

The Educational Significance of Educational Television

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Abstract

On paper, the promise of a Capitalistic media marketplace has been met, even with such public service markets as educational television. However, little research has been conducted about the actual quality of educational television, whether found on PBS or on the corporate educational networks. This study examines 525 hours of prime-time educational programming recorded over a period of 18 months. Findings indicate that PBS had, over the time period in question, a wider diversity of programming options than the four corporate networks studied: History Channel, Discovery Channel, Animal Planet, and TLC (formerly The Learning Channel). In addition, findings indicate that over a third of History Channel programming was focused on the Military, where as the other three corporate networks focus on programming better described as entertainment than education. Overall, about two-thirds of broadcast time on these networks was found to be dedicated to programming that would be of no value to a standard liberal arts definition of “educational.”

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INTRODUCTION

As many people have commented and become increasingly concerned with the apparent slide in the values and “quality” of television content, many opinion leaders from the halls of Congress to local churchyards have looked to educational television as a beacon of hope for what television can be. Historically, the Federal Communications Commission has required cable operators to carry a certain minimum of educational programming based on the number of customers and channels offered. However, very little research has been conducted as to the actual educational quality of educational programming. What is considered educational programming? To what degree does it satisfy the requirement of a general liberal arts education? Is educational programming diverse, or does it tend to concentrate on particular areas of interest? This study seeks to address such concerns.

THEORIZING THE MEDIA

The concept of cultural hegemony, first developed in a detailed way by the Italian Marxist Antonio Gramsci (1985), refers to the ability of political elites to maintain control over a society by developing an ideological support of the dominant political and economic system. The populace comes to see the prevailing social system as adequate, if not ideal, through cultural means. This form of social power is more powerful and less expensive than other forms of power because it is capable of having the populace “police themselves” (Mann, 1986). Such power often rests on a control of knowledge itself and the ability to convince others of one variety over another (Foucault, 1995).

Within this context, control of the mass media is of critical importance – particularly since World War II. In the past, obvious forms of government control of the media have

rightfully been met with skepticism by proponents of democratic governance (Altheide, 1984; McChesney, 2004). The examples of state propaganda machines such as those found in the former Soviet Union were models of the evils of government (and thus, elite) control of the media (see Lott, 1999). Detached observers did not always see government involvement as inherently harmful, however, and indeed saw limitations in how a market-driven media could serve a democratic society as well. In other words, a “free market” in media was not to have been seen as a guarantee of an independent media that could not be utilized by elites for the purpose of reinforcing hegemonic power (McChesney, 2004; Bagdikian, 2004; Herman & Chomsky, 1988).

Edward Herman and Noam Chomsky addressed this seeming paradox in the 1988 book *Manufacturing Consent*. In it, they proposed a theory of how a market-driven media could, and indeed did, represent the interests of the elite classes and thus of perpetuating the hegemonic order. They proposed a series of five “filters” through which news content must be “cleared.” The first of these filters is the corporations themselves, or “Profit Orientation of the Mass Media.” Pointing to a list of the 24 corporations that controlled over half of the media outlets in the United States at the time, they illustrated that each company had in common a set of interests that included the maintenance of the free-market system particularly in: communications; the reduction of media regulations, anti-monopoly laws; and the marginalization of competition from public broadcasting. In addition, the nature of the media itself, and more specifically high start-up costs and limited bandwidth, were viewed as a hindrance to increasing competition. It should be noted that Herman’s & Chomsky’s list of 24 corporations was wittled, through corporate concentration, to only five by 2003 (Bagdikian, 2004).

A second media filter that enforced a hegemonic portrayal of the world was the “Advertising License.” Herman & Chomsky maintained that advertisers, also major corporations, were more likely to buy time on non-controversial programs than on programs that contradicted or questioned the dominant political-economic order, thus making alternative views difficult to fund even had the media companies themselves thought the project worthwhile. A third filter, “Sourcing,” referred to the types of journalistic sources considered reputable by the media. For instance, a story examining an invasion would be more likely to cite government officials or former government officials as sources, while not seeking out the opinion of local residents or members of peace organizations. A fourth filter, “Flak,” referred to the ability of offended groups to create problems for the organization. This might include anything from letter-writing campaigns, today far easier with email, to the raising of political controversy when faced with unpopular sentiments. A fifth filter, the ideology of “Anti-Communism,” seems irrelevant in today’s world but arguably has simply been replaced by “Anti-Terrorism” as a control mechanism.

Herman & Chomsky (1988) developed this theory in order to explain biases in news coverage, but it is applicable in other realms as well. Consider a 2001 incident involving Bill Maher, the host of the ABC show, *Politically Incorrect*. In 1993, the largely libertarian Bill Maher started the show on the Comedy Central network, where he typically invited guests from a variety of political perspectives to banter about politics in an informal and humorous way. The show, considered quite inclusive at the time, was picked up by ABC for late night in 1997. Six days after the attacks of September 11, 2001, Maher and Dinesh D’Souza, author of the conservative mantra *The End of History*, had the following exchange:

D'Souza: Bill, there's another piece of political correctness I want to mention. And, although I think Bush has been doing a great job, one of the themes we hear constantly is that the people who did this are cowards.

Maher: Not true.

D'Souza: Not true. Look at what they did. First of all, you have a whole bunch of guys who are willing to give their life. None of them backed out. All of them slammed themselves into pieces of concrete.

Maher: Exactly.

D'Souza: These are warriors. And we have to realize that the principles of our way of life are in conflict with people in the world. And so -- I mean, I'm all for understanding the sociological causes of this, but we should not blame the victim. Americans shouldn't blame themselves because other people want to bomb them.

Maher: But also, we should -- we have been the cowards lobbing cruise missiles from 2,000 miles away. That's cowardly. Staying in the airplane when it hits the building, say what you want about it, it's not cowardly. You're right.

Maher had broken the first tenet of the post-9/11 United States: Anti-Terrorism as a control mechanism. Even though the remark – that flying a plane into a building takes a certain amount of misdirected courage – did not support the attacks or terrorism in general, the dissension from the dominant discourse of the time was enough to stir a national furor. Within days, filter two (advertising) went into effect as sponsors, such as Sears and Federal Express, pulled their ads. The fourth filter, flak, was received by the network, both in emails and by the media circus that developed around Maher. Curiously, although Maher was a self-described libertarian and D'Souza considered an arch-conservative, many commentators found it convenient to represent Maher and the show as “liberal,” a malign that questioned whether or not the show was a good source for news. Of course, it was a comedy talk show, a fact that was apparently forgotten during the ordeal. ABC allowed the show to stumble a few more months, reluctant to let its investment founder. This was a result of the profit orientation of the company. A more hysterical response would have been to follow the flak and fire Maher received at the time, but the show made money prior to the remark and ABC chose to give the show another chance. When the show's revenues did not pick up, ABC cancelled it in early 2002.

Educational television seems a curious outpost of struggles for cultural hegemony and media politics. Early on, idealistic proponents of the potential of television to educate the public gushed praise on their noble cause. Educational television was to help in educating the young both in and out of school (Boram, 1963), even in such fields as mathematics (Zant, 1965). It would help to reduce crime and other social ills linked to social alienation in the United States (McLeod et al, 1965-1966) and help to modernize the economy and social structure of developing countries (Rogers, 1965-1966). Indeed, media corporations had an interest in highlighting such potential as it ingratiated television to the general public.

The notion of educational television was first seriously considered in 1951 (Levin, 1956). After much debate - between educators, who were interested in reserving television networks specifically for educational programming because of the lack of effort made by commercial networks to provide programming that was educational; and broadcasters, who were not opposed to the 'idea' of educational television, but had their reservations about reserving networks specifically for this purpose based on educators' ability to pay - the Federal Communications Commission (FCC) approved the reservation of 242 networks (later increased to 252) for educational use (Steinberg, 1955; Levin, 1956). The FCC believed that the educators had successfully established the need for reserved channels - both Ultra High Frequencies (UHF) and Very High Frequencies (VHF - channels 2-13, this was strongly opposed by broadcasters) - to prevent commercial interests from claiming hold of all available options before educators were given the opportunity to claim their share of this great media source (Steinberg, 1955). According to Steinberg (1955), the educators had won the battle, yet still there is a vast difference between interest in or proposing to use educational television and actually utilizing the channels set aside for educational purposes. Educational television began with one channel on

the air and a potential viewing audience of 800,000 in 1953 (Steetle, 1959). Steinberg (1955) found that by September 1955 13 channels were on the air (half of these were VHF). Hilliard's (1958) later analysis found that by 1958 32 educational stations were on the air, another 10 were expected to be active by the end of the year, and dozens more were in the petition or permit stages with the FCC. Despite progress these data illustrate the difference between proclaimed interest and actual ability to utilize channels reserved for educational purposes.

Furthermore, Steinberg (1955) claims that in theory the difference between commercial television and educational television is that the first is intended to merely entertain viewers whereas the second is to utilize the media source as a means of meeting the educational needs of the viewers – to broaden the horizons and encourage growth and maturity in the audience. Hilliard (1958) adds that one of the primary goals of educational television is to inform the general public via a common body of knowledge. In fact he finds that much of the educational programming on the air in the 1950's consisted of programming aimed at enhancing the cultural experience of adult viewers. However, in reality, Steinberg (1955) argues, the true difference between commercial and educational television is the ability to pay for costly airtime – commercial television is, as indicated by its name, paid for in full by the commercials that air during programming, whereas educational television is dependent on sponsors – private or public. Steinberg finds that public legislators are not likely to sponsor or invest in educational television and alternative sources may be on a case by case basis failing to provide consistent funding for such endeavors.

The suggested solution to the financial gap between educational interest and educational use of television was a partnership between commercial and educational interests – commercial stations agreeing to air educational programs either as a public service or paid for by private

interests (Steinberg, 1955; Levin 1956). Yet Steinberg (1955) considered this solution bound to cause conflicts as educational programming is most useful if aired during costly prime time slots – commercial interests are not likely to give these slots over to such programming on a regular basis. Levin (1956) suggests that the issue of cooperation between educational interests and commercial interests may be more about the social controls placed on commercial interests rather than their good intentions and willingness to be cooperative. He claims that even if commercial interests do cooperate with educational interests the result is likely to be no more than a token of educational programming even if such programs are sufficiently funded by foundation donors. He claims that universities are still the better source for educational programming given their interest in the integration and independence of thought – efforts to improve the information presented to the general public must utilize such rationale. Thus, educational interests did indeed win the initial battle, but the future of educational television at this point in time was still dubious at best.

Proponents of commercial media outlets producing educational broadcasts still argue that profit-based media are as capable as public broadcasting of producing interesting educational material. Moreover, because commercial media is driven by profit, it is more likely to be responsive to public tastes and preferences than media that is insulated from such preferences by governmental financial support. Critics of educational endeavors by commercial media argue that the emphasis placed on profit supercedes an emphasis on educational content, in part because of a desire to avoid controversy that might eliminate potential consumers. For example, Loewen (1996) contends that American high school history/social studies textbooks routinely either omit or truncate aspects of discussions of issues and/or events (such as viewing the battle at the Alamo as an episode of imperialist expansion and not Texan independence) that might

irritate members of textbook selection committees who would then block the adoption. In sum, Loewen contends that market considerations and not rigorous scholarship drive the textbook creation process. The publication of textbooks provides an additional variable in the production of educational television, which is the growth in concentration of media ownership. With increased media concentration, the need to hold current market shares (and potentially gain more) increases, which therefore suggests that the perceived pressure not to offend (and therefore lose) market share through intellectual controversy increases. Therefore, we predicted that much of the subject matter disseminated through commercial educational television will be unlikely to be of a controversial nature that might offend one or more segment of the viewing audience.

Furthermore, Frank (2000) argues that the proponents of commercially driven enterprises, such as educational television, are informed by a quasi-religious ideology he termed “market populism” which assumes that markets are simply better than alternative institutions (namely governments) at providing goods and services. Frank notes that this belief system is not substantively grounded in empirical evidence that irrefutably establishes the market populist case.

Starr (2004) has argued that as the media has gained more power, such “market populism” has tended to stress areas of consensus among viewers and avoided areas of potential conflict. As the desire on the part of the media is to reach the greatest audience possible, this has resulted in a “watering down” of media offerings. McChesney (2004) has traced the outcomes – the decline of “hard news” in favor of “infotainment” – to dynamics associated with capitalist accumulation. Herman & Chomsky (1988) have argued even further that the media functions to narrow the boundaries of respectable political debate, stressing some cultural values (such as militarism) while deemphasizing others (such as communitarian values).

Since the early 1980s, the loosening of anti-monopolistic regulation has resulted in a rapidly escalating trend toward the consolidation of media services into fewer companies. Bagdikian (2004) has followed these trends since the early 1980s, when there were comparatively many media companies, until today, when only five companies control nearly all major media outlets, including publishing, radio, and television, in the United States. As this trend has accelerated, cable television technology has created an environment in which the few major producers of programming have spawned a seemingly infinite array of network choices. It is now common for consumers to have nearly a hundred channels on standard cable television, and upgrade packages can have literally hundreds of channels available through cable and satellite providers. The result is that each channel now competes for a smaller number of consumers on a greater number of channels, and the ability to capture one's attention must increasingly be done in less time. The result is that content producers must increasingly capture attention in bold ways, by appealing to basic human drives for sex, wealth, and the deviant (Miller, 1988).

Within this wider media framework is educational television. Whereas in the late 1970s educational programming was found primarily on public television and in programming mandated by the FCC and produced by the major networks, the average viewer today has access to numerous educational channels produced by both public and private enterprises. Of these, nearly every cable provider carries PBS, the History Channel, Animal Planet, Discovery Channel, and the Learning Channel. Increasingly, cable and satellite customers have even more of a selection. It is on these networks that we base our research.

Based on the foregoing conclusion, we can expect that educational television, even publicly subsidized PBS, will produce material that is primarily of interest to a wide array of the

viewing audience. In accordance with the profit motive of the networks, companies will produce shows that are simplistic or even of questionable educational value in order to build an audience. In addition, in order to “lock in” a viewer quickly, there should be a concentration on popular subject matter (such as dating and home design) rather than on *teaching* one how to perform such activities. We can also anticipate that such networks will avoid subjects that may alienate one or another large segment of the viewing public. This is in line with the profit orientation of the market. Alienation of some segments of the market will shrink the market, thus making it more difficult to sell advertising to the corporations who underwrite the programming. A corollary of this hypothesis is that educational television will focus on topics of wide agreement. Of course, we can also expect that educational television will avoid subjects that will alienate corporate advertisers. This is, on face value, similar to our earlier statement. However, this refers to the practice of avoiding political and economic ideas that may be popular but are incompatible with corporate interests. An example would be an in-depth discussion of the dangers of globalization, which may very well be popular with large swaths of the audience but unpopular to corporate advertisers. (In fact, the only such discussions occurred on PBS).

Hypotheses for this study are thus as follows:

H1: Programming will be of interest to a sizable audience

H2a: Programming will be of relatively little educational value

H2b: Programming will focus on “popular” subject matter

H2: Programming will avoid controversial subject matter

H2a: Topics will be of wide agreement

H2b: Programming will avoid political and/or economic dissent

METHOD

This study focuses on the primetime content available on five of the most commonly available educational networks: PBS, the History Channel, Animal Planet, the Discovery Channel, and the Learning Channel. Although each network is generally understood as being “educational,” each is rather distinct in its overall mission.

PBS, or the Public Broadcasting System, is a public non-profit company dedicated “to enrich the lives of all Americans through quality programs and education services that inform, inspire and delight” (PBS, 2004). This is the only “public” network and, if one examines their mission closely, it includes not only traditionally educational programming but programming that includes the arts as well.

The History Channel is a network of the privately owned AETV, a collaboration between the Hearst Companies, ABC Inc. and NBC. Its mission is as follows:

Launched in 1995, THE HISTORY CHANNEL features historical documentaries, signature weekly series, epic miniseries, and special movie presentations. The range and quality of the programming has made the network one of the most watched in cable television. THE HISTORY CHANNEL has over 125 million subscribers worldwide, 83.2 million subscribers in the U.S. (AETV, 2004)

The three remaining networks, Discovery Channel, Animal Planet, and The Learning Channel, are all divisions of Discovery Networks. Discovery Networks is based in Chicago and has offices throughout the world. There are 18 networks on cable and satellite in the United States. The Discovery Channel was the first of these, and “has been dedicated to supporting the most important scientific achievements and discoveries around the world” (Discovery, 2004). The Learning Channel was originally quite similar, but has since remade itself into “TLC,” whereupon it was:

...about high-quality, intelligent real-world entertainment. With programming that captures life unscripted, TLC relays personal stories that inspire, engage, inform and unite our audience in the spirit of life's possibilities (Discovery, 2004).

TLC is included not only because of its history of educational programming, but its continued popular identification as such. However, it should be noted that the mission of the network does not truly claim to be educational anymore, although it continues to provide some educational content during the daytime. Animal Planet, in contrast, prides itself as the only network devoted to animal-human interaction, and in this way continues to hold itself as educational television.

Videotapes were made of the primetime viewing of each network for a three week period in January 2004 and a two week period in August 2005. Although there was some difference in individual programs, tests for significant levels of program quality and types of programs shown failed to show significant change during the time period in question. A subset of the 2004 data was analyzed by student research assistants during 2004 (see Smith et al, 2004). Based on this initial data, a new coding sheet was developed and utilized for coding by the principal researchers of the entire data set in late 2005.

Programs were coded by the principal researchers in multiples of two in order to ensure intercoder reliability. In order to ensure reliability and validity across the entire sample, the full sample was recoded over a two week period. Each episode was coded into a class of program as follows: military, science & technology, nature, current events & politics, crime, religious & spiritual, reality, arts, and history (see coding sheet in appendix). Additional data was collected on the style of program and the sources primarily utilized in the program. Educational utility was coded for the direct documentary utility of the program and not as “examples” or “educational moments.” Educational utility was coded into the following categories: no utility; general education, including history, science, humanities, social science (excluding history),

mathematics, and current events; and non-academic education, including religious programming (educational rather than worship oriented) and “how to” programs.

FINDINGS

It is worth noting, before the substantial review of our findings, that 65.5 percent of the 525 hours of programming reviewed were deemed of no educational value. Educational value, in this case, was defined as a show being of sufficient quality in terms of content and production to be of use in one of eight categories: history, science, humanities, social science (excluding history), current events, religious instruction and history, and “how to” or vocational programming. Educational utility varied by channel, with PBS and the History Channel scoring around one-third of programming with no educational value, in contrast to much higher percentages of “non-educational” programming found on the Discovery Channel (76.2 %), Animal Planet (80.0 %), and TLC (96.2 %).

Table 1: Principal Focus of Program, by Category

	PBS	HIST	DISC	TLC	AP	TOTAL
Military	2 (1.9)	42 (40.0)	4 (3.8)	0	0	48 (9.1)
Science/Technology	10 (9.5)	20 (19.0)	52 (49.5)	26 (24.8)	0	108 (20.6)
Nature	6 (5.7)	0	5 (4.8)	0	97 (92.4)	108 (20.6)
Current Events	20.5 (24.3)	0	5 (4.8)	4 (3.8)	0	34.5 (6.6)
Crime	0	10 (4.8)	20 (19.0)	6 (5.7)	0	31 (5.9)
Spiritual/Religious	0	8 (7.6)	4 (3.8)	1 (1.0)	0	13 (2.5)
Reality	9 (8.6)	0	9 (8.6)	68 (64.8)	3 (2.9)	89 (17.0)
Arts	39.5 (37.6)	2 (1.9)	2 (1.9)	0	5 (4.8)	48.5 (9.2)
History	13 (12.4)	28 (26.7)	4 (3.8)	0	0	45 (8.6)
TOTAL	105 (100)	105 (100)	105 (100)	105 (100)	105 (100)	525 (100)

Programming with a primary orientation toward discussing military activities accounted for 9.1 percent of the total hours on all five channels, with nearly all of the programming found on the History Channel. Most (65.3 percent) of these programs were historical in nature, as

evident in table 2, in that a higher percentage of shows were educational for history than the total number of hours shown here, with an additional 23 percent dedicated to military technology and 12 percent to general military interest. When a specific war was the focus of the program on the History Channel, the war of choice 86 percent of the time was World War II.

Although it looks like the History Channel, Discovery, and TLC are the center for science education on television, the above data changes significantly when one examines the type of programming on each channel. Sixty-nine percent of the science programming on TLC, 48 percent on Discovery Channel, and 26 percent of that on the History Channel was dedicated to discussions of automobiles (including motorcycles) and “big machines.” In contrast, 70 percent of the science programming on PBS was dedicated to either “pure science” (e.g., one show discussed the threat of alien species invasion) or medical science.

Not surprisingly, Animal Planet was the center for nature programming. As also shown in table 2, however, while much of the programming was very appropriate science programming (e.g., *The Crocodile Hunter* – a series that examines the habits and habitats of a variety of exotic species), also included in this category is a series of shows that are more questionable, such as several “amazing videos” shows, a countdown show of “extreme animals,” and a variety of *Cops*-inspired programs (see below). Curiously, of the 35 hours of programming where a particular species or class of animals was the focus of the program, predators were the focus in 51 percent of cases and pets in another 46 percent, leaving only 3 percent (or one hour) of programming for prey animals.

Current events reporting was found on only three channels, with PBS providing two-thirds of this programming. The only dedicated news broadcasts were found on PBS, which has a wider mandate than the others and thus is not a surprise.

Crime made up about five percent of the programming, but nearly 20 percent of that was on the Discovery Channel.

Spiritual/religious programming was quite rare. Only 6.5 hours was recorded across all channels, one hour of which was a repeat of a “Truth of Noah’s Ark” show that had run the previous week. The History Channel had the most spiritual/religious programming, but the shows tended to be about Unidentified Flying Objects (e.g., a show called, “UFOs in the Bible”) or the medieval prophet Nostradamus.

Reality programming was found on four of the five channels, however, the majority of the reality programming was found on TLC.

Most of the arts programming was found on PBS, which includes such programming as part of its mandate. Although many viewers might immediately think of such shows as *Masterpiece Theater*, over half of the programming was in actuality 1970s-era British situation comedies and mystery shows. On the Discovery Channel, the five hours were actually three separate repeats of a film about a veterinary hospital called, *The Clinic*.

History was found primarily on PBS and the History Channel. The figure of 26.7 percent of programming on the History Channel being history underrepresents the true number since a large percentage of the programming was both historical and military in its orientation.

Table 2: Educational Utility of Programming, by Discipline

	PBS	HIST	DISC	TLC	AP	TOTAL
None	38.5 (36.7)	40.5 (38.6)	80 (76.2)	101 (96.2)	84 (80.0)	344 (65.5)
History	16 (15.2)	106.5 (53.8)	4 (3.8)	1 (1.0)	0	77.5 (14.8)
Science	13 (12.4)	1 (1.0)	15 (14.3)	1 (1.0)	21 (20.0)	51 (9.7)
Humanities	8.5 (8.1)	0	0	0	0	8.5 (1.6)
Social Science	16 (15.2)	3 (2.9)	3 (2.9)	1 (1.0)	0	24 (4.6)
Current Events	11 (10.5)	3 (2.9)	0	0	0	14 (2.7)
Religious	0	1 (1.0)	3 (2.9)	0	0	4 (0.8)
Instructional/ Vocational	2 (1.9)	0	0	0	0	2 (0.4)
TOTAL	105 (100)	105 (100)	105 (100)	105 (100)	105 (100)	525 (100)

Assessing the educational utility of a show is an admittedly subjective activity. We defined educational utility in terms of the program having content and style appropriate for a classroom in one of the above disciplines at any level of education (See Table 2).

PBS, for instance, is often considered educational even though, in fact, it is charged with not only educational programming, but with news and fine arts entertainment as well. Despite this fairly diverse programming mandate, it had the lowest level of non-educational programming. Not surprisingly, it also had the most diverse set of offerings among the channels examined. The most hours of programming was dedicated to *The American Experience*, a documentary-based program dedicated to various issues in American History. This show is clearly of value to a history class. A total of 7.5 hours was given to this show, compared to 5 hours – one per week – dedicated to *Antiques Roadshow*. This popular show features antiques experts who assess the value of items brought to shows held throughout the country by the owners. Although viewers might learn something of the world of antiques, this show was not rated as being of value within a liberal arts curriculum.

The History Channel, more narrowly focused on history, had slightly over one third (38.6 percent) of its programming during the period in question rated as having no educational value. By far, the single most aired program was a technology history program entitled *Modern Marvels*. Twenty-five of the 105 hours recorded, or 23.8 percent of program time, was dedicated to this show. In most cases, this show reviewed the history of a particular technology, often of common items (bathroom technology) or military technology (several episodes were about fighter planes). The result was that only about two-thirds of these programs were considered educational for classroom use. The second most common show was a special miniseries in 2004 called *Barbarians*. This multiple episode series examined the history of several warrior

societies, such as the Vikings, the Mongols, and the Huns. It ran for 14 hours, but this figure is misleading as the series was run twice during primetime during the three week period in 2004 (and additional times during the day). As such, the third most common show – which was not repeated – is a show called *Mail Call*. This 30 minute series features a former army sergeant who guides the viewer through a series of short clips about questions of general interest about the military. This show accounted for 10 hours of programming, or 4.8 percent of the total.

Discovery Channel, which encourages viewers to “explore the mind,” was deemed to have 76.2 percent of its programming that was not appropriate to a liberal arts classroom. The most common show, *Mythbusters* (9 hours), is however useful for science education at the Middle or High School level. Two hosts experimentally test “urban legends” to see if they are accurate, such as whether or not a cell phone will explode at a gas station. While the show does not utilize strict scientific controls, it does a reputable job at conveying the scientific method. The second most common show, *FBI Files* (7 hours), was one of several criminal justice oriented programs. This particular show focuses on criminal arrests by the FBI, and similar shows also examine aspects of criminal investigation (such as *The New Detectives*, which examines forensics). Despite the criminal justice content, these shows were not classified as “educational” due to the lack of a coherent social science or science orientation; they were, instead, focused simply on the action of criminal arrest. One particular genre of shows, oriented toward building “extreme” vehicles, including such shows as *American Chopper*, *Monster Garage*, and *Southern Chopper*, were the single largest category of shows but no single show was shown more than those above.

To be fair, TLC no longer refers to itself as “The Learning Channel,” thus dropping any pretense to be educational television. Many viewers, however, still consider the network to be

“educational,” even though we found that 96.2 percent of its viewing time did not fall into this category. The most common show, *What not to Wear*, was run for 10 of the 105 hours recorded. This show featured a pair of fashion consultants who lend their services to an unsuspecting individual nominated by their friends or family for a makeover. Similar “makeover” shows, such as *Date Patrol* and *Miami Ink*, extended the amount of time dedicated to this theme. The second most common program, *Trading Spaces* (8 hours), was a home decoration and improvement show in which neighbors inhabited each others homes and redecorated a room. Variants on the home decoration theme, such as *Trading Spaces Family* and *While you were Out*, also extended the amount of time given to this type of show. Just as on the Discovery Channel, a third major genre – that of super vehicles and machines – was found to be a major type of programming.

On Animal Planet, the program aired the most was *Animal Cops Detroit* (10 hours), followed by *Planet’s Funniest Animals* (9 hours). In the first case, *Animal Cops Detroit* is one of several shows that use a format similar to *Cops* but set in the world of animal protection law. Emphasis is on the investigation and arrest of suspects who have allegedly broken animal protection laws, with an added theme of animal rescue. Planet’s Funniest Animals is a program model on America’s Funniest Home Videos that shows videos of interesting pet tricks and humorous situations.

ANALYSIS & DISCUSSION

Analysis of the data reveals the types of patterns expected in the hypotheses. In both cases, the hypotheses appear to be confirmed.

The first hypothesis, Programming will be of interest to a sizable audience, deals with the appeal of programming to the general public. Two corollaries, that programming will be of

relatively little educational value and it will focus on popular subject matter, are also confirmed by the data.

The immediate finding that about two-thirds of the programming was deemed of no educational value in the classroom supports the contention that networks are attempting to win a wide audience by airing material that skirts the boundary between educational television and entertainment using even the widest definition of “education.” The three largest categories – science & technology, nature, and reality programs – demonstrate the type of programming options available.

Of 103 hours of science & technology programming aired on these five channels, only 6 hours was dedicated to “pure science.” That is, only 5.8 percent of science programming dealt in a direct manner with scientific theories and research. As such programming might be considered too “boring,” what type of science programming is deemed interesting enough to be on television? The largest category, accounting for 46 of the 103 hours (44.7 percent) of science programming, was “vehicles and machines.” This category accounted for 69.2 percent of TLC science programming, 47.9 percent of such programming on Discovery Channel, and 26.3 percent of that on the History Channel. During this time period neither Animal Planet nor PBS ran such programs. The next most common category was “Myths & Mysteries.” Accounting for 20 hours (19.4 percent) of science programming, much of the programming was of dubious educational value. One major exception was a series called *Mythbusters*, discussed above. The third most common category was “technology,” not including vehicles and machines. This category also did not include military or medical technology, and as such actually underreports the amount of technology programming aired during this period. Nevertheless, one episode of *Modern Marvels* (The History Channel), for instance, concentrated on the technology of the

bathroom, while an episode of *Extreme Engineering* (Discovery Channel) discussed plans for a large real estate development entitled “Sky City” in Tokyo. Simply stated, the portrayal of science on educational television is heavily skewed toward technology and innovation – what science can do for you – and downplays science as a method of knowledge accumulation.

Nature programming was of course centered on Animal planet, with 97 of the 108 hours. During this period, PBS aired 6 hours of nature programming, all of which was classified as “science” based. Discovery Channel aired an additional five hours, 4 of which were also science based. Animal planet, in contrast, aired 27 hours of science based nature programming, or 27.8 percent of its total. The remaining programming on the network included 42 hours (43.3 percent) of general entertainment, which included a feature film, two dog shows, and a number of “best of” type shows. Animal crime shows, such as *Animal Cops Detroit*, accounted for 28.9 percent (28 hours) of programming as well. While a case for the educational utility of such programs may be debatable, the sheer amount of such programming indicates a desire on the part of the network to maintain viewers rather than provide educational content.

Reality programs accounted for 89 hours (17 percent) of all programming, and about 65 percent of the programming on TLC. Such programming included *What not to Wear* and *Date Patrol*. Although an argument could be made that someone could learn about social norms from such programming, the intent was not to directly educate the viewer as to fashion or dating etiquette, but rather to entertain, therefore such programming can not be considered specifically useful for educational purposes. It is consistent, however, with providing content that is popular.

The types of programming found on educational television are thus aimed at a large audience, and educational quality suffers as a result. About two-thirds of the programming is of little if any educational value, and instead of providing educational content much of the

programming mimics shows found on networks focused more specifically on entertainment, such as *Animal Cops* and reality programming.

The second hypothesis, Programming will avoid controversial subject matter, as well as its two corollaries, topics will be of wide agreement and programming will avoid political/economic dissent, are also upheld.

The problem with programming of a religious or spiritual nature is that it is easily identified with a specific perspective if any detail comes into play. Not surprisingly, especially since the periods in which the programs were recorded were not near major holidays, only 2.5 (13 hours) percent of programming fit this category. Even this meager figure obscures a deeper truth: such programming tended to avoid religious differences by vague allusion to spiritual matters such as Unidentified Flying Objects (one episode, UFOs in the Bible, was particularly interesting), prophecy, and ghosts. Often, avoidance of specific spiritual beliefs was predicated by making appeals to “science,” although such appeals were often based on highly tenuous research. For example, one program – *The Real Noah’s Ark* – mixed the Biblical story of Noah, saving humanity by bringing pairs of animals onto an ark while God flooded his creation, with similar stories from the Mesopotamian stories of *Atrahasis* and the *Epic of Gilgamesh*. With little if any evidence, the program concluded that 1) there was an historical figure on which Noah was based; 2) that there was indeed a major flood, but of a regional nature in southern Mesopotamia (Sumer); and 3) that this individual had a large collection of rivercraft tied together that was swept into the Persian Gulf, but he, his family and animals survived. Such mangling of the archeological record and complete ignorance of sociological processes of myth creation of course does not satisfy the scientific purist, and such a search for the “truth behind the Bible” would satisfy a Christian or Jewish literalist even less, but for the large percentage of Americans

with a general commitment to Biblical truth but are not completely sold on Biblical literalism, such a theory might have some appeal. It should be noted that every specifically religious show adopted a Judeo-Christian perspective.

The second least aired category was crime. Unlike religious/spiritual programming which avoided controversy by speaking in vague terms and appealing to “evidence,” crime programs have an obvious vantage point for avoiding conflict: they take the side of the victim. Of the thirty hours of crime programming, fully fifty percent (15 hours) was devoted to forensics and investigative techniques. The remainder was filled out by journalistic accounts of ongoing crimes and historical accounts of past crimes, often Mafia related. In 68 percent of the episodes the rights of the victim were mentioned, whereas the rights of the defendant were discussed in only nine percent of cases. Avoidance of controversy and areas of wide agreement are thus found by appealing to the sensibilities of the victim in opposition to the “evil” of the criminal.

Current events programming accounted for 34.5 hours (6.6 percent) of educational content, 73 percent of which was found on PBS. PBS had the only news programs, while Discovery Channel contributed five hours and TLC four hours of documentaries to PBS’ 7 hours. This is consistent with a media avoiding controversy. It should be noted that news is part of the mandate for PBS.

The pattern of seeking out areas of consensus in programming was especially apparent in three categories. For instance, history accounted for 8.6 percent of programming, a little shy of military programming with 9.1 percent of programming. In both cases, the passage of time was used to obscure controversy (most people today care little for the outcome of the battles between Romans and Huns) or figures of transcendent prominence were used to obscure divisions (most Americans agree on the importance of Abraham Lincoln). Similarly, of the 25.5 hours dedicated

specifically to war, none examined wars in which the United States was explicitly involved. Wars of little controversy found favor. World War II, a war in which the United States helped save the world from Nazism and the Holocaust, was the war of focus 74.5 percent of the time (19 hours). The American Civil War accounted for an additional 17.6 percent of the programming (4.5 hours), with all other American wars (including the ongoing Iraq War) taking up the remaining 7.8 percent of the time (2 hours). Arts programming, including films and, in the case of PBS, sitcoms, accounted for 48.5 hours (9.2 percent) of all programming.

CONCLUSIONS

In 1956, Harvey Levin argued that despite good intentions commercial broadcasters would provide only token amounts of educational television as their orientation is twofold; they are trying to be both educational and successful in the market. He argued that universities were the best place for the production of educational television, close as they are to the research and production of knowledge that, in theory, should be the cornerstone of educational television. Fifty years later, Dr. Levin has apparently been shown to have been correct.

This study is limited by its focus on prime time television, although this is exactly the time that most Americans are watching television and thus when educational programming can be most effective. In addition, one might argue that our definition of educational is too narrow, that those teachable moments found in such shows as *Date Patrol* should be considered educational. There is in the end an inescapable subjectivity to such work, and there are numerous programs designated as “educational” (such as *Mythbusters*) that some might find reason to take issue with in terms of their educational utility. Be that as it may, the standards that

we have utilized likely blend well with the majority of educators and as such should serve as a foundation for future research.

Even when such limitations are taken into consideration, the findings of this study are disappointing. Frankly, we had meager expectations coming into this study and still find ourselves disappointed with the results. The findings are indicative of an industry driven to produce programs not out of a sense of public duty or educational clarity, but out of a drive for profits. It is certain that the high degree of “reality TV” on TLC or the large amount of war and even crime – an overall high level of violent programming – is a proven way of gaining viewers. Even on Animal Planet, every show that highlighted a specific animal highlighted a predator, not potential prey. We are forced to conclude that educational programming has, to a large degree, begun to mimic in its own particular way, the violence and sexual content found on television networks with entertainment as their primary mission. We should remember that, with the exception of PBS, the ultimate mission of every channel is to win the largest number of viewers so as to raise advertising rates that feed corporate profits. And we should also note that, despite its public orientation, even PBS relies on British entertainment programming as a means of winning an audience that is increasingly difficult to find.

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