parents (Davis, 1992). Ultimately, an acquisition model would provide a framework for questions regarding issues such as (a) transfer—how lessons from entertainment and in-school viewing are, are not or could be applied to other domains of learning, (b) mental effort—how can viewers, listeners or users of CD-ROM, electronic games and so forth be stimulated to allocate more effort and attention to important content? and (c) can visual media production synthesize knowledge from other forms, for example, scriptwriting elicits reading skill and practice? These and other issues related to skill and information acquisition have the potential to unite the concerns of researchers, educators, and activists in ways that may prove fruitful for both producers and consumers of education.

What Research is Necessary?

The controversy surrounding the deficit model makes it a central priority for further research. The summary of work in the area cited earlier suggests that what we specifically do not need are more cross-sectional, correlational studies of relationships among leisure TV viewing, reading, and virtually every other indicator of scholastic achievement. Those data are in. What are necessary are some investigations that can assess the size of these relationships for significant population subgroups, and most important, nail down or at least disambiguate causality. A beginning step would be some longitudinal work. Earlier in this chapter a hypothesized critical period was invoked in an attempt to resolve some consistent lines of investigation into the relationships among media use and task persistence, practice in reading, math and other areas which may result in lowered abilities at later ages, where most of the current research is concentrated. If, as Anderson (1992) speculates, “It is possible that because young children find TV viewing easier than reading, that TV viewing displaces small but crucial amounts of leisure reading at the most critical ages” (p. 9), it is imperative that a time-series design with data points across the preschool years into grade 3 be employed. The work of Gadberry (1980) demonstrates the possibility that this work can be done, but her interrupted time-series analysis focused on only a few weeks of restricted viewing. Huesmann and Eron’s (1986) investigation (over 20 years between measurements) of early viewing and aggression demonstrates the “payoff” of a longitudinal approach, but what is needed to resolve the causal role of early TV viewing is a frequent measurement of a difficult-to-measure population in the most formative years.

A second area of research concerns the entire notion of passivity; as Anderson (1992) points out, we lack a conceptual definition of this state, therefore pioneering efforts at conceptualization and operationalization are necessary. Passive viewing is one of the key elements of the deficit model in lay circles and popular writing; as such, it has been used to justify a need for media literacy. Even as a fuzzy concept, it is integrally linked with a number of important issues in cognition. It is possible that ultimately, a psychophysiological approach could yield a proxy, but early efforts have not paid off.

Among other gaps in our knowledge about television’s relationship to education that were discussed earlier in the context of established knowledge is the issue of amount of viewing. It has seldom been adequately measured, but even with differential measures, it has traditionally been an independent variable. As such, its use has yielded a number of qualifiers of negative effects based on heavy viewing; even skeptics such as Neuman (1991) allow that it is heavy viewers who suffer the greatest deficit. If one of the goals of media literacy is to reduce the deficit, it is imperative that research designs examine the impact of viewer training on the amount and kind of viewing. There is an implicit assumption in the media literacy movement that critical viewing can alter everyday patterns of viewing, but little evidence for or against the assumption exists. Previous work suggests that the context most amenable to viewing modification is the family (Bryant, 1990). The role of the family in mediating television comprehension and enjoyment has long been investigated in the traditions of effects research, phenomenological and cultural studies but is seldom discussed with respect to media literacy. Since the viewing done at home is the major concern of the deficit arguments, the role of the family context in reinforcing and originating media education is crucial. What are needed are methods of providing systems models of media education, and theoretically sound evaluations of those methods.

The research agenda for the acquisition model is far less certain. As noted earlier, the issue of transfer is salient for educators and researchers: transfer of insights and information from television to other domains of knowledge, transfer of world knowledge to television, and transfer of media education from schools to everyday viewing. An important initial effort might examine the benefits of television scriptwriting as an exercise and as a measure of learning. Are scripts generated by the media-educated richer, more complex, more informative, more “visually literate” than those written by untrained writers? With respect to education issues, would a term paper...
be written and researched with more quality and thoroughness if it were assigned as a documentary script? One of the important issues in transfer is the perspective taking that is required of a scriptwriter; how can this information be presented in a manner that elicits attention, yet instructs? It is also important to examine some of the cognitive subskills that may underlie educational achievement. One author has suggested spatial perception and visual-verbal associational ability as areas that may benefit from visual literacy (Messaris, 1994). Adoption of an acquisition model as a research agenda does not mean that theoretical work becomes evaluation research. Inquiry into the maximization of media education potential has implications for a broader spectrum of emotion and cognition than has been addressed by the deficit model. We may explore the connections among thought, form and content in a brand new arena.

**What Media Education Might Become**

The majority of forecasts regarding the future of media in the past few decades has fared miserably, primarily because it was made in the economic “blue sky” of the 1950s and 1960s when all things were possible (Jassem, & Desmond, 1986). In the harsher light of the current global economy, poorly designed and administered programs of media literacy will go the way of marching bands and instruction in the arts—“extras” quickly and easily sliced from school budgets. Those that survive will require hard data on effectiveness from the research community, a difficult requirement in light of schisms between researchers and educator-advocates presented earlier. A great deal depends upon whether some good research is forthcoming; earlier suggestions represent a few possibilities, but theory building of the amount and kind from the research community, a difficult requirement in light of schisms between researchers and educator-advocates presented earlier. A great deal depends upon whether some good research is forthcoming; earlier suggestions represent a few possibilities, but theory building of the amount and kind witnessed in the search for connections between television and aggression or advertising and social behavior are necessary. In the past 20 years a number of models of the processes were developed, competition among them was partially resolved, new branches of the effects framework emerged, and just recently, recommendations have been heeded to some extent as evidenced by the Children’s Television Act of 1990. If the same sort of concentrated labor is exhibited by investigators of media literacy, the necessary funds, coordination of efforts and concomitant publicity may enliven our research and enlighten our children.

**References**


