

The Three-Hour Rule

Is It Living Up To Expectations?

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ACKNOWLEDGEMENTS

Jeffrey Stanger, who formatted the report;
Jennifer Goldstein, who catalogued tapes;
Mark Brewin, Carolyn Strom, Lubianska Espinosa, John Sindoni, and Rebecca Zeit, who were members of the coding team;
Amy Jordan, Senior Research Director, who provided guidance, was a member of the coding team, and critiqued drafts;
Kathleen Hall Jamieson, Dean of the Annenberg School, who edited this report

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EXECUTIVE SUMMARY

This report examines the quantity and quality of broadcasters' second year efforts at implementing the mandates of the FCC's "Three-Hour Rule." Reported here are analyses of the educational strength of E/I programs offered for children in one large media market in the northeast – Philadelphia – as well as E/I programs airing in other parts of the country. While other research at the Annenberg Public Policy Center examines the industry's response to the Three-Hour Rule from the perspective of those who work in and around children's television (Jordan, 1999), this study evaluates the extent to which the broadcasters' programs are, in fact, educational.

Our evaluation of the educational and informational offerings in the Philadelphia-area under the second year of the Three-Hour Rule reveals that...

- **The commercial broadcasters in the Philadelphia-area are continuing to air at least three hours a week of programming between the hours of 7:00am and 10:00pm.** The ten commercial broadcasters in the Philadelphia-area listed a total of 44 programs as meeting the FCC's requirements (3 episodes of each program were evaluated).
- **The commercial broadcasters' E/I programs focus on a variety of educational lessons.** Half of the programs focused on social-emotional issues with the remaining programs emphasizing school-related information, physical-health issues, or a combination of lessons. However, 75 percent of the programming provided by the major networks were narrative, pro-social programs for elementary school-age children.
- Using the Annenberg Public Policy Center's criteria for educational strength (in which lessons are salient, well-integrated, involving, and relevant to children's lives), **33.3 percent of the E/I programs airing in Philadelphia were considered "highly educational," 45.5 percent were considered "moderately educational," and 21.2 percent were considered "minimally educational."**
- The educational strength of programs offered in the 1998/99 season is proportionally similar to that offered during the 1997/98 season in the Philadelphia market. Approximately four-fifths of the offerings are educational under the letter and sometimes the spirit of the FCC regulations but **one-fifth of E/I programs have little or no educational value and fail to meet the guidelines set forth by the FCC.**

An evaluation of the amount and quality of E/I programs airing outside of Philadelphia indicates that...

- **The educational strength of the 91 programs (273 episodes) airing outside of Philadelphia was proportionally similar to that of programs airing in the Philadelphia media market.** Approximately one-quarter of E/I programs airing outside of Philadelphia were also minimally educational.

- **In addition to network-provided programs, we see four additional types of E/I programming airing outside of the Philadelphia media market: locally produced programs, religious programs, Spanish language programs, and other syndicated programs.**
- **Locally produced programs seem to be rapidly disappearing from the local broadcast stations' FCC filings.** Twenty-seven percent of those reported on a December 1997 or 1998 FCC electronic 398 report were no longer airing as core programming. This appears to reflect a continuation of the decline observed after the networks began offering three-hour lineups to their affiliates (Jordan & Sullivan, 1997).
- **There still appears to be confusion at some stations about what qualifies as an E/I program.** Although most of the stations air network-provided line-ups as core programming, several syndicated shows such as *Duck Tales* and *Hercules*, appeared on an FCC report even though the syndicator or network claimed they were not specifically designed to meet the educational needs of children.
- **E/I offerings by commercial broadcasters contain less violence than is typically found in children's programs.** Only 7.9 percent of all 405 episodes evaluated by APPC contained violence in three or more scenes, whereas roughly a quarter of children's programs airing on broadcast and cable stations contain a lot of violence (Woodard, 1999).

INTRODUCTION

The 1998/99 television season provides important indications of how the commercial broadcasters are implementing the mandates of the "Three-Hour Rule," which became effective in September 1997. The Federal Communications Commission guidelines define educational programming as "Programming that furthers the positive development of children 16 years of age and younger in any respect, including the child's intellectual/cognitive or social/emotional needs..." (FCC, 1991, p.2114). In addition, "core" educational programming must be specifically designed for children, have education as a significant purpose, be a regularly scheduled, weekly program of at least 30 minutes in length, and air between the hours of 7:00am and 10:00pm (FCC, 1996). Educational objectives and the target age of the child audience must be specified in the children's programming report and an on-air symbol must be included in programs to inform viewers of the commercial broadcaster's E/I efforts. Broadcasters must also provide information about E/I programs to listing services and have a station representative who can answer questions about core programming.

The research presented here reflects the broadcasters' second year efforts under the new programming rule. To determine how well broadcasters were meeting the spirit and letter of the rule, we tracked the quantity and quality of educational offerings on the commercial broadcast stations using criteria developed by the Annenberg Public Policy Center (see Jordan and Woodard, 1997; Jordan, 1998). Criteria for evaluating the educational strength of children's television programs were developed with the assistance of an advisory panel of experts in child development, education, and television production.¹

This report is divided into three sections. Part One examines core educational offerings and reporting practices of commercial broadcasters in a top ten media market in the Northeast: Philadelphia. Part Two focuses on the quality of E/I programs that are available elsewhere in the United States, including programming that is locally produced, airing on Spanish language stations, and religious networks. Part Three summarizes the current state of E/I offerings by the commercial broadcasters in light of research on the quality of children's television airing on broadcast and cable television (Woodard, 1999), APPC's annual spring survey (Stanger and Gridina, 1999), and the perspective of network executives, longtime observers and advocates of children's television (Jordan, 1999).

METHODOLOGY FOR ASSESSING COMPLIANCE

Commercial broadcasters' 1998-99 educational offerings were identified in three ways. First, calls were made to the ten commercial broadcast stations that comprise the Philadelphia media market to ascertain core programming provided by the networks. Next, the December 1997 and 1998 electronic FCC filings of core educational

¹ Members of the Advisory Panel on Educational Television include Daniel Anderson, Sandra Calvert, Eliot Larson, Valeria Lovelace, Ann McGillicuddy-DeLisi, and John Zimmerman. Members of the Advisory Council on Excellence in Children's Television include: Daniel Anderson, Ken Burns, Peggy Charren, James Corner, William Damon, Paula Danziger, Jonathon Kozol, Charles Ogeltree, Zena Sutherland, and Marta Tienda.

programs were examined (when available)² in an attempt to identify unique programs. Finally, calls were made to all of the stations that were airing programs (according to their most recent FCC report) that were not provided by a major network. If the program was still airing, contact information for the syndicator or local producer of the program was obtained. Networks, syndicators, programmers, and local producers were then contacted and asked to submit three episodes of each program title.³ An analysis comparing the programs taped randomly off the air (Woodard, 1999) with those submitted to APCC indicates that the programs are of similar educational strength.⁴ It should be noted that only one episode of *Awesome Adventures*, *Wild About Animals*, and *Vegetable Soup* and two episodes of *Talk Box*, *Kids Ideas*, and *Puppet Love* were evaluated due to taping difficulties or submission of less than three episodes. In order for these programs to be appropriately represented in the sample, the data from the episodes coded were duplicated to create three episodes. This data collection procedure resulted in a nationwide census of 405 E/I programs (135 individual titles) airing in different parts of the country.

A seven-member coding team was trained over the course of three months in the evaluation of the commercial broadcasters' educational offerings. Coders included four undergraduates majoring in Communication or English, one doctoral student at the Annenberg School for Communication, the Senior Research Investigator of the Children and Television Project, and the primary author of this report. Fifteen percent of the sample (61 programs) were double-scored to ensure intercoder agreement. All of the measures achieved acceptable levels of reliability.⁵

ASSESSMENT OF COMMERCIAL BROADCASTERS' REPORTING REQUIREMENTS

FCC guidelines implemented in January 1997 require the commercial broadcasters to inform viewers about their educational offerings through on-air identifiers, icons in listing services, and a representative at each station who can answer questions about core programming for children. The current status of each of these requirements will be addressed below.

² A difficulty in doing timely research is that accurate reporting is not consistently available and programming schedules frequently change. Stations are required to file their reports by the 10th day of the succeeding quarter. Therefore, December 1998 FCC reports should be available by January 10, 1999. As of February 3, 1999 only 832 of the stations had electronically filed. All 1,233 December 1997 reports were examined in addition to the December 1998 reports.

³ As can be seen in Appendix A, the only program provided by a major network that was not received was *NBA Inside Stuff*. Pax also did not submit programs. The majority of syndicated programs were received directly from the source, however it should be noted that syndicated programs taped off air were of lower educational strength than submitted programs (Chi square (2) = 39.80, p < .001). An additional twenty syndicated programs did not air in the Philadelphia area and therefore were not obtained, nine of which were in a foreign language and five of which were religious. Because many local programs could not be taped off air since they do not air in Philadelphia, only 66 percent of the sample was obtained.

⁴ One might expect a bias in the programs submitted to us in that they are their "best" episodes. A comparison of submitted tapes with those taped randomly off the air indicates that all but two programs were similar in their evaluation of lesson clarity and integration. Those two programs actually received lower scores on our evaluation than they did in Woodard's (1999) evaluation, possibly because the evaluation of educational strength is less vigorous in the Woodard analysis.

⁵ Inter-coder reliability was obtained using Holsti's formula. Each variable achieved a level of agreement of .74 or greater, with a mean agreement level of .87.

On-air Identifiers and Printed Listings

Broadcasters are required to place identifiers at the beginning of programs they consider to be "educational and informational" for children. As Jordan (1998) noted, the commercial broadcasters routinely use identifiers in the preceding moments or first few seconds of a program. However, the identifiers only air briefly and are often difficult to identify.

A notable exception is the E/I icon and introduction presented on TBN (a commercial broadcast station in some parts of the country). Before each program, a spokesperson states the target ages and curriculum goals of the program. The spokesperson also publicizes the existence and location of their children's programming reports and suggests contacting the children's television liaison at the local station to obtain more information about programs. Some programs airing on cable or PBS also carry the E/I icon, but these appear to be programs also airing on commercial broadcast stations (or previously airing) as core programming.⁶

Broadcasters are also required to inform listing services about educational and informational services. However, it seems that very few print media carry this information. In fact, the major television listing service -- [TV Guide](#) -- has stopped printing the E/I icon. Electronic access to program listings carrying the E/I label information is more readily available. TV listings provided on the World Wide Web by vendors such as [ClickTV](#) include the E/I label.

Station Representatives

An additional way that the public may obtain information about programs is through its local station representative (also called a children's television liaison). Calls to the ten commercial broadcast stations in Philadelphia requesting the children's television liaison (frequently the station manager or director of programming) were mostly successful. The exceptions to this include the local Pax-affiliate, who did not have anyone to speak with about children's programming. Additionally, three of the calls to affiliates were initially responded to with confusion, but with persistence I eventually spoke with someone who had some knowledge about children's programming. In sum, there were numerous instances where it was neither easy nor direct to get information about children's core programming.

⁶ Programs observed on PBS or Disney that were carrying the icon include: *Sing Me a Story with Belle*, *Bloopy's Buddies*, and *Bill Nye the Science Guy*, programs that also air on commercial broadcast stations through syndication.

PART ONE: COMMERCIAL BROADCASTERS' E/I OFFERINGS IN PHILADELPHIA

This section focuses on the quality and quantity of E/I offerings in Philadelphia, a top ten media market in the Northeast. The E/I programs included in these analyses are those shows listed as educational and informational (E/I) and airing during times specified under the FCC's guidelines for core programming, 7:00am – 10:00pm.

Hours of programming

Core educational offerings were obtained by calling the ten commercial broadcast stations – affiliates of ABC, CBS, Fox, NBC, UPN, WB, Home Shopping Network (HSN), Pax, and two independent stations.⁷ Program schedules were cross-checked with TV Guide listings as recently as May 1999. Spring schedules have only changed slightly from fall 1998 schedules, with the exception of the Pax network, which dropped their “Cloud Nine” block hosted by teen angels. Their programming block is now called “Pax Kids.” The only change made by a major network was the substitution of *Rupert* in place of *Franklin* (which is now airing on Nickelodeon). Additionally, the Fox affiliate was airing *Life with Louie* twice a week but has replaced it with a second daily episode of *Magic School Bus*.

As Table One indicates, all of the commercial broadcast stations in the Philadelphia area offer a minimum of three hours of educational and informational programming for children between the required hours of 7:00am – 10:00pm. In fact, slightly more than half (60 percent) of the stations offer more than the required three hours worth of programming. As a result, during a typical week in May 1999, 42.5 hours of educational and informational programming were offered to children by the ten commercial broadcasters in Philadelphia.

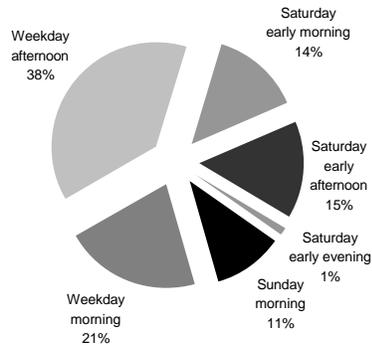
⁷ Calls to the newer networks resulted in inadequate (affiliates of Home Shopping Network and UPN) or inaccurate information (Pax-affiliate). This may be because I was not connected with the appropriate station representative.

Table 1: Philadelphia Commercial Broadcasters' Core Educational Programming 1998/99

Network/ Channel	Core Educational Programs	Target Age	Air Time	Program Source
CBS (KYW-3)	Rupert	3 to 7	11-11:30 Sat	CBS
	Anatole	5 to 9	11:30-12 Sat	CBS
	Dumb Bunnies	5 to 10	12-12:30 Sat	CBS
	Flying Rhino Jr. High	6 to 9	12:30-1 Sat	CBS
	Birdz	8 to 10	7-7:30 Sun	CBS
	Mythic Warriors	9 to 11	7:30-8 Sun	CBS
ABC (WPVI-6)	One Saturday Morning (Doug, Recess, Pepper Ann)	8 to 12	8:30-10:30 Sat	ABC
	New Winnie the Pooh	3 to 6	11:30-12 Sat	ABC
	Squigglevision	7 to 11	11-11:30 Sat	ABC
	101 Dalmations	7 to 11	8-8:30 Sat	ABC
NBC (WCAU-10)	Saved by the Bell:	13 to 16	10-10:30 Sat	NBC
	The New Class			
	Hang Time	13 to 16	10:30-11	NBC
	Hang Time	13 to 16	12:30-1 Sat	NBC
	One World	13 to 16	11-11:30 Sat	NBC
	City Guys	13 to 16	11:30-12 Sat	NBC
NBA Inside Stuff	13 to 16	1-1:30 Sat	NBC	
FOX (WTFX-29)	Magic School Bus	6 to 9	2-2:30 M-F	Fox
	Magic School Bus	6 to 9	2:30-3 M-F	Fox
	Popular Mechanics for Kids	6 to 14	10-10:30 Sun	Syndicated
	Bill Nye the Science Guy	9 to 11	7:30-8 Sat	Syndicated
WB (WPHL-17)	Histeria!	6 to 12	3:30-4 M-F	WB
	Histeria!	6 to 12	11:30-12 Sat	WB
	Brand Spanking New Doug	8 to 12	7:30-8 M-F	Syndicated
	Homer's Workshop	6 to 14	7-7:30 Sat	Syndicated
	Lionhearts	6 to 11	7:30-8 Sat	Syndicated
Independent (WGTV-48)	Young Americans Outdoors	13 to 16	7:30-8 Mon	Syndicated
	Critter Gitters	4 to 14	7:30-8 Tues	Syndicated
	Field Trip	6 to 11	7:30-8 Wed	Syndicated
	Wild About Animals	6 to 16	7:30-8 Thurs	Syndicated
	Awesome Adventures	12 to 16	7:30-8 Fri	Syndicated
	Peer Pressure	13 to 16	12:00-12:30 Sun	Syndicated
	Click	13 to 16	12:30-1 Sun	Syndicated
UPN (WPSG-57)	California Dreams	13 to 16	3:30-4 M-F	Syndicated
	Saved by the Bell	12 to 16	4-4:30 M-F	Syndicated
	Algo's FACTory	9 to 14	2:30-3 F	Network
PAX (WPPX-61)	Sylvanian Families	5 to 9	7-7:30 Sat	Network
	Inquiring Minds	6 to 10	8:30-9 Sat	Network
	Inquiring Minds	6 to 10	7:30-8 Sun	Network
	Adventures of Swiss Family Robinson	6 to 10	8-8:30 Sat	Network
	Adventures of Swiss Family Robinson	6 to 10	7-7:30 Sun	Network
	Get Along Gang	5 to 9	7:30-8 Sat	Network
HSN (WHSP-65)	New Zoo Revue	4 to 9	7:30-8:00 Sun	Syndicated
	Jack Houston's Imagineland	3 to 6	8:00-8:30 Sun	Syndicated
	Vegetable Soup	5 to 12	7:00-7:30 Sun	Syndicated
	Musical Encounters	6 to 12	8:30-9:00 Sun	Syndicated
	Musical Encounters	6 to 12	9:00-9:30 Sun	Syndicated
	Young America Outdoors	13 to 16	9:30-10:00 Sun	Syndicated
Independent (WFMZ-69)	Bloopy's Buddies	2 to 6	7:30-8 M-F	Syndicated
	Critter Gitters	9 to 14	7:00-7:30 R	Syndicated
	Critter Gitters	9 to 14	4:30 Sun	Syndicated
	Field trip	6 to 11	7:00-7:30 Tues	Syndicated
	More than a Game	11 to 16	5-5:30 Sun	Syndicated
	Animal Adventures	12 to 16	7:00-7:30 Wed 5:30-	Syndicated
	Animal Adventures	12 to 16	6:00 Sat	Syndicated

Although the amount of E/I programming available to children in Philadelphia has remained relatively stable since the initial assessment conducted in January 1997,⁸ the Three-Hour Rule set forth by the FCC has effectively increased the number of programs available to children during hours when they are likely to watch (Jordan, 1998; Jordan and Woodard, 1997). Before implementation of the guidelines, many of the E/I programs were aired in the pre-dawn hours (see Jordan and Woodard, 1997; Jordan and Sullivan, 1997). The current season's programs can be found throughout the day and throughout the week. Although the major networks tend to package their programming into a block on Saturday and Sunday mornings (e.g., ABC's "One Saturday Morning", CBS's "Kidshow", and NBC's "TNBC"), over half of educational and informational programming can be found on weekdays (58.83 percent).

Figure 1: Airtimes of E/I Programs



Where are the local broadcasters getting programs?

Approximately half of the programs airing in Philadelphia were provided to affiliates by the networks (54.5 percent) with the remainder coming from syndicators (45.5 percent). ABC, CBS, NBC, Fox, WB, and Pax all provide their broadcast affiliates with a full three hours' worth (or more) of educational programming. The Fox and WB affiliates furnish programming beyond the three hours by airing syndicated programs in addition to those provided by the network. One half-hour of the UPN-affiliate's block was received from the network, with the remainder syndicated programs. The HSN-affiliate and two independent stations air syndicated programs as their core educational programming. None of the Philadelphia commercial broadcast stations air locally produced programs as core educational programming. Some local educational programs were aired in addition to the three hours either in the early morning hours (pre 7am) or on an irregular basis. These local programs cover a variety of issues including insights into Native American culture and highlights of local school athletes.

⁸ This amount is higher than that of the 1997-1998 season due to the addition of two new networks (Pax TV and HSN) and an independent station.

Who are they for?

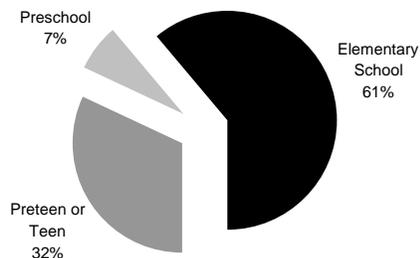
The commercial broadcast stations are required to indicate the target age for their educational programs. The majority (94 percent) of the programs targeted an age range of three to six years. Only a handful of programmers or producers indicated that the target age was "all children" or "two- to twelve-year-olds." This indicates an improvement over last year when one-quarter to one-third of the shows targeted a wider age range.

The information provided by the broadcasters about appropriate audiences was used to classify the target age of each program. Programs' target audience was recoded as "primarily preschool" (0 to 4 years), "primarily elementary school" (5 to 11 years), or "preteen/teen" (12 to 16 years). Programs spanning two or more age groupings were reclassified based on content and/or air times.

Similar to previous years, the majority of programs are offered to elementary school-age children. However, there was a decrease this year in programming for preschoolers – only three programs primarily intended for preschoolers air in the Philadelphia market, one of which was provided by a major network (*New Adventures of Winnie the Pooh*). This may be due to a hesitation on the part of broadcasters to label programs as appropriate for preschoolers. At least some advertisers feel that preschoolers are not a legitimate market (Jordan, 1996). In fact, numerous studies indicate that children do not understand advertising's selling intent and biased nature until they are eight years of age or older (see Adler et al., 1980). Thus, there may be more programs for preschoolers than these numbers suggest, but they are labeled as appropriate for elementary school-age children.

This year also produced an increase in E/I programming for preteens and teens. This includes programs such as *More Than A Game*, *Awesome Adventures*, and *Wild About Animals*. However, some of the programs in this category did not appear to gear their program specifically towards a child audience, which may be a reflection of the way this age group is viewed by broadcasters.

Figure 2: Target Audience for Philadelphia E/I Programs



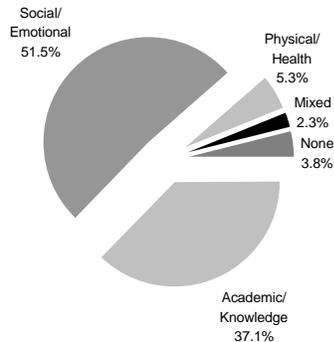
What do E/I programs look like?

Teen programs tend to be live action programs (such as *Saved by the Bell: The New Class*) where the majority of programming for elementary school-age children consisted of animated cartoons (such as *Doug* or *The Lionhearts*).⁹ Although most programs still consist of sitcoms (e.g., *Hang Time*) or action adventure programs (e.g., *New Adventures of Captain Planet*), other options include programs not typically found on commercial broadcast stations before the Children's Television Act of 1990 (Kunkel, 1993). There are now a variety of programs available to children such as news or magazine programs (e.g., *Inquiring Minds*), programs designed to stimulate music appreciation (e.g., *Musical Encounters*), game shows (e.g., *Click*) and a program designed to increase interest in nature and the outdoors (e.g., *Young America Outdoors*).

What are the shows teaching?

Three episodes of the 44 programs (132 episodes) were coded and evaluated according to the primary educational lesson in the program. Approximately one-half (51.5 percent) of the programs focused on social-emotional issues. Indeed, 75 percent of the programs provided by the networks are prosocial in nature. Programs such as *Hang Time*, *Pepper Ann*, and *Flying Rhino Junior High* fell into this category. Traditional academic or knowledge lessons were the focus of another one-third of the programs. *Magic School Bus*, *Bill Nye, the Science Guy*, and *Squigglevision* taught scientific lessons, while *Histeria!* emphasized historical facts and *Mythic Warriors* focused on Greek mythology. Several animal programs – *Animal Adventures* and *Wild About Animals* – and game shows – *Click* and *Peer Pressure* – also fell into the “traditional academic” category. Physical or health lessons were the primary theme of 5.3 percent of the programs, including two episodes of *Saved by the Bell: the New Class* (exploring the consequences of cigar smoking and sleep deprivation) and *NBA Inside Stuff* (providing information about basketball). Only 2.3 percent of the programs emphasized two or more lesson types equally.¹⁰ Major networks were most likely to provide programming with social lessons while the independent stations were more likely to provide academic/knowledge lessons.¹¹

Figure 3: Primary Lesson of E/I Programs Airing in Philadelphia



⁹ Chi square (4) = 69.19, p < .001.

¹⁰ The distribution of lesson types was almost identical to last year. All numbers were within 5 percentage points.

¹¹ Chi square (3) = 14.55, p < .01

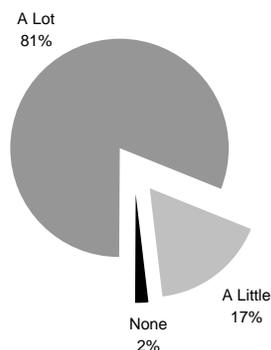
Other elements of E/I programs

It is important to determine what programs deemed “educational” are implicitly teaching children. Because children receive messages about the world from the characters portrayed on TV, programs may be reinforcing children's ideas that certain activities and behaviors are only for one sex or one ethnic group. Conversely, research indicates that children benefit from seeing ethnically diverse characters and unique gender portrayals (Greenberg and Brand, 1994).

Gender images in children's television are often even more stereotyped than in programs targeted to adults (Feldstein and Feldstein, 1982). Minority characters have also been consistently underrepresented in children's programming. One analysis of Saturday morning cartoons on the major networks found that Caucasian males dominate television programs, with minorities appearing primarily in minor roles (Calvert, 1994). Educational programming for children is also typically male-dominated, with programs with male hosts such as *Mister Rogers* and *Captain Kangaroo* (Cantor, 1977). Female hosts and lead characters are more common now, such as the lead character in *The Secret World of Alek Mack* or the host of *Nick News*, but whether this trend carries over to educational programming in general remains to be seen.

Gender diversity was evaluated by assessing whether programs contained both boys and girls in major and minor speaking roles. 81.1 percent of the programs had female TV characters in both major and minor roles with another 16.7 percent having little gender diversity (a token female or male or only minor characters of one gender). Only one program (2.3 percent) had no diversity, an animated program where animal characters all had male voices.

Figure 4: Gender Diversity in Philadelphia E/I Programs

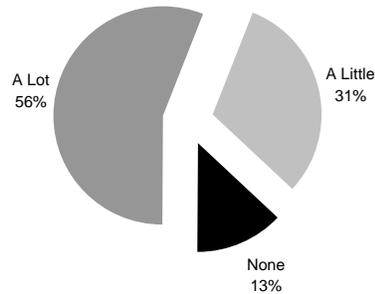


Coders also evaluated whether the programs included characters of different races and ethnicity. Almost one-fourth of the programs contained characters whose ethnicity could not be coded because they were not human (for example, animals,¹² muppets, or anthropomorphized objects). Of the remaining programs, 55.8 percent contained a lot of ethnic diversity, 30.8 percent contained a token minority or minorities only in minor roles where 13.5 percent of the programs did not contain any minorities. Thus, nearly half of the programs that have the potential to provide children with different images of

¹² Even though animals may have ethnic markers, we decided only to code ethnicity if at least three human characters were present due to difficulties in obtaining reliability.

people fail to realize that potential. Programs for teenagers were more successful in this regard than programs for elementary school-age children.

Figure 5: Ethnic Diversity in Philadelphia E/I Programs



These numbers for gender and ethnic diversity are similar to those found in the national sample of E/I programs. However, religious programs contained less gender and ethnic diversity and Spanish programs contained less ethnic diversity.¹³ Comparisons of diversity in the Philadelphia E/I sample with the general sample of children's programs (Woodard, 1999) indicate that there is more diversity in E/I programs.

Many in the policy, academic, and advocacy communities believe that violent messages detract from children's learning of educational messages. Because violent scenes frequently contain a lot of attention getting production techniques (e.g., loud noises, action, character movement), young children may be particularly attentive to such content (Schmitt, Anderson, and Collins, in press). In addition, children learn to use aggression in resolving conflicts in viewing TV characters employing violence and aggression (Hearold, 1986; Huesmann and Eron, 1986; Paik and Comstock, 1994), a lesson that may counter the educational intent of the show.

Coders evaluated whether programs contained "a lot" of violence in three or more scenes. Violence was defined as "the overt depiction of an intentional and/or malicious threat of physical force or the actual use of such force intended to physically harm an animate being or group of beings." A small amount of the E/I programs airing in Philadelphia contained a lot of violence (12.1 percent). All of the programs containing violence were provided by the networks.¹⁴

¹³ The overall ANOVA on gender diversity, $F(4, 400) = 3.49, p < .01$ and Dunnett's post-hoc test, $t(96.32) = 3.01, p < .01$ were significant. The overall ANOVA on ethnic diversity, $F(4, 348) = 5.39, p < .001$, Dunnett's post-hoc test comparing the Philadelphia sample with Spanish language programs, $t(30.71) = 3.09, p < .01$ and Dunnett's post-hoc test comparing the Philadelphia sample with religious programs, $t(111.84) = 3.40, p < .01$ were significant.

¹⁴ Of all 405 episodes, 7.9 percent contained violence. Only 2 episodes (1.6 percent) of locally produced programs (both were from *The Bozo Super Sunday Show*) contained a lot of violence.

But are the E/I programs truly educational?

Educational strength of the primary lesson was evaluated using a series of four questions. These questions were developed based on the FCC's definition of educational television, and operationalized in consultation with the APPC advisory panels.

The "objective" portion of the scale consists of four questions (combined score ranges from 0 to 4).¹⁵

- Lesson Clarity: Is the message clearly and explicitly laid out so that it can easily be comprehended by the target audience?
- Lesson Integration: To what degree is the lesson a salient aspect of the program? Are the lessons consistently conveyed throughout the program and integral to the program as a whole?
- Lesson Involvement: Keeping in mind the target age for the program, consider the following three questions: Do children or child-like characters of the target audience's age have significant roles? Are the majority of production techniques understandable? Is the lesson "on-target" (that is, neither too easy nor too difficult)?
- Lesson Applicability: Is the target audience shown carefully conveyed, realistic situations and solutions it can apply?

Coders also provided a subjective assessment by making an overall judgment of the program's "educational quality." Programs were judged as either "highly educational" (engaging, challenging, relevant to the target age group), "moderately educational" (contains educational content but has some problems), or "minimally educational" (does not appear to have education as a significant purpose and is a surprising choice for the E/I label). Objective and subjective measures were highly correlated, $r = .74$, $p < .01$.

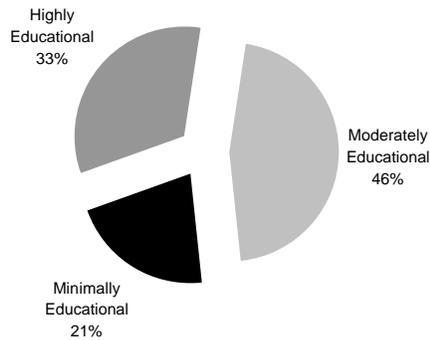
The combined scores on the objective measure (0-4) and subjective measure (0-2) were equally weighted and summed to produce an overall numeric score for "educational strength." Programs were then recoded as "Highly educational" (score of 6.67-8), "Moderately educational" (score between 3.34 and 6.66), or "Minimally educational" (score between 0 and 3.33).

The Availability of High Quality Programs

The overall measure of educational strength for the 132 programs produced the following distribution: 33.3 percent of the programs were considered highly educational, 45.5 percent were considered moderately educational, and 21.2 percent were considered minimally educational.

¹⁵ Each question was scored as present (1) or absent (0) with the exception of lesson involvement which was given a score of 0, .33, .67, or 1 depending on whether the 3 criteria were met.

Figure 6: Educational Strength of E/I Programs Airing in Philadelphia



Based on the rating given to each program (see Appendix One), the amount of FCC-qualifying programming airing during a typical week can be determined. The majority (79 percent) of E/I programming provided to children in Philadelphia does meet the guidelines of the FCC processing guideline known as the Three-Hour Rule. In a typical week, however, 4.5 of the 42.5 hours contain little or no educational value. These minimally educational programs failed to meet the benchmarks established by the Annenberg Public Policy Center. In these programs, no discernable lesson could be found or the attempts to convey information to the target audience were judged to have failed. Thus, these programs are evaluated as meeting neither the spirit nor the letter of the law.

There were no significant differences in the educational strength of programs addressed to children of different ages. There was a significant difference in the educational strength of programs available on different commercial broadcast stations.¹⁶

Lesson type was also significantly related to educational strength -- programs having knowledge/information as their main lesson (such as *Magic School Bus*, *Popular Mechanics for Kids*, *Inquiring Minds*, and *Bill Nye, the Science Guy*) received higher scores than programs emphasizing social/emotional skills.¹⁷

Use of an Educational Advisor or Researcher

One by-product of the Three-Hour Rule is the increasing employment of child development or education experts in the development and/or selection of an E/I show (Jordan, 1999). A consultant or researcher can provide the programmer with information such as determining whether certain topics are feasible, what children understand, whether they are interested in certain topics, and the program's potential effectiveness.

¹⁶ $F(9, 134) = 2.87, p < .01$. The largest difference was between the Fox affiliate (all programs were considered "highly educational") and the Pax station (1.5 hours of the three hour block were considered "minimally educational"). It is worth noting, however, that Pax does air one of the highest scoring educational programs provided by a network, *Inquiring Minds*.

¹⁷ Chi square (2) = 5.80, $p < .05$

Listing an educational consultant in the credits¹⁸ (41.7 percent of the sample) did not substantially improve the strength of a program, however programs with a consultant listed were somewhat more likely to receive a moderate over a minimal rating. Although far fewer programs listed a researcher in the credits (12.1 percent), use of a researcher was strongly related to educational strength.¹⁹ In fact, none of the programs listing a researcher in the credits received a minimally educational rating.

The Use of Websites Related to E/I Programs

Children live in a multi-media environment and can be reached through a variety of venues (Stanger and Gridina, 1999). Several producers recognize this fact and have a website associated with their programs. Coders assessed whether the program contained a website address for each program. As such, a website address for a network (e.g., www.cbs.com) was not recorded but a website address for an individual program was (e.g., www.fieldtrip.com). Of the E/I programs airing in Philadelphia, 33.3 percent have a program-related website.²⁰

¹⁸ It should be noted that educational consultants are not always listed in the credits. Therefore, one problem with this analysis is that shows that are more explicitly educational may list a consultant.

¹⁹ Chi square (2) = 9.29, $p < .01$. This finding also held up with the national sample, however, a game show in the national sample did employ a researcher (of math and science facts) and receive a minimally educational rating.

²⁰ This trend appears to be true of E/I programs in general -- in the national sample of E/I programs, 27.4 percent have a program-specific website. Also, websites exist that are not promoted in the programs or listed in the credits. Since kids are less likely to find these, we did not attempt to find these websites.

PART TWO: COMMERCIAL BROADCASTERS' E/I OFFERINGS IN OTHER LOCAL MARKETS

Of the 1077 commercial broadcasters whose FCC reports were analyzed last year (Jordan, 1998), 68.7 percent were affiliated with a major network (ABC, CBS, Fox, or NBC), 10.1 percent were affiliated with a weblet (UPN or WB) and 1.2 percent were affiliated with the Home Shopping Network. Philadelphia can be treated as a representative market because most of what is offered by the network affiliates also airs in Philadelphia. The majority of network-affiliated stations in Philadelphia clear the block of programs provided to them.

Nevertheless, network affiliates of Telemundo, Univision, Worship and TBN²¹ are not found in Philadelphia. Additionally, 13.2 percent of the broadcast stations nationwide are independents. This section provides an additional examination of the amount and quality of 273 programs (91 individual titles) available outside of Philadelphia. Nearly half of the nationally acquired programs (46.1 percent) were locally produced. The remainder came from Telemundo/Nick Latin America (11.2 percent) or a syndicator (42.7 percent).²²

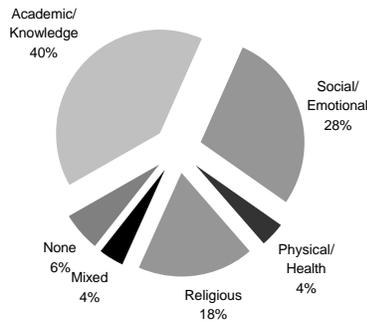
In general, what do the programs look like?

Consistent with the results for the Philadelphia E/I sample and the general assessment of all children's programs available in Philadelphia (Woodard, 1999), the audience of choice for these additional E/I producers is elementary school-age children (56 percent). The next most popular age group is teenagers (27.5 percent), rounded out with programs for preschoolers (16.5 percent).

The primary goal or lesson type of the national sample was examined. While the most popular kind of program conveyed academic or knowledge lessons, a surprising 27 percent of the programs endeavored to teach children about religious or biblical passages. Social lessons were much less frequent in the nationwide sample than in Philadelphia. Overall, a greater mix of lesson types is observed.

In general, educational strength was similar to that of programs found in Philadelphia.

Figure 7: Primary Goal of Nationwide E/I Programs



²¹ TBN is a cable station in Philadelphia but 3.2 percent of the 1077 commercial broadcast stations were affiliates.

²² As indicated in Appendix One, some programs were taped off air.

What do locally produced E/I programs look like?

Although the Philadelphia commercial broadcasters affiliated with major networks receive all of their core programming from their networks, approximately six percent of the 1233 commercial broadcasters filing quarterly reports were airing a locally produced E/I show. There were a total of 89 locally produced core programs on a December 1997 or 1998 FCC 398 report.²³ Some of these programs were locally produced but airing in more than one market. Producers and programmers were contacted and asked to submit three episodes of each program. Phone calls to station representatives determined that 24 of the locally produced programs (26.97 percent) reported on a quarterly report were no longer airing as core programming. Thus, the decline in local programming observed by Jordan and Sullivan (1997) after the networks began offering three-hour lineups appears to be continuing.

129 episodes (43 individual titles) of locally produced programs were examined in terms of quality and quantity.²⁴ Presumably, these programs are of higher quality than the locally produced programs not submitted (since they were still airing and someone took the effort to send them in).

Locally produced core programming submitted to APPC looks quite different from that provided by the networks. All of the programs (100 percent) are live action programs with the majority (85 percent) designed to convey a lesson in an expository manner (as opposed to telling a story). Most of the programs contained academic or knowledge lessons (81.1 percent). For example, in one program children were involved in a competition to find things indigenous to the state of North Carolina while children in another program learned about HIV, AIDS, and a local teen who lives with the virus. Nevertheless, primary lessons generally concerned topics of relevance to children everywhere. For example, one program explored topics ranging from skiing to cooking to conserving water to zoo animals. Nevertheless, even sub-lessons frequently incorporated community interests or events.

Are they educational?

The educational strength of locally produced programs was quite similar to that of the syndicated and network programs airing in Philadelphia. The majority of the programs was moderately educational (53.5percent), however, there were fewer highly educational programs (21.7 percent vs. 33.3 percent). Approximately the same proportion of locally produced programs was minimally educational (24.8 percent vs. 21.2 percent). Nevertheless, the sum educational strength measure (rated on an 8-point scale) of locally produced programs was slightly lower than that of programming airing on the major networks and weblets. When one considers the more limited resources, which sometimes translated into poor production techniques, it is impressive to note that three locally produced programs were among the 10 top scoring programs overall.

²³ Additional locally produced programs were airing in Mandarin Chinese or Tagalog such as the program *Yan ang Bata* (KIKU) which teaches Filipino values and traditions.

²⁴ Therefore, we were successful in obtaining 66.15 percent of the identified locally produced programs airing during the 1998/99 season.

What do Spanish-language E/I programs look like?

Spanish language stations provide an important resource for the 10.6 million children of Hispanic origin residing in the United States (U.S. Dept of Commerce, 1998). Approximately three percent of commercial broadcast stations nationwide are affiliated with Telemundo or Univision. The majority of these stations air the programming provided to them by the networks. Thus, the sample of 24 programs (eight individual titles) is relatively small.

There does not appear to be much variability in what is available to Spanish speaking children as core E/I programming.²⁵ No programming is available for teenagers. Two of the three programs intended for preschoolers are of exceptionally high educational strength (*Plaza Sesamo*[*Sesame Place*] and *Pistas de Blue*[*Blue's Clues*]). The other programming is aimed at elementary school-age children and presents a variety of lessons in different formats. Most of the elementary school-age programs are well-known programs translated from English. The quality of these programs is equally likely to be of moderate or low quality. This is due to the inclusion of programs as core programming that were judged to entertain but not inform (for example, *Rugrats*).²⁶ In fact, 25 percent of the Spanish E/I programs could not be considered educational by APPC standards.

What does religious E/I programming look like?

A significant number of religious programs is being aired across the country as core educational programming. Approximately five percent of commercial broadcast stations are affiliated with a religious network -- stations which, though non-profit, still must abide by FCC regulations. Some of the religious programs included in our evaluation were *Becky's Barn*, *Colby's Clubhouse*, *Faithville*, *Flying House*, *Gerbert*, *Nana Puddin'*, *Quigley's Village*, and *Superbook*.

Of the programs obtained, 72 episodes (29 individual titles) were coded as having a religious lesson as their main lesson. Approximately half also had a social lesson (62.5 percent). Only 27.5 percent of the programs also contained an academic or knowledge lesson or a physical/health lesson (8.3 percent). The lessons contained messages such as the importance of patience, loving each other, feeling good about oneself, and perseverance. Some programs, such as *Al Densons' Studio 828*, explore other issues important to teenagers, such as the causes and effects of eating disorders.

Are they educational?

Of the programs containing a religious lesson, almost all were classified as moderately educational (77.9 percent). A much smaller percentage of the programs was considered highly educational (13.9 percent) or minimally educational (8.3 percent).

²⁵ Spanish programs requested but not submitted (e.g., *Twinkle*, *Widget*, *Sky Dancer*, and *Buboheata*) were only airing on one station.

²⁶ Alternative E/I foreign language programming was not obtained because it was not submitted or we did not have a coder able to understand the program.

The small amount of minimally educational programs may be due to the fact that religious programs, by default, almost always contain a lesson that is well-integrated (that is, consistently conveyed throughout the program). However, these programs had some difficulty conveying the message effectively, especially in terms of production techniques. For example, some of the programs used old style animation techniques with still pictures presented with character voice-overs. Perhaps most disturbingly, two of the programs in the sample appeared to be program length commercials.²⁷

What do syndicated programs airing outside of Philadelphia look like?

Several syndicated programs aired outside of Philadelphia. Fifty-seven programs (19 individual titles) were examined. These programs were equally likely to contain social and academic lessons.

Nearly half of the shows were of high quality – in fact, 10 of them had average educational strength scores above 7.0 (on an 8-point scale). Four of these programs, *Feed Your Mind*, *New Adventures of Captain Planet*, *Barney* and *Talk Box* are only aired on one commercial broadcast station.

Also included in this category, however, are programs that were judged to have little or no educational value – programs such as *Jumanji*²⁸ and *Pocket Dragon Adventures*.

There still appears to be confusion at some stations about what qualifies as an E/I program. Several syndicated programs were listed as E/I on a FCC report but when contacted, the syndicator reported that the program is not an educational program for children. For example, after determining that a station was airing *Duck Tales* as core educational programming, a call was made to Disney to request the program. The request was met with disbelief that the program was being aired as educational programming. In fact, several programs were deemed “not specifically designed to educate”²⁹ or “not for children” by the syndicator. Such listings, though infrequent, harken back to the days when *The Jetsons* was listed as educational (Center for Media Education, 1992). Additionally, there are still questionable claims on some station reports such as the listing of a program based on a video game, *Super Mario Brothers* as “illustrating good versus evil... by showing the bad side of greed.” Thus, of the syndicated programs airing outside of Philadelphia identified in FCC reports as “educational and informational” for children, 13 should not be considered core programming.

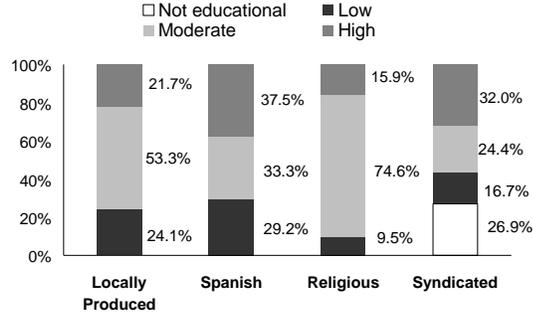
Additionally, some station representatives made dubious claims about core programming over the phone (e.g., saying they were airing *Ah! Real Monsters*), which when checked with FCC reports, was inaccurate.

²⁷ One of these programs contained music videos where the only discernable message might be “Praise the Lord.” One episode of this particular program, *Carman's Video Gold*, also asked children to contribute money if they wanted to continue seeing the show.

²⁸ The FCC report lists the educational objective of this program as illustrating how characters “survive the jungle by being creative and athletic.”

²⁹ Programs identified by the syndicator as not specifically designed to meet the educational and informational needs of children: *Animal Rescue*, *Dinobabies*, *Duck Tales*, *Hercules*, *Jungle Cubs*, *Mr. Men*, and *Puzzle Club*. One program was identified by the syndicator as not being specifically designed for children: *Dave Chalk's Computer Show*.

Figure 8: Educational Strength of E/I Programs Airing Outside of Philadelphia



Overall, what does an educational program look like?

In this national census of core E/I programming available to children, approximately three-quarters of the programs were considered likely to enhance the healthy development of children. Approximately one-quarter of those programs were considered highly educational.

The top 26 programs in the overall scoring for the 135 educational programs in the sample all scored an average rating of at least 7.0 on an 8-point scale. These programs are listed below.

The first eight programs listed received perfect scores on the objective and subjective measures across all of the episodes sampled:

- Magic School Bus (Fox)
- Bill Nye The Science Guy (Syndicated)
- Nick News (Syndicated)
- Plaza Sesamo (Univision)
- Barney and Friends (KAUT)
- UP’N Running (WPWR-TV)
- Pista de Blue (Telemundo)
- Talk Box (Syndicated)
- Brain Stew (WTKR)
- Get real! (WISC)
- New Zoo Revue (Syndicated)
- Feed Your Mind (Syndicated)
- Real Life 101 (Syndicated)
- Saved By the Bell: The New Class (NBC)
- Secrets of the Animal Kingdom (Syndicated)
- Inquiring Minds (Pax)
- New Adventures of Captain Planet (Syndicated)
- Popular Mechanics for Kids (Syndicated)
- Hang Time (NBC)
- Quigley’s Village (TBN)
- HyperTek (KRON-TV)
- Al Denson’s Studio 828 (Syndicated)
- The Reppies (Syndicated)
- Androgena (WRAL)
- Pepper Ann (ABC)
- Awesome Adventures (Syndicated)

There are a number of interesting aspects to this list. First, the programs are diverse with respect to genre and target age. The majority contained academic or knowledge lessons, but subject matter ranged from information about careers (*Real Life 101*), science lessons (*Magic School Bus*, *Brain Stew*), magazine/variety programs (*Nick News*, *Inquiring Minds*, *Get Real!*), technology information (*HyperTek*) to information about animals (*Secrets of the Animal Kingdom*). A few prosocial programs made the list, including a talk show for teens dealing with social and moral issues (*Talk Box*), situation comedies (*Saved by the Bell: The New Class*, *Hang Time*) and a narrative featuring a 12-year-old girl who demonstrates the importance of individuality and intelligence (*Pepper Ann*).

Although the programs in the list are a diverse group in terms of content, the programs do have several common elements. All of the programs contained a clear lesson that was well integrated throughout the show. The programs were generally successful at involving kids and using appropriate production techniques. One factor that distinguished the highly educational from the strong moderately educational programs was that these programs were more effective in being "applicable" to children's lives. In highly educational shows, the target audience was shown carefully conveyed, realistic situations and solutions that could be applied to children's own lives. They were also more successful at giving children tools that they could use in solving problems or dealing with emotions. For example, in one program children learn about pollution solutions they can employ: recycling, using things that are biodegradable, picking up trash and making others aware of how they are affecting the environment.

What does a minimally educational program look like?

Approximately one-quarter of the E/I programs evaluated in the 1998-99 season were considered minimally educational.

The lowest rated programs were (Listed alphabetically):

- Adventures of Swiss Family Robinson (Pax)
- Anatole (ABC)
- Bananas in Pajamas (Syndicated)
- Click (Syndicated)
- Hollywood Video High 5 Challenge (KPTV)
- Jumanji (Syndicated)
- NBA Inside Stuff (NBC)
- Peer Pressure (Syndicated)
- Pocket Dragon Adventures (Syndicated)
- Rugrats (Telemundo)
- Student Bodies (Syndicated)

These programs failed on both subjective and objective measures. Some of the programs did not contain a lesson and therefore could not reasonably be considered to have "education as a significant purpose" (FCC, 1996). For example, *Pocket Dragon Adventures* is an entertaining program for elementary school-age children, but no lessons could be found in the three episodes watched. As noted by the FCC (1996), entertainment programs with a minor educational message cannot be counted as having serving the educational and informational needs of children as a significant purpose. Therefore, it cannot be correctly said that this is a program that has education as a significant purpose.

The overall percentage of minimally educational programs has not changed much over the last three years (22 percent in 1996/97, 25.7 percent in 1997/98 and 21.2 percent in 1998/99) indicating that there are still a significant proportion of programs airing as core programming that should not be. Minimally educational programs appear to be of two types: Those that are devoid of any educational content and those that attempt to include a lesson but would fail to "contribute to the development of the child" (FCC, 1996).

Programs that do not offer any discernable lesson do poorly when assessed using the Annenberg Public Policy Center criteria. Additionally, game shows that contain only factoids without an overarching theme or provide anti-educational messages or sports shows that simply list scoreboards for recent sporting events without providing information were considered minimally educational. In general, the minimally educational programs are often innocuous programs that are not considered harmful to children (that is, they do not contain violence), but they also do not appear to be addressing the educational needs of children in any respect.

PART THREE: THE IMPLICATIONS OF THE RESEARCH

Summary

This evaluation of commercial broadcasters' E/I offerings indicates that while much of what is offered is similar to what was offered last year -- in terms of quality and quantity -- there have also been several interesting and noteworthy changes. Results of the 1998/99 E/I evaluation indicate several findings that are disappointing but also several encouraging trends.

Obstacles

Unfortunately, the proportion of minimally educational programs is similar to that found in previous years. Although it is questionable whether one-fifth of programs deserve the E/I label, they continue to air on commercial broadcast stations (programs such as *NBA Inside Stuff* and *Peer Pressure* have aired in the last two consecutive seasons without any noticeable improvement).

In addition, there still appears to be some confusion at the station level about what constitutes E/I programming. There were several questionable programs identified on the FCC 398 reports that were not validated by the syndicator or network contact. These kinds of claims are probably the exception rather than the rule. There is generally less variation in the way that broadcasters are complying with the Children's Television Act under the new Three-Hour Rule. Most stations are selecting three E/I hours each week, primarily by using the advice of consultants and other experts to guide their choices (Jordan, 1999). Nevertheless, there appears to be some need to clear up the kind of programming that should be listed on license renewal applications.

Information about E/I programs remains hard for parents to find. Although commercial broadcasters are consistently using E/I icons, the on-air information is often brief and difficult to identify. Printed listing services do not carry the information. More information is available via the Internet; however, only 61 percent of families with home computers have access to the Internet (Turow, 1999). Thus, there is a serious lack of information for parents about core educational and informational offerings, mostly because the popular press does not appear to be interested in or have the capacity to publish such information. Not surprisingly, only one in seven parents is able to correctly identify the meaning of the E/I symbol (Stanger and Gridina, 1999).

Parents may also have difficulty obtaining information about core programming from representatives at their local stations. It does appear likely that parents who are persistent will be mostly successful. Nevertheless, some of the information obtained from station representatives was inadequate or inaccurate. Therefore, additional station outreach may be necessary in order to have a representative at each station who is adequately informed about the Three-Hour Rule.

Finally, a decrease in locally produced programs was observed. Only 65 locally produced programs were found amongst the over 1200 filings by the stations who

must abide by the mandate. Locally produced programs may provide an important niche for children, as they address the needs and interests of a particular community.

Opportunities

The good news is that approximately 80 percent of the E/I programs evaluated in a nationally representative media market are meeting the letter and sometimes the spirit of the law. One third of these programs (and many airing outside of Philadelphia) are even highly educational. Highly educational programs come from a variety of sources, including: programs which originally aired on PBS (such as *Magic School Bus*, *Bill Nye*, *The Science Guy*, and *New Zoo Revue*), those developed as a result of the Three-Hour Rule (such as *Pepper Ann*, *Popular Mechanics for Kids*, and *Brain Stew*), locally-produced programs (such as *UP’N Running* and *HyperTek*), Spanish language programs (*Pistas de Blue* and *Plaza Sesamo*), religious programs (*Al Denson’s Studio 828* and *Quigley’s Village*) and those airing in syndication (*Real Life 101* and *Nick News*). These programs tackle a variety of lessons and audiences and are particularly effective at making these lessons relevant to the lives of children.

The commercial broadcasters’ E/I programs focus on a diverse variety of lessons. Before the Children’s Television Act of 1990, much of what was available on commercial broadcast stations for children consisted of cartoons that were entertaining action/adventures or comedies (Wartella, Heintz, and Mazzarella, 1994). Such lack of diversity appears to have been somewhat changed by the new regulations, although perhaps not to an ideal level. In a large market in a Northeast city, children now have available shows that can stimulate their curiosity about science, Greek mythology, music, and history. Nevertheless, the vast majority of programs offered by the major networks are animated programs that tell stories with a prosocial lesson. Although there are many highly rated E/I programs offered outside of Philadelphia, several of these syndicated programs are not available in most media markets. This is unfortunate because syndicated programs are significantly more likely to contain traditional academic messages and add needed diversity.

Violence is almost non-existent in E/I programs. The amount of violence in core educational programming is much lower than that found in children’s TV in general (Woodard, 1999). Therefore, a by-product of the FCC Three-Hour rule may be the inclusion of more programming for children that is less violent. It is interesting to note that none of the E/I offerings were considered low quality (Woodard, 1999), suggesting more benign, if not more educational programs available on commercial broadcast stations.

Nearly one-third of E/I programs have a program-specific website, which may provide children with more opportunities to learn about the topics presented in programs. However, a recent analysis of the *network’s* E/I websites indicates that they generally contain information about main characters and plot summaries but rarely contain anything considered educational (Center for Media Education, 1999). In fact, the most consistent feature appears to be an advertising/marketing function, frequently featuring links to “online stores.” The rare exception to this appears to be the page for *Squigglevision*, which encourages children to perform safe science experiments on their

own. Thus, it seems that the majority of E/I websites are missing out on the opportunity to provide additional educational information to children.

A final opportunity presented by the Three-Hour Rule is the institution of a system enabling stations to electronically file their quarterly reports with the FCC. Because they are available to the public, these files increase access to information about what stations are airing as fulfilling their obligations to the child audience. It also makes it easier for researchers to track broadcasters' responses to the Three-Hour Rule. However, there is still a long way to go in terms of public access to printed information about E/I programs.

Conclusion

While there are many successes of the Three-Hour Rule, and there are encouraging signs in the development of new educational programs for children, it does not appear that the full potential of this medium as a teaching tool has yet been realized. Thus we conclude on a cautiously optimistic note. Broadcasters are making an effort to meet the educational needs of children. This effort is solid but by no means perfect. There are many new programs that are better than those previously airing on commercial broadcast stations. Unfortunately, there are still a significant number of programs airing that are not considered educational by the standards set forth by the APPC. Additionally, there are too few highly educational programs available on these stations. Programs such as *Magic School Bus*, *Bill Nye, the Science Guy*, and *Nick News* illustrate that teaching difficult topics can be done well. Since the majority of E/I programs are moderately educational, there is clearly much more effort needed in developing educational programming for children, finding the best of what has already been produced and choosing to air it, and providing diversity in network programs.

APPENDIX: APPC EVALUATION OF E/I PROGRAMS

E/I Programs (Listed Alphabetically)	Network or Station	APPC Evaluation (3 episodes per program)
101 Dalmations	ABC	Minimal
101 Dalmations	ABC	Minimal
101 Dalmations	ABC	Minimal*
Action News for Kids	Local	Moderate
Action News for Kids	Local	Moderate
Action News for Kids	Local	Moderate
Adventure Rio	Local	Moderate
Adventure Rio	Local	High
Adventure Rio	Local	High
Adventures of Swiss Family Robinson ¹	PAX	Minimal*
Adventures of Swiss Family Robinson	PAX	Minimal*
Adventures of Swiss Family Robinson	PAX	Minimal*
Al Denson's Studio 828	Syndicated	Moderate
Al Denson's Studio 828	Syndicated	High
Al Denson's Studio 828	Syndicated	High
Algo's FACTory	UPN	Moderate
Algo's FACTory	UPN	Moderate
Algo's FACTory	UPN	High
American Athlete	Syndicated	Minimal
American Athlete	Syndicated	Moderate
American Athlete	Syndicated	Moderate
Anatole	CBS	Minimal
Anatole	CBS	Minimal
Anatole	CBS	Minimal*
Androgena	Local	Moderate
Androgena	Local	High
Androgena	Local	High
At The Zoo	Local	Moderate
At The Zoo	Local	Moderate
At The Zoo	Local	Moderate
Awesome Adventures	Syndicated	High
Awesome Adventures	Syndicated	High
Awesome Adventures	Syndicated	High
Bananas in Pajamas ¹	Syndicated	Minimal
Bananas in Pajamas	Syndicated	Minimal
Bananas in Pajamas	Syndicated	Minimal
Barney and Friends	Syndicated	High
Barney and Friends	Syndicated	High
Barney and Friends	Syndicated	High
Becky's Barn	Syndicated	Moderate
Becky's Barn	Syndicated	Moderate
Becky's Barn	Syndicated	Moderate
Big Comfy Couch	Syndicated	Moderate
Big Comfy Couch	Syndicated	Moderate
Big Comfy Couch	Syndicated	Moderate
Bill Nye The Science Guy	Syndicated	High
Bill Nye The Science Guy	Syndicated	High
Bill Nye The Science Guy	Syndicated	High
Birdz	CBS	Moderate
Birdz	CBS	Moderate
Birdz	CBS	High*
Bloopy's Buddies	Syndicated	Moderate
Bloopy's Buddies	Syndicated	Moderate
Bloopy's Buddies	Syndicated	High
Bozo Super Sunday Show	Local	Minimal
Bozo Super Sunday Show	Local	Minimal*
Bozo Super Sunday Show	Local	Moderate*
Brain Stew	Local	High
Brain Stew	Local	High
Brain Stew	Local	High
Buster and Me	Local	Moderate
Buster and Me	Local	Moderate
Buster and Me	Local	Moderate
California Dreams ¹	Syndicated	Moderate
California Dreams	Syndicated	Moderate
California Dreams	Syndicated	High
Call of the Outdoors for Kids	Local	Moderate
Call of the Outdoors for Kids	Local	Moderate
Call of the Outdoors for Kids	Local	Moderate
Carman's Video Gold ¹	TBN	Minimal
Carman's Video Gold	TBN	Minimal
Carman's Video Gold	TBN	Moderate
City Guys	NBC	Moderate
City Guys	NBC	Moderate
City Guys	NBC	Moderate*
Click ¹	Syndicated	Minimal
Click	Syndicated	Minimal
Click	Syndicated	Minimal
Colby's Clubhouse ¹	TBN	Moderate
Colby's Clubhouse	TBN	Moderate
Colby's Clubhouse	TBN	High

E/I Programs (continued)	Network or Station	APPC Evaluation (3 episodes per program)
Creating a healthy environment	Local	Minimal
Creating a healthy environment	Local	Minimal
Creating a healthy environment	Local	Moderate
Critter Gitters ¹	Syndicated	Minimal
Critter Gitters	Syndicated	Moderate*
Critter Gitters	Syndicated	High
David D. TV	Local	Minimal
David D. TV	Local	Minimal
David D. TV	Local	Moderate
Deputy Billy and Friends	Local	Minimal
Deputy Billy and Friends	Local	Moderate
Deputy Billy and Friends	Local	Moderate
Did You Ever Wonder?	Syndicated	Moderate
Did You Ever Wonder?	Syndicated	Moderate
Did You Ever Wonder?	Syndicated	High
Disney's Doug	ABC	Moderate
Disney's Doug	ABC	Moderate
Disney's Doug	ABC	Moderate
Dumb Bunnies	CBS	Minimal
Dumb Bunnies	CBS	Minimal
Dumb Bunnies	CBS	Moderate*
Eastman Curtis (This Generation)	Syndicated	Minimal
Eastman Curtis (This Generation)	Syndicated	Moderate
Eastman Curtis (This Generation)	Syndicated	High
Faithville ¹	Syndicated	Moderate
Faithville	Syndicated	Moderate
Faithville	Syndicated	Moderate*
Feed Your Mind	Syndicated	High
Feed Your Mind	Syndicated	High
Feed Your Mind	Syndicated	High
Field Trip	Syndicated	Moderate
Field Trip	Syndicated	Moderate
Field Trip	Syndicated	Moderate
First Cut	Local	Moderate
First Cut	Local	Moderate
First Cut	Local	Moderate
Flying House ¹	Syndicated	Moderate
Flying House	Syndicated	Moderate
Flying House	Syndicated	Moderate*
Flying Rhino Jr. High	CBS	Moderate
Flying Rhino Jr. High	CBS	Moderate*
Flying Rhino Jr. High	CBS	High*
Franklin	CBS	Moderate
Franklin	CBS	Moderate
Franklin	CBS	High
Gerbert ¹	Syndicated	Moderate
Gerbert	Syndicated	Moderate
Gerbert	Syndicated	High
Get Along Gang ¹	PAX	Minimal
Get Along Gang	PAX	Minimal
Get Along Gang	PAX	Moderate
Get real!	Local	High
Get real!	Local	High
Get real!	Local	High
Girl Scouting Today	Local	Minimal
Girl Scouting Today	Local	Moderate
Girl Scouting Today	Local	Moderate
Gospel Bill Show	Syndicated	Moderate
Gospel Bill Show	Syndicated	Moderate
Gospel Bill Show	Syndicated	Moderate*
Hang Time	NBC	Moderate
Hang Time	NBC	High
Hang Time	NBC	High
High Q	Local	Minimal
High Q	Local	Minimal
High Q	Local	Moderate
High School Sports Show	Local	Minimal
High School Sports Show	Local	Minimal
High School Sports Show	Local	Moderate
Histeria!	WB	Moderate
Histeria!	WB	Moderate*
Histeria!	WB	High*
Hollywood Video High 5 Challenge	Local	Minimal
Hollywood Video High 5 Challenge	Local	Minimal
Hollywood Video High 5 Challenge	Local	Minimal
Homer's Workshop	Syndicated	Moderate
Homer's Workshop	Syndicated	Moderate
Homer's Workshop	Syndicated	High
How 'Bout That	Local	Moderate
How 'Bout That	Local	High
How 'Bout That	Local	High
HyperTek	Local	High
HyperTek	Local	High
HyperTek	Local	High
In the Beginning ¹	Syndicated	Minimal
In the Beginning	Syndicated	Moderate
In the Beginning	Syndicated	Moderate

The Three-Hour Rule: Is It Living Up To Expectations?

E/I Programs (continued)	Network or Station	APPC Evaluation (3 episodes per program)
Inquiring Minds ¹	PAX	High
Inquiring Minds	PAX	High
Inquiring Minds	PAX	High
It's Academic	Local	Minimal
It's Academic	Local	Minimal
It's Academic	Local	Minimal
Jack Hanna's Animal Adventures ¹	Syndicated	Moderate
Jack Hanna's Animal Adventures	Syndicated	Moderate
Jack Hanna's Animal Adventures	Syndicated	Moderate
Jack Houston's Imagineland	Syndicated	Moderate
Jack Houston's Imagineland	Syndicated	Moderate
Jack Houston's Imagineland	Syndicated	Moderate
Janice's Attic	Syndicated	Moderate
Janice's Attic	Syndicated	Moderate
Janice's Attic	Syndicated	Moderate
Joy Junction	Syndicated	Moderate
Joy Junction	Syndicated	Moderate
Joy Junction	Syndicated	High
Jumanji ¹	Syndicated	Minimal*
Jumanji	Syndicated	Minimal*
Jumanji	Syndicated	Minimal*
Just Kids	Syndicated	Moderate
Just Kids	Syndicated	Moderate
Just Kids	Syndicated	Moderate
Just The Facts ¹	TBN	Minimal
Just The Facts	TBN	Moderate
Just The Facts	TBN	Moderate
KidsNews Network	Local	Minimal
KidsNews Network	Local	High
KidsNews Network	Local	High
Kids Against Crime ¹	TBN	Moderate
Kids Against Crime	TBN	Moderate
Kids Against Crime	TBN	Moderate
Kids Ideas	Local	Moderate
Kids Ideas	Local	Moderate
Kids Ideas	Local	Moderate
Kids Like You ¹	Syndicated	Moderate
Kids Like You	Syndicated	Moderate
Kids Like You	Syndicated	Moderate
Kids on the Move	Syndicated	Moderate
Kids on the Move	Syndicated	Moderate
Kids on the Move	Syndicated	Moderate
KidTalk	Local	Moderate
KidTalk	Local	Moderate
KidTalk	Local	Moderate
Knowledge Bowl	Local	Minimal
Knowledge Bowl	Local	Minimal
Knowledge Bowl	Local	Moderate
Knozit Show	Local	Moderate
Knozit Show	Local	Moderate
Knozit Show	Local	Moderate
Kolitas	Telemundo	Moderate
Kolitas	Telemundo	Moderate
Kolitas	Telemundo	High
La Isla de Jordan	Syndicated	Moderate
La Isla de Jordan	Syndicated	High
La Isla de Jordan	Syndicated	High
Let's Read	Local	Moderate
Let's Read	Local	Moderate
Let's Read	Local	Moderate
Life With Louie	Fox	Moderate
Life With Louie	Fox	Moderate
Life With Louie	Fox	High
Lift Off	Telemundo	Minimal
Lift Off	Telemundo	Moderate
Lift Off	Telemundo	Moderate
Lil' Iguana	Local	Moderate
Lil' Iguana	Local	Moderate
Lil' Iguana	Local	High
Lionhearts	Syndicated	Moderate
Lionhearts	Syndicated	Moderate
Lionhearts	Syndicated	High
Magic School Bus	Fox	High
Magic School Bus	Fox	High
Magic School Bus	Fox	High
More than a Game ¹	Syndicated	Minimal
More than a Game	Syndicated	Moderate
More than a Game	Syndicated	High
Musical Encounter	Syndicated	Moderate
Musical Encounter	Syndicated	Moderate
Musical Encounter	Syndicated	High
Mythic Warriors	CBS	Moderate*
Mythic Warriors	CBS	High*
Mythic Warriors	CBS	High*
Nana Puddin ¹	Syndicated	Moderate
Nana Puddin ¹	Syndicated	Moderate
Nana Puddin ¹	Syndicated	High

E/I Programs (continued)	Network or Station	APPC Evaluation (3 episodes per program)
NBA Inside Stuff ^f	NBC	Minimal
NBA Inside Stuff	NBC	Minimal
NBA Inside Stuff	NBC	Minimal
New Adventures of Captain Planet	Syndicated	Moderate*
New Adventures of Captain Planet	Syndicated	High*
New Adventures of Captain Planet	Syndicated	High*
New At the Zoo	Local	Minimal
New At the Zoo	Local	Minimal
New At the Zoo	Local	High
New Zoo Revue	Syndicated	High
New Zoo Revue	Syndicated	High
New Zoo Revue	Syndicated	High
Nick News ^f	Syndicated	High
Nick News	Syndicated	High
Nick News	Syndicated	High
On The Air	Syndicated	Moderate
On The Air	Syndicated	Moderate
On The Air	Syndicated	High
One World	NBC	Moderate
One World	NBC	Moderate
One World	NBC	Moderate
Our Future Generation	Local	Minimal
Our Future Generation	Local	Moderate
Our Future Generation	Local	Moderate
Oye Arnold	Telemundo	Moderate
Oye Arnold	Telemundo	Moderate
Oye Arnold	Telemundo	Moderate*
Peer Pressure ^f	Syndicated	Minimal
Peer Pressure	Syndicated	Minimal
Peer Pressure	Syndicated	Minimal
Pepper Ann	ABC	Moderate
Pepper Ann	ABC	High
Pepper Ann	ABC	High
Pete McTee's Clubhouse	Local	Minimal
Pete McTee's Clubhouse	Local	Moderate
Pete McTee's Clubhouse	Local	Moderate
Pistas de Blue	Telemundo	High
Pistas de Blue	Telemundo	High
Pistas de Blue	Telemundo	High
Plaza Sesamo ^f	Univision	High
Plaza Sesamo	Univision	High
Plaza Sesamo	Univision	High
Pocket Dragon Adventures ^f	Syndicated	Minimal
Pocket Dragon Adventures	Syndicated	Minimal
Pocket Dragon Adventures	Syndicated	Minimal*
Popular Mechanics for Kids	Syndicated	Moderate
Popular Mechanics for Kids	Syndicated	High
Popular Mechanics for Kids	Syndicated	High
Puppet Love	Local	Moderate
Puppet Love	Local	Moderate
Puppet Love	Local	Moderate
Quigley's Village ^f	TBN	Moderate
Quigley's Village	TBN	High
Quigley's Village	TBN	High
Real Life 101	Syndicated	High
Real Life 101	Syndicated	High
Real Life 101	Syndicated	High
Recess	ABC	Moderate
Recess	ABC	Moderate
Recess	ABC	High
Reppies	Syndicated	Moderate
Reppies	Syndicated	High
Reppies	Syndicated	High
Rugrats	Telemundo	Minimal
Rugrats	Telemundo	Minimal
Rugrats	Telemundo	Minimal
Rupert	CBS	Minimal
Rupert	CBS	Moderate
Rupert	CBS	Moderate
Saved By The Bell:The New Class	NBC	High
Saved By The Bell:The New Class	NBC	High
Saved By The Bell:The New Class	NBC	High
Saved by the Bell ^f	Syndicated	Minimal
Saved by the Bell	Syndicated	Moderate
Saved by the Bell	Syndicated	Moderate
Scouting Today	Local	Moderate
Scouting Today	Local	Moderate
Scouting Today	Local	Moderate
Secrets of the Animal Kingdom ^f	Syndicated	High
Secrets of the Animal Kingdom	Syndicated	High
Secrets of the Animal Kingdom	Syndicated	High
Squigglevision	ABC	Moderate
Squigglevision	ABC	High
Squigglevision	ABC	High
Story Shop	Local	Minimal
Story Shop	Local	Moderate
Story Shop	Local	High

The Three-Hour Rule: Is It Living Up To Expectations?

E/I Programs (continued)	Network or Station	APPC Evaluation (3 episodes per program)
Straight Talk	Local	Moderate
Straight Talk	Local	Moderate
Straight Talk	Local	Moderate
Student Bodies ^t	Syndicated	Minimal
Student Bodies	Syndicated	Minimal
Student Bodies	Syndicated	Moderate
Superbook ^t	TBN	Minimal*
Superbook	TBN	Moderate
Superbook	TBN	Moderate*
Sylvanian Families ^t	PAX	Minimal
Sylvanian Families	PAX	Moderate
Sylvanian Families	PAX	Moderate
Talkbox	Syndicated	High
Talkbox	Syndicated	High
Talkbox	Syndicated	High*
Teen Challenge	Local	Minimal
Teen Challenge	Local	Minimal
Teen Challenge	Local	Moderate
Teen Talk	Local	Moderate
Teen Talk	Local	Moderate
Teen Talk	Local	Moderate
Teletubbies	Syndicated	Minimal
Teletubbies	Syndicated	Moderate
Teletubbies	Syndicated	Moderate
Tigritos TV ^t	Univision	Minimal
Tigritos TV	Univision	Minimal
Tigritos TV	Univision	Minimal*
UP'N Running	Local	High
UP'N Running	Local	High
UP'N Running	Local	High
Vegetable Soup ^t	Syndicated	High
Vegetable Soup	Syndicated	High
Vegetable Soup	Syndicated	High
View From the Zoo	Local	Moderate
View From the Zoo	Local	Moderate
View From the Zoo	Local	High
We Are Tomorrow, R U?	Syndicated	Moderate
We Are Tomorrow, R U?	Syndicated	Moderate
We Are Tomorrow, R U?	Syndicated	Moderate
Whatever	Local	Moderate
Whatever	Local	High
Whatever	Local	High
Wild About Animals	Syndicated	Moderate
Wild About Animals	Syndicated	Moderate
Wild About Animals	Syndicated	Moderate
Winnie the Pooh	ABC	Minimal
Winnie the Pooh	ABC	Moderate
Winnie the Pooh	ABC	Moderate
Woodrow the Woodsman	Local	Minimal
Woodrow the Woodsman	Local	Moderate
Woodrow the Woodsman	Local	Moderate
XIS	Local	Minimal
XIS	Local	Minimal
XIS	Local	Minimal
Young Americans Outdoors ^t	Syndicated	Moderate
Young Americans Outdoors	Syndicated	Moderate
Young Americans Outdoors	Syndicated	High
Young People's Report	Local	Moderate
Young People's Report	Local	Moderate
Young People's Report	Local	High
Zoo Today	Local	Moderate
Zoo Today	Local	Moderate
Zoo Today	Local	High

* Contained violence in three or more scenes

t Taped off-air because not submitted to APPC

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