

Florida Public Broadcasting

Draft

COUNCIL FOR EDUCATION POLICY, RESEARCH AND IMPROVEMENT

Akshay Desai, Chairman Robert Taylor, Vice Chairman

St. Petersburg Ft. Myers

W. C. Gentry
Jacksonville

Diane Leone
St. Augustine

Bob McIntyre Pat Telson
Largo Winter Park

Elaine Vasquez Harold Wishna

Ft. Lauderdale Tamarac

The Council for Education Policy, Research and Improvement (CEPRI) was created as an independent office under the Office of Legislative Services by the 2001 Legislature (Section 1008.51, Florida Statutes). The Council serves as a citizen board for independent policy research and analysis and is composed of five members appointed by the Governor and two members appointed by the Speaker of the House and two members appointed by the President of the Senate. The Council's statutory responsibilities include the following:

- Prepare and submit to the Florida Board of Education a long-range master plan for education. The plan must include consideration of the promotion of quality, fundamental educational goals, programmatic access, needs for remedial education, regional and state economic development, international education programs, demographic patterns, student demand for programs, and needs of particular subgroups of the population, implementation of innovative techniques and technology, and requirements of the labor market.
- ❖ Prepare and submit for approval by the Florida Board of Education a long-range performance plan for K-20 education in Florida and annually review and recommend improvement in the implementation of the plan.
- Annually report on the progress of public schools and postsecondary education institutions toward meeting educational goals and standards as defined by s. 1008.31.
- ❖ Provide public education institutions and the public with information on the K-20 education accountability system, recommend refinements and improvements, and evaluate issues pertaining to student learning gains.
- ❖ On its own initiative or in response to the Governor, the Legislature, the Florida Board of Education, or the Commissioner of Education, issue reports and recommendations on matters relating to any education sector.
- ❖ By January 1, 2003, and on a 3-year cycle thereafter, review and make recommendations to the Legislature regarding the activities of research centers and institutes supported with state funds to assess return on the State's investment in research conducted by public postsecondary education institutions, in coordination with the Leadership Board of Applied Research and Public Services.

Further information about the Council, its publications, meetings and other activities may be obtained from the Council's office, 111 West Madison Street, Suite 574, Tallahassee, Florida 32399-1400, telephone (850) 488-7894; FAX (850) 922-5388; Website – www.cepri.state.fl.us.

TABLE OF CONTENTS

INTRODUCTION
AUDIENCE DEMOGRAPHICS OF FLORIDA PUBLIC BROADCATING4 Public Radio Public Television
OBJECTIVITY OF PUBLIC BROADCAST PROGRAMMING8 National Public Radio Public Television Public Opinion Poll
EDUCATIONAL ACTIVITIES OF FLORIDA PUBLIC BROADCASTING10 The Florida Knowledge Network Educational Programming Off-air Educational Initiatives
FINDINGS AND RECOMMENDATIONS17
APPENDICES
Appendix A: Ranking of State Appropriations for Public Broadcasting Appendix B: Florida Public Television Audience Distribution: Age and Gender Appendix C: Annual Viewer Income Appendix D: Ready To Learn Partnership Data for Florida Appendix E: PBS TeacherLine Enrollment and Completion by State
REFERENCES

INTRODUCTION

Legislative Charge

In a letter dated March 30, 2004 to the Council for Education Policy, Research and Improvement, Representative David Simmons, Chair of the House Appropriations Subcommittee on Education, requested that CEPRI "evaluate the current policies and procedures related to the Florida Public Broadcasting System and the extent to which state funds appropriated to the Florida Public Broadcasting System efficiently address the needs and priorities of all demographic components of the state's population."

Issues to Be Addressed

Based on feedback from Council members and conversations with House staff, the following three main issues will form the core of this study:

- 1. Does Florida Public Broadcasting serve an ethnically and economically diverse and representative sample of Florida's population?
- 2. Does Florida Public Broadcasting programming present an objective and unbiased coverage of news and current events?
- 3. Is it appropriate for the State to appropriate funds to Public Broadcasting through the Education budget? This question, by necessity, involves an examination of both the quantity and, as far as possible, the quality, of Florida Public Broadcasting's educational offerings, both on-air and off-air.

Background

National. The Radio Act of 1927 was a first attempt by the Federal Government to establish policies to deal with a burgeoning broadcasting activity. This legislation established broadcasting as a regulated commercial activity, with private interests licensed by a federal agency. These private interests were considered to be public trustees of their specified frequencies and were charged to operate them in the "public interest, convenience, and necessity."

By 1934 the limited ability of the commercial broadcasting system to provide educational, cultural and informational programming was becoming apparent. An amendment was proposed to the Communications Act of that year reserving 25 percent of all radio frequencies for educational, nonprofit use. The amendment failed but government interest in the matter grew, and in 1945 the Federal Communications Commission set aside 20 of 100 FM channels for noncommercial radio and in 1952 it reserved 242 television channels for the noncommercial sector.

At first educational institutions and state and local governments sought these noncommercial licenses to enhance their ability to education their constituencies. As television's audiences increased, nonprofit community groups began to acquire noncommercial licenses and began to broadcast more general interest programs.

In 1967 Congress began serious discussion about how government could support alternative uses of broadcasting without violating the First Amendment. Congressional discussions were framed by the

report of the Carnegie Commission on Educational Television, a body established specifically by Congress to conduct a study of noncommercial television and community owned channels and how to investigate these entities might better serve the public.

The Commission proposed a new kind of television – public television, which was to include 'all that is of human interest and importance which is not at the moment appropriate or available for support by advertising, and which is not arranged for formal instruction." To produce and distribute this new television, the Commission recommended a connected system of local stations and national production centers, funded by private and government funds distributed by a "federally chartered nonprofit, nongovernmental corporation."

Guided by the Commission's report Congress passed the Public Broadcasting Act of 1967 which for the first time provided federal funds for operation of noncommercial radio and television stations. The act created the Corporation for Public Broadcasting, a private, nonprofit organization designed to consolidate educational radio and television stations into a national network, to receive and spend private and federal funds for public broadcasting and to provide a buffer from political pressure.

Florida. In 1973 the Legislature created the Florida Public Broadcasting Program System as described in 73-293, Laws of Florida. The system is administered by the Department of Education pursuant to rules adopted by the State Board of Education. The System's purpose was to maintain high quality broadcasting capability for public television stations and public radio stations. The stations which comprised the System were licensed by the Federal Communications Commission to local communities, school boards, community colleges, or the Board of Regents. State funding was provided to assist qualified public broadcasting stations with operations, equipment, production and program distribution, construction of station facilities and a statewide interconnection system.

In 1980 the Legislature enacted Section 229.8051, F. S. to limit the expansion of public broadcasting in Florida. The statue stated that the state would not fund any public broadcasting services which would substantially duplicate stations receiving funds as of July 1980. The Department of Education's Office of Public Broadcasting was given authority to enforce the law as well as to develop policies and procedures in implementing the system.

In 1990, the Postsecondary Education Planning Commission conducted a study of the Florida Public Broadcasting System and found that while the state was providing funding to stations whose broadcast signals substantially overlapped, those stations had avoided duplication of program services. The Commission recommended that a task force be commissioned to recommend a clear, comprehensive, educational telecommunications policy for the State of Florida. While the public broadcasting system has continued to grow, such a task force has yet to be formed.

In 2001, the Legislature revised the statute regarding public broadcasting in Florida. Section 1001.26 F.S. mandates that all public broadcast stations must meet Corporation for Public Broadcasting qualifications. Also, in order to be funded by the Legislature, new stations must either 1) provide a first service to an audience that does not currently receive a broadcast signal, or 2) provide a significant new program service as defined by rule by the State Board of Education. (Note: this rule was never been developed by the State Board of Education.)

Currently there are 25 public broadcasting stations eligible to receive state financial assistance. These are the 13 television stations and 12 radio stations that comprise Florida Public Broadcasting. In

2003-2004, the state provided over \$19 million of education funds (excluding university appropriations) to the system (Table 1). This sum represents 25% of total Florida Public Broadcast funding for that year. Seventy-five percent of the system's funding comes from non-state sources, the largest of which is public support – which constituted 46% of total revenues for that year.

Table 1 Florida Public Broadcast Appropriations and Related Funding 2003-04

State Appropriations	\$ Total	% of Total
Florida Community Service Grant	8,529,154	11.2%
Federal Equipment Matching Grants	239,650	0.3%
Radio Reading Services for the Blind	407,914	0.5%
Florida Crossroads	609,207	0.8%
The Florida Channel	1,600,000	2.1%
The Florida Knowledge Network	214,290	0.3%
Capitol Technical Center	90,994	0.1%
New Broadcast Facilities (PECO)	7,395,000	9.7%
	19,086,209	25.0%
Non-State Sources		
CPB Appropriation - Community Service Grants	12,143,750	15.9%
Federal Equipment Matching Grants	239,650	0.3%
Local Government	1,154,308	1.5%
Institutional Support	8,266,932	10.8%
Auctions	351,225	0.5%
Public Support	35,116,359	46.0%
	57,272,224	75.0%
Total	76,358,433	

Sources: Florida Department of Education; Florida Public Broadcasting Service, Inc.

In FY 2004 forty-one states give direct line item appropriations to their public broadcasting systems. Nine states did not appropriate funds directly. However, the public broadcasting systems in most of those states do receive tax dollars indirectly through the public universities. Of the states that appropriated funds directly to public broadcasting, Florida ranked 25th out of 41 in FY 2004 with per capita appropriations of \$1.12. In FY 2005 with the phase out of PECO funding, State appropriations to public broadcasting shrank to \$12 million, placing Florida 29th out of 40 states (Appendix A).

In general the Legislature has not sought to regulate the operation of Florida's public broadcast system very closely. The finances of Florida's public broadcasting stations are audited every year by independent auditors and by the Corporation for Public Broadcasting, but otherwise statutory regulation has been light: for example, the State does not verify that community programming needs and station programming are matched nor does the State regulate in any way how the community service grant appropriations are used by public broadcasting.

Florida is like most states in that it funds public broadcasting through a block grant, not through specific programmatic funding. There are two reasons for this: Firstly, an annual program by program funding review by a state legislature might raise First Amendment issues regarding governmental restriction of free speech. Secondly, would be the argument that public broadcasting

would certainly make, that being in the broadcast business it knows best how funds should be allocated.

Public access cable. Occasionally there is some confusion in the public eye between public access cable stations and PBS stations. Federal must-carry laws require local cable franchises to provide any full-power public broadcast TV station in their area of coverage with a free channel as part of the basic cable programming package. Thus it is that public broadcast television stations enjoy cost-free cable coverage. In addition to this mandated coverage, many cable franchises provide so-called PEG channels *gratis* to their franchising authority. This coverage is not mandated, but is matter of negotiation between the cable company and its franchising authority.

For example, in the case of Tallahassee, the City Government negotiated five so called PEG channels (public, education, government channels) with Comcast for which Comcast levies no charges, either to the City or to its subscribers. Four educational channels are aired by FAMU, FSU, TCC, and the Leon County School Board respectively; and a government channel is aired by the City of Tallahassee.

There are no public access cable channels in Tallahassee. Public access channels are seen in some large metropolitan areas, but are regarded warily by many smaller, conservative franchising authorities. This is because public access channels permit very little content control by the franchising authority. Thus, pornography, religious extremism and political extremism cannot be legally enjoined from public access channels because of First Amendment protections. Consequently, many franchise authorities decline to request such a service from their cable providers.

Public broadcast stations have no financial relationship with PEG cable stations. However, depending, on local agreements, PBS stations will air certain programming from PEG stations and will share their own local programming (not PBS programs) with these stations.

AUDIENCE DEMOGRAPHICS OF FLORIDA PUBLIC BROADCASTING

As a broadcasting service that is at least partially supported by public monies, there is a natural desire among State officials to ensure that the targeted audiences of Florida Public Broadcasting include a roughly representative sample of Florida's population. This section of the report will describe the audience characteristics of Florida's public broadcast radio stations and televisions in terms of gender, age, income, race/ethnicity and education. These data describe ten of the twelve radio stations with the largest audience and nine of the thirteen television stations with the largest audience.

Public Radio

Nationally, the public radio audience has been growing rapidly. Between 1989 and 2002 the number of weekly listeners to public radio has nearly doubled to more than 25 million. Audience growth has been particularly strong among African Americans and Hispanics. During this time period the African-American audience has more than doubled while the Hispanic audience has tripled.

In Florida The Media Audit and Arbitron have compiled audience characteristics for the 10 Florida public radio stations with the largest audiences. Some of their findings for 2004:

- Male listeners outnumber female listeners in seven out of ten stations.
- For seven out of ten stations, those 55 years of age or older constitute a majority of the listeners.
- The percent of listeners with annual income below \$34,000 ranges from 21% to 40% among the NPR stations.
- The percent of listeners with annual income greater than \$75,000 ranges from 24% to 47%.
- Between 8% and 18% of Florida NPR listeners have a high school degree or less.
- Between 56% and 78% of Florida NPR listeners have a Bachelor's Degree or higher.
- Race/ethnicity data is available for only 7 of the 13 public radio stations in Florida. The ranges are as follows:
 - 1. White: 43% to 82% (2000 Florida census: 78%)¹
 - 2. Black: 3% to 14% (2000 Florida census: 15%)
 - 3. Hispanic: 7% to 31% (2000 Florida census: 17%)

Public Television

Gender and age. TRAC Media Services has collected some useful data on the Florida Public Television audience. (See Appendix B.) Some age and gender characteristics of the Florida market:

- Women constitute 45% of the whole week audience
- Men comprise 32%

¹ Note that census figures are population percents while audience figures are household percents.

- Kids from 2-17 comprise 23%
- Men and women 65 years of age or older comprise the largest age segment of the viewing audience 42%.

Noteworthy is the large number of children age 2-5 who watch public television. They comprise 16% of the whole week distribution. And because their percentage declines on weekends, it is safe to say that 2-5 year olds actually comprise greater than 16% of the weekday audience.

Income. Annual income data for the nine largest Florida PBS television stations is available from The Media Audit, an independent firm that surveys major Florida markets. (See Appendix C.) Their data show that a large percentage of the adult PBS audience in these nine markets is of decidedly moderate financial means:

- In six of the nine stations viewership is higher among households with an annual income of less than \$25,000 than it is among households with an annual income greater than \$75,000.
- Percent of households with annual incomes under \$34,000 varies from 33% to 54%.
- Percent of households with annual incomes of \$75,000 or greater varies from 13% to 24%.

It should be noted that the relatively large percent of viewers with annual incomes under \$34,000 may, in part, result from the presence of college student viewers who are not yet working full time.

Race/Ethnicity. Race/ethnicity data on Florida PBS viewers is scanty. TRAC Media estimates:

- African American viewing in Florida comprise roughly 30% of African-American households.
- Hispanic viewing in Miami is estimated at 72% of Hispanic households.

Data from The Media Audit shows the percentage ranges of Florida PBS television viewers for the nine stations surveyed in 2004 as:

- 1. Whites: 36% to 84% (2000 Florida census: 78%)
- 2. Blacks: 2% to 20% (2000 Florida census: 15%)
- 3. Hispanics: 6% to 36% (2000 Florida census: 17%)

Whites constitute a minority of the audience for two PBS stations, both in Miami: WLRN and WPBT, whose percent of white viewers is 36% and 38% respectively.

Education. Educational data on 2004 PBS audience in Florida from The Media Audit shows quite a large number of viewers with a high school degree or less - percentages range from 30% to 42%. Viewers with a college degree or a post-graduate degree range from 27% to 46%. In fact four of the nine stations surveyed had audiences with a higher percentage of adult viewers with a high school degree or less than with a college or post-baccalaureate degree (See Table 2 below).

Table 2 Education Levels PBS stations in Florida			
H.S. Grad or less	College Grad or more	Station	City
30%	41%	WXEL	W. Palm Beach
31%	45%	WPBT	Miami
32%	47%	WMFE	Orlando
35%	42%	WLRN	Miami
36%	39%	WGCU	Ft. Myers/Naples
39%	37%	WJCT	Jacksonville
41%	29%	WEDU	Tampa
41%	32%	WUSF	Tampa
42%	29%	WCEU	Daytona
Source: The Media Audit 2004			

National level data from the Public Broadcasting System in Table 3 below mirrors the strong showing from the 'high school grads or less' category in Florida. Nationally, the percent of PBS-viewing heads of households who have a high school education or less is actually greater than the percent of who have fours years or more of college education. (Unfortunately, The Media Audit data do not allow us to calculate the overall Florida percentage for these categories as PBS has done at the national level.)

Table 3 Public TV Audience			
2002-2003 Season			
	U.S.	U.S.	Full Day
	Population	Population	Audience
	(000)	(%)	(%)
TV Households	106,700	100	
Households (by Head of Household)			
EDUCATION			
< 4 Years High School	15,930	14.9	14.6
4 Yrs. High School	32,550	30.5	29.3
1-3 Years College	29,440	27.6	26.8
4+ Years College	28,780	27.0	29.2
PBS National Audience Handbook Table 4 (adapted)			

OBJECTIVITY OF PUBLIC BROADCAST PROGRAMMING

Because Florida public television and radio stations request and receive state tax appropriations every year, the question of whether or not public broadcast programming presents an objective and unbiased coverage of news and current events is a natural one. Indeed, in previous decades there was a widespread belief among certain conservative elements that public broadcasting was too liberal. In 1969 President Nixon vetoed the PBS authorization, replaced the Corporation for Public Broadcasting (CPB) Board, and shifted its funds to member stations as a punishment for its allegedly liberal bias. In 1981 President Reagan rescinded the CPB authorization for two years, and in 1995 House leader Newt Gingrich threatened to kill all federal funding for public broadcasting. Since the mid-nineties political pressure against public broadcasting from the Congress or the Executive has subsided.

No surveys or other evidence specific to Florida appear to exist on the topic of public broadcasting bias. There have, however, been several national surveys which address this issue: four by Fairness and Accuracy in Reporting (FAIR), a progressive national media watch group, and one by a recent RoperASW public opinion poll.

National Public Radio

FAIR has produced two studies of NPR's news and current events programming, in 1993 and in 2004. The studies examined three general areas of potential bias: partisan sources, think tank sources and NPR political commentators.

Partisan guest list. The studies looked at such partisan guests as government officials, party officials, campaign workers and consultants. From these lists Republicans outnumbered Democrats by more than three to two in the 2004 study. In its 1993 survey when Clinton was president and Democrats controlled both houses of Congress, Republican sources still outnumbered Democrats. Partisans from outside the two major parties were extremely rare on public radio.

Think tank sources. Representatives of think tanks to the right of center outnumbered those to the left of center by more than four to one.

NPR commentators. Few NPR commentators deal primarily with political issues. FAIR identified only eight of 46 who might be legitimately called political commentators. Of these, three were conservative, two were liberal and the remaining three could not be categorized as either liberal or conservative.

Both the 1993 survey and the 2004 survey came to the same conclusion: that there was no evidence of liberal bias in either NPR's guest list, its think tank sources or its political commentators.

Public Television

FAIR conducted two studies of public television programming, one in 1993 and one in 1999. The 1993 study worked from a composite 'national' public television schedule by combining programming information from 15 stations in 10 cities and focused on the sources featured in their public affairs programming. The study reported that public television draws upon a "narrow range of sources, similar to those used by commercial television..." (FAIR, 1993). The study concluded that its findings cast "considerable doubt" on conservative claims of liberal bias in public television's public affairs programming or in documentaries. In fact, the study found quite the reverse - that alternative or anti-establishment perspectives were rare on public television.

The 1999 study came to the same conclusions as the 1993 one and noted that, if anything, the exclusion of alternative perspectives had become even more pronounced since the last study.

Public Opinion Poll

In a poll recently commissioned by PBS, the international research company RoperASW surveyed 1,000 adults on various questions related to PBS television programming. The poll was conducted in December 2003 through January 2004. Some highlights of the survey were:

- PBS was the most trusted of seven major national institutions asked about. Second was courts of law.
- PBS has the most trusted news and public affairs programs. Forty percent trust PBS "a great deal". CNN was second at 33%.
- Americans are more satisfied with PBS programming (36%) than with programming on cable (24%) and commercial broadcast (16%).
- The majority of those polled (51%) believe federal funding for PBS is too little.

EDUCATIONAL ACTIVITIES OF FLORIDA PUBLIC BROADCASTING

The question of whether or not it is appropriate for the State to fund Florida Public Broadcasting through the education budget is probably best explored through an examination of 1) the educational culture of public broadcasting in Florida, and 2) the quantity and quality of the educational programming on Florida public television stations, and 3) their off-air educational activities.

Educational Culture of Florida Public Broadcasting

The 25 radio and television stations that comprise the Florida Public Broadcasting system developed in a culture that was oriented toward education. For example, the licenses of 16 of these stations are institutional licenses. In Florida's case, this means these licenses are held by colleges, universities, or school districts. As such, their Boards of Trustees and Community Advisory Boards (if extent) are staffed primarily by educators. The remaining nine stations hold community licenses and are run by local non-profit organizations. In every case these stations began as a service of local school districts. Currently there are 35 educators, active or retired teachers, principals, superintendents, professors or university officials on the Boards of Trustees or Community Advisory Boards that serve these stations.

Quantity and Quality of Educational Programming

In an attempt to provide a visual representation of the quantity of educational programming offered by Florida's public television channels, the Florida Public Broadcasting Service has developed a composite graphic representing the mix of educational and other programming across all thirteen Florida PBS stations. The graph below represents a typical weekday broadcast, derived from the analog and digital schedules of Florida's 13 public TV stations. (See Figure 1.)

The definition of 'educational programming' here means that a program satisfies one or more of the following criteria:

- 1. Programs are accompanied by lesson plans and teacher guides
- 2. Programs are requested by teachers and/or are used in the classroom to supplement the standard curricular offerings.
- 3. Programs offer college credit, GED credit, Work Place Essential Skills or teacher in-service training credit.

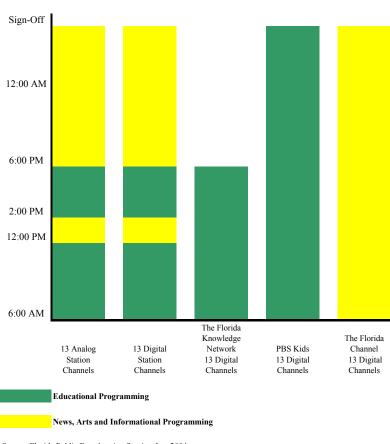


Figure 1 Educational Programming on Florida Public Television

Source: Florida Public Broadcasting Service, Inc. 2004

Figure 1 would suggest that about half of Florida public television's programming consists of serious educational offerings. What exactly are these programs and is there any evidence to suggest that they make a real difference in the lives of students or teachers?

The Florida Knowledge Network. The Florida Knowledge Network is funded separately from Florida Public Broadcasting Service (FPBS) stations, but it is carried on a digital channel by all of them. This came about through an agreement struck between the Florida Legislature and FPBS: In return for funding assistance from the Legislature for federally mandated digitalization, the FPBS agreed to carry the Florida Knowledge Network from 6 a.m. to 6 p.m., weekdays for a minimum of 10 years.

The Department of Education has installed satellite reception equipment in every school district, community college, university and public television station to establish a network for statewide reception. Approximately 60% of Florida's schools can receive direct FKN broadcasts with existing technology. The addition of FPBS television multicasting technology (digital technology) should extend direct broadcast coverage to 95% of Florida's schools when digital reception technology is eventually installed.

The Florida Knowledge Network (FKN), itself, is the instructional television broadcast service of the Florida Department of Education. The FKN works closely with school district representatives

who annually select and request instructional programming. Curriculum support and staff development programming are the most common choices. This covers programming such as lesson plans, teacher training guides, homework hotlines, testing materials along with educational programs designed to comply with the Florida curriculum. In addition to the traditional K-12 audience, FKN educational programming will eventually provide adult education programming such as teacher training, vocational certification, workplace essential skills education, continuing education credits, GED courses and college degree programs.

Evaluation. No direct evaluation of FPBS services to the FKN is available. However, indirect evaluations do exist. For example, a large percent of the educational videos that FKN distributes to schools come from the Public Broadcasting Service. Two recent surveys by Grunwald Associates (2002 and 2004) reported that K-12 educators rank PBS as their preferred source of video in the classroom.

PBS Generated Educational Programming

The educational programming represented in Figure 1 by the 13 Analog Station Channels and the 13 Digital Station Channels is exactly the same. During the transition from analog to digital broadcast technology, the Federal Communications Commission requires all stations to duplicate their primary signal in both formats. The educational programming in these duplicate formats is primarily educational programming designed for preK-5. The all day PBS Kids Channel represents a larger (but partially identical) selection of educational children's programming for the same age groups. Independent educational evaluations are not available for the great majority of these programs. However, evaluations of three of the better known PBS children's programs still being produced are available: Between the Lions, Dragon Tales and Sesame St.

Between the Lions. This program is designed to help children ages 4-7 begin to read. It was developed in consultation with children's reading and literacy experts. It is part of a multi-media literacy initiative (Ready To Learn) that includes a website that offers free materials and supplementary activities designed to foster reading skills for children.

The University of Kansas, Juniper Gardens Children's Project, published a study of Between the Lions in 2000. The study was funded in part through a service agreement with WGBH Educational Foundation, a not-for-profit corporation associated with the Boston PBS station WGBH and United Way of Boston Bay. The study design incorporated a control group. Participants were 164 kindergarten and first grade students in the greater Kansas City area.

The study concluded that kindergarten children who watched Between the Lions "performed significantly better on almost all outcome measures of reading achievement when compared to kindergarten children who did not watch the program" (Linebarger, 2000). For first graders the results were mixed. The study speculated the less dramatic results for this group may have been due to a ceiling effect. Taken as a whole, the study concluded that the results were promising and that Between the Lions could well prove to be a valuable tool that reinforces and extends early literacy instruction, both in the classroom and at home.

A second study was published in 2002 by the Mississippi Literacy Initiative. Funding was provided by the Public Broadcasting Service and the Corporation for Public Broadcasting through a Ready To Learn grant from the U.S. Department of Education. This was a controlled study in which nearly

1,000 students in three age groups (preschool, kindergarten and first grade) participated. The target population of this study was children in low income communities and children who speak English as a second language. The children in this study were much more at risk than those in the University of Kansas study described above.

In this study the experimental groups outperformed control groups on a number of measures, but not on every measure. The test results from this study, though generally positive, were not as dramatic as the results for kindergarteners in the Kansas City study. Nevertheless, researchers reported that teachers and school administrators from the schools included in the study were enthusiastic about the benefits of this program, particularly regarding a newfound interest in learning and reading among the children in the experimental groups.

Dragon Tales. This program is designed to help children 2 to 6 years old develop strategies for meeting challenges in their lives: social challenges such as developing and maintaining relationships, emotional challenges such as coping with fears, physical challenges such a learning to ride a bicycle and cognitive challenges such as following clues and solving problems.

In 2001 an evaluation of Dragon Tales was published by Rust Research (Rust, 2001). The evaluation was funded by the Sesame Workshop, a nonprofit educational organization chartered by the New York State Board of Regents. The evaluation consisted of three studies: two school-viewing studies and one home-viewing study. A blind experimental design was used to prevent the expectations of teachers and interviewers from biasing the results. The participants were 340 children aged 4 or 5 enrolled in 12 schools in New Jersey, New York and Connecticut. They were drawn from a broad mix of racial, ethnic and economic backgrounds.

Key findings from the school viewing studies were:

- Dragon Tales viewers significantly increased the frequency with which they chose to do challenging tasks, started or organized play with others, shared with others, and cooperated with others in comparison to the control group.
- Dragon Tales viewers were more goal-oriented. They spent more time making things than children in the control group.

Key findings from the home-viewing study include:

• Watching Dragon Tales at home stimulated more parent-child talk about trying things as well as more discussion about emotions, feelings, sharing and the use of Spanish. Parents who watched Dragon Tales with their children were more likely to say that it put their child in a good mood than parents who co-viewed other programs with their children.

The evaluators concluded that Dragon Tales was achieving its educational objectives and that these objectives were consistent with U.S. Department of Education guidelines for early childhood education.

Sesame Street. This is the oldest educational children's program on television. It began in 1969 and was initially targeted to at risk 2 to 4 year olds. It soon became so popular that its audience quickly expanded to include children drawn from the whole economic and racial spectrum of the country. What made the show unique at its inception and what still distinguishes it is the principal that program production should be based on a curriculum of specific goals in preschool education, that it

should be grounded on the latest research in children's education and that content and format should be continuously modified based on repeated formative evaluation feedback. Perhaps because of the importance the producers placed on educational research, Sesame Street is the most highly researched educational children's show ever.

The goals of Sesame Street are to:

- Take beginning steps toward reading, writing, mathematics and science
- Learn about feelings and how to cope with emotion
- Appreciate cultural diversity by modeling people who differ in appearance, action or point of view and playing together, working together, resolving conflicts together with them
- Appreciate the arts in a variety of forms and develop the concept 'I am an artist'
- Learn about the body and how to keep it healthy and safe.

Since the early 1970s there have been over a dozen studies of Sesame Street which have shown a consistent pattern of significant effects in the areas of emergent literacy, numeracy, school readiness, and social behaviors. One study even concluded that watching Sesame Street regularly produced measurable effects when children reached adolescence. Specifically, adolescents who were frequent viewers at age 5 had better grades in high school, read more books for pleasure, had higher levels of achievement motivation and expressed less aggressive attitudes than did teens who had rarely viewed the program (Huston et al., 2001).

The positive effects that Sesame Street seems to have on pre-schoolers' school-related skills is frequently more pronounced among children from low income families. However, we should bear in mind that preschoolers from low income families who watched Sesame Street regularly were still behind their peers from middle income families in recognizing letters, counting and other signs of emergent literacy and numeracy. Whatever good it may be doing, educational TV alone is not a cure for the handicapping effects of coming from an educationally/economically impoverished family. This underscores the need for programs supplemental to the on-air offerings of educational television alone, programs which build upon and expand upon the effects of conventional educational programming. Public broadcasting has attempted to fill this need with a number of offair and/or supplemental educational outreach efforts.

Off-air and Supplemental Educational Initiatives

Ready To Learn. Congress enacted enabling legislation for Ready To Learn in 1995 with the active assistance of the Corporation for Public Broadcasting (CPB) and the U.S. Department of Education. The outreach funded by Ready To Learn is designed to increase the potential of PBS children's television programs to enhance children's cognitive and social skills. Most of the outreach takes the form of workshops aimed at parents, child care providers, and teachers to show them how to extend the lessons in the television programs for children using a model called the 'learning triangle,' or the View-Read-Do model. This model involves using program video clips to illustrate a concept, linking this concept to reading a children's book, and doing an activity – all with similar themes.

Participating PBS member stations agree to designate an official Ready To Learn Coordinator, broadcast a minimum of 6.5 hours of PBS children's programming each weekday, distribute at least 300 children's books per month, distribute the magazine PBS Families/PBS para la Familia and conduct a minimum of 20 outreach workshops each year. These workshops target parents,

caregivers and teachers of children from low income families, children in rural areas, children with limited proficiency in English, and children with disabilities. Coordinators must also participate in at least 40 hours of professional development training each year. PBS provides each station with \$25,000 annually for the program and assists Coordinators' professional development by providing 20 hours of credit at its annual Ready To Learn Professional Development Seminar. An important feature of Ready To Learn is its commitment to facilitating its outreach with and through active collaboration with local community organizations that serve families and promote literacy such as Head Start or the YMCA.

In Florida eight of the thirteen public television stations participate in Ready To Learn. From February 2003 through February 2004 Florida stations:

- organized 350 workshops
- trained 3,536 parents through these workshops
- trained 2,213 teachers and child care providers through the workshops
- potentially impacted over 39,000 children.

During the same period of time Ready To Learn workshops in Florida partnered with over 18 community organizations (See Appendix D.) Most common partners were K-3 schools, child care centers and colleges or universities.

In 1999 a PBS sponsored controlled study of Ready To Learn workshops using a national sample was published by researchers from the University of Alabama (Bryant et al., 1999). The study found that:

- participation in an RTL workshop leads to more active viewing on the part of parents and more parental coviewing
- after participating in an RTL workshop parents were more likely to set rules for their children's TV viewing
- both children and parents watched more educational television after parents attended a workshop
- parents who had attended an RTL workshop read more books and stories to the kids and read longer each time and took their kids to libraries and bookstores more than did parents in the control group.

However, the results for child care givers was in general not as unequivocally positive as were the results for parents. The authors of the study concluded that the PBS Ready To Learn workshops were "remarkable effective" for parents, but that the model should probably be adjusted to accommodate the special condition of childcare professionals.

TeacherLine. This is a five year initiative funded under the U.S. Department of Education's Ready To Teach program. It is designed to provide high quality online professional development for K-12 teachers. Through TeacherLine educators have access to more than 90 online facilitated courses in reading, math, science, interdisciplinary instructional strategies, instructional technology and curriculum mapping. Teachers may take these courses either directly through the national PBS site or through the two Florida PBS stations which distribute TeacherLine courses throughout the state: WBCC-TV in Cocoa and WLRN-TV in Miami. Courses through the Florida stations are aligned to Florida's curriculum in addition to national standards. Florida teachers who complete a TeacherLine

course receive 30 Master Plan points. (Florida teachers needs 120 points every five years to retain their teaching credential.)

Florida teachers have been extremely active in TeacherLine. Of 38 states that participate in the program Florida ranks 5th in the number of course enrollments. And the completion rates for Florida teachers at 80% is much higher than the national average of 59% (See Appendix E.)

In 2003 an evaluation of TeacherLine was produced by The Hezel Alliance under contract from PBS. The quantitative portion of the study involved a small scale pilot study in Miami, Florida. (A more extensive quantitative study should be finished in 2005.) Elementary schools with at least 10% TeacherLine participation were matched against a group of non-participating schools and then compared by FCAT math scores. Schools rated A or B under Florida's A+ Plan showed no score improvement. However, schools rated C or D all had higher average FCAT scores than the control group in Geometry and Algebra, though only the Geometry score differences achieved statistical significance. Evaluators regarded these results as moderately encouraging and speculated that with a larger sample and with a treatment group with a greater concentration of TeacherLine participants, FCAT score improvement might well be substantially increased.

National Teacher Training Institute. This program provides strategies and resources to teachers to allow them to more effectively utilize classroom technologies, particularly instructional video and the internet. All core curricular areas are covered.

During the 2003-04 school year 18 public television stations partnered with WNET-TV, New York, to offer National Teacher Training Institute (N.T.T.I.) workshops. In these workshops master teachers demonstrate lesson plans and set up teacher networks for professional self-support. Each workshop publishes dozens of classroom ready technology based lessons for participating teachers to share with their colleagues. Lessons are based on core state and local curricula at each grade level. Turnkey training is a cornerstone of the program. As a condition of acceptance to a workshop, teachers are asked to share what they learn with at least 10 colleagues.

WSRE-TV Pensacola is one of 18 sites nationally to participate in the N.T.T.I.. K-12 teachers from northwest Florida are selected to serve as master teachers and are trained to develop technology based but highly interactive lesson plans to enhance math, science and the technology curriculum for their students. N.T.T.I. master teachers work with core state and local curriculum standards as well as follow the standards of K-12 math and science instruction of the National Council of Teachers of Mathematics and the National Science Teachers Association.

Since 1997 the N.T.T.I. manager at WSRE-TV has recruited 20 master teachers for workshops. And more than 2000 Florida teachers have participated in N.T.T.I. workshops since WSRE joined the program.

FINDINGS AND RECOMMENDATIONS

Florida Public Broadcasting Audience

The first issue posed by this report was whether or not Florida Public Broadcasting serves an ethnically and economically diverse sample of Florida's population.

Findings. The comparison between public radio and public television audiences revealed that:

- the largest audience block for both NPR and PBS were people nearing retirement age or of retirement age
- adult public radio listeners were more likely to be male, adult public television viewers were more likely to be female
- public radio listeners were more likely to be better educated (bachelor's degree or more) and more likely to be well off (annual household income above \$75,000) than public television viewers.
- White and Hispanic percentages were roughly the same for radio and television. Blacks appeared to form a slightly smaller percentage of the radio audience than they did the television audience.

The public television, because of its educational programming and larger audience was of particular interest to this study. Audience data for public television show:

- adult women strongly outnumber adult male viewers
- children from 2-5 comprise greater than 16% of the weekday viewing audience
- households with annual income under \$34,000 are well represented (33% 54% among the nine largest stations)
- head of households with a high school degree or less are well represented (30% to 42%)

Summary. The audiences for public radio and especially public television, though not an exact mirror of the Florida population, can clearly be categorized as broadly diverse across racial/ethnic, age and economic lines.

Objectivity of Florida Public Broadcasting

The second issued treated in this report is whether or not Florida Public Broadcasting programming presents an objective and unbiased coverage of news and current events.

Findings. Two studies by FAIR, one in 1993 and one in 2004, concluded that there was no evidence of liberal bias in either NPR's guest list, its think tank sources or its political commentators.

FAIR also conducted two similar studies of public television, one in 1993 and one in 1999. Both studies concluded that sources for PBS public affairs programming were similar to those of commercial television and that charges of liberal bias against PBS were unsubstantiated. In addition, a national opinion survey conducted by RoperASW in 2003/04 gave PBS news and public affairs programs high ratings in terms of public trust.

Summary. No concrete evidence in the form of surveys or studies was discovered to suggest that current PBS or NPR programming in Florida is biased. On the contrary, CEPRI discovered some survey evidence which suggested the opposite.

Public Broadcast Funding Through the Education Budget

To determine the appropriateness of funding Public Broadcasting through the education budget this study looked at the educational culture of the public broadcast stations, the quantity and quality of their educational programming, and their off-air educational activities.

Findings. There can be no doubt that the culture of Florida's public broadcast stations is oriented toward education. Licenses for a majority of the stations are held by educational bodies of one type or another, and there are some 35 current or former educators now serving on the Boards of Trustees and Community Advisory Boards of the nine stations that hold community licenses.

The quantity of educational offerings on Florida public television is substantial. In a graph representing a 'composite', i.e. not a mathematical, description of the educational programming versus other types of programming on Florida's 13 public TV channels, the Florida Public Broadcasting Service categorized roughly half of their programs as educational.

Measuring the educational quality of this programming is a daunting task. This study took note of two surveys of educators and academic studies of three educational children's programs to get a rough handle on the quality of PBS educational programming.

- Two surveys by Grunwald Associates reported that k-12 educators rank PBS as their preferred source of videos in the classroom
- Two studies of Between the Lions, a program designed to help children ages 4 to 7 begin to read, concluded that regular viewing of this program helped children to perform better on tests that measure emergent literacy and/or stimulated interest in reading.
- A study of Dragon Tales, a program designed to help 2 to 6 year olds develop strategies for
 meeting social and emotional challenges in their lives, found that it achieved its objectives.
 For example, children who viewed the program regularly increased the frequency they chose
 to do challenging tasks, spent more time making things, and spent more time discussing their
 feelings with parents.
- A number of studies of Sesame Street, which aims to develop a wide range of pre-school skills among 2 to 4 year olds, has consistently been judged the program effective in meeting its educational goals. Its effectiveness in fostering pre-school academic and social skill may be more pronounced among low income and at risk students than among other types of students.

This study looked at three off-air educational initiatives that are active in Florida:

• Ready To Learn aims to build upon and expand the effects of PBS's suite of children's educational programs. Eight Florida PBS stations run Ready To Learn workshops for parents, teachers and childcare givers of children from low income families, children in rural areas, children with limited proficiency in English and children with disabilities. In a recent 12 month period Florida PBS stations gave 350 workshops, trained 3,536 parents and 2,213 teachers with a potential impact on over 39,000 children.

A 1999 national study of Ready To Learn concluded that Ready To Learn workshops were very effective for parents, but not so effective for childcare professionals and that the Ready To Learn model ought to be adjusted when applied to that group.

- TeacherLine provides online professional development for K-12 teachers. Teachers who complete a course receive credit toward maintaining their teaching certificates. Florida teachers have been active in this program, which is run through WBCC-TV in Cocoa and WLRN-TV in Miami. In 2003 The Hezel Alliance did a pilot study of this program in Miami, Florida. Schools rated C or D whose teachers participated in the program all had higher average FCAT scores in math than did a control group. Score differences were small, however, and were not all statistically significant. Nevertheless, evaluators regarded these results as promising and plan to do a full blown study centered in Miami in 2005.
- The National Teacher Training Institute, based at WNET-TV in New York provides teachers with strategies and resources to use instructional video and the internet in the classroom. WSRE-TV in Pensacola is a partner in the program. Since 1997 it has held 20 workshops covering all core subject areas and trained more than 2000 teachers. No evaluation data was available for this program.

Recommendation. The decision of whether to fund public broadcasting through the education section of the budget or through another section is often a matter of historical accident or legislative convenience. Certainly not all forty one states that budget appropriations directly to public broadcasting do so through their budget's education section. However, many of them do, and it certainly makes sense to do so given public broadcasting historical roots in the world of education and its ongoing efforts in both on-air educational programming and off-air educational initiatives. But in the final analysis this is a matter best left to the discretion of legislators.

APPENDIX A RANKING OF STATE APPROPRIATIONS FOR PUBLIC BROADCASTING

Table 1 Per Capita Ranking of State Appropriations for Public Broadcasting FY 2004

	Estimated 2003	FY 04 State	FY 04 State	Rank
State	Population	Appropriation	\$ per Capita	Per Capita
UT	2,351,467	17,253,300	\$7.34	1
AK	648,818	4,365,547	\$6.73	2
NC	8,407,248	41,146,956	\$4.89	3
SD	764,309	3,500,000	\$4.58	4
NE	1,739,291	7,909,810	\$4.55	5
LA	4,496,334	18,370,000	\$4.09	6
KY	4,117,827	15,448,500	\$3.75	7
RI	1,076,164	3,496,530	\$3.25	8
SC	4,147,152	12,800,000	\$3.09	9
WV	1,810,354	5,057,066	\$2.79	10
MS	2,881,281	7,661,053	\$2.66	11
IA	2,944,062	6,617,838	\$2.25	12
GA	8,684,715	18,239,844	\$2.10	13
MD	5,508,909	11,100,000	\$2.01	14
NM	1,874,614	3,600,000	\$1.92	15
NH	1,287,687	2,389,146	\$1.86	16
AL	4,500,752	8,077,950	\$1.79	17
ME	1,305,728	2,182,709	\$1.67	18
KS	1,229,142	2,000,000	\$1.63	19
AR	2,725,714	4,365,547	\$1.60	20
WY	501,242	750,000	\$1.50	21
VT	619,107	913,832	\$1.48	22
HI	1,257,608	1,800,000	\$1.43	23
WI	5,472,299	6,535,900	\$1.19	24
FL	17,019,068	19,086,159	\$1.12	25
ID	1,366,332	1,528,200	\$1.12	26
ND	633,837	689,000	\$1.09	27
ОН	11,435,798	12,399,292	\$1.08	28
OK	3,511,532	3,445,000	\$0.98	29
PA	12,365,455	11,982,000	\$0.97	30
NJ	8,638,396	7,146,000	\$0.83	31
NY	19,190,115	13,800,000	\$0.72	32
CT	3,483,372	2,260,000	\$0.65	33
TN	5,841,748	2,933,476	\$0.50	34
VA	7,386,330	3,290,154	\$0.45	35
IL	12,653,544	5,566,300	\$0.44	36
IN	6,195,643	2,700,000	\$0.44	37
ΑZ	5,580,811	2,272,525	\$0.41	38
MN	5,059,375	1,795,000	\$0.35	39
NV	2,241,154	700,000	\$0.31	40
МО	3,190,099	90,000	\$0.03	41
	196,144,433	297,264,634		

Source: National Educational Telecommunication Association 2004

Table 2 Per Capita Ranking of State Appropriations for Public Broadcasting FY 2005

		F1 2005		
	Estimated 2003	FY 05 State	FY 05 State	Rank
State	Population	Appropriation	\$ per Capita	Per Capita
WY	501,242	4,750,000	\$9.48	1
UT	2,351,467	17,465,600	\$7.43	2
AK	648,818	4,365,547	\$6.73	3
SD	764,309	4,929,000	\$6.45	4
NE	1,739,291	8,876,852	\$5.10	5
IA	2,944,062	14,951,544	\$5.08	6
KY	4,117,827	15,184,800	\$3.69	7
SC	4,147,152	12,733,539	\$3.07	8
LA	4,496,334	13,555,000	\$3.01	9
WV	1,810,354	5,077,905	\$2.80	10
MS	2,881,281	7,069,983	\$2.45	11
MD	5,508,909	11,100,000	\$2.01	12
GA	8,684,715	17,280,663	\$1.99	13
AL	4,500,752	8,731,016	\$1.94	14
NM	1,874,614	3,600,000	\$1.92	15
NH	1,287,687	2,335,918	\$1.81	16
ME	1,305,728	2,308,937	\$1.77	17
KS	1,229,142	2,000,000	\$1.63	18
AR	2,725,714	4,365,547	\$1.60	19
HI	1,257,608	1,900,000	\$1.51	20
VT	619,107	913,832	\$1.48	21
PA	12,365,455	18,053,000	\$1.46	22
OK	3,511,532	4,929,000	\$1.40	23
NC	8,407,248	11,000,000	\$1.31	24
RI	1,076,164	1,352,090	\$1.26	25
ID	1,366,332	1,593,200	\$1.17	26
ND	633,837	689,000	\$1.09	27
ОН	11,435,798	12,301,362	\$1.08	28
FL	17,019,068	12,457,545	\$0.73	29
NJ	8,638,396	6,146,000	\$0.71	30
NY	19,190,115	13,100,000	\$0.68	31
WI	5,472,299	3,332,087	\$0.61	32
TN	5,841,748	2,786,802	\$0.48	33
VA	7,386,330	3,290,154	\$0.45	34
IN	6,195,643	2,700,000	\$0.44	35
ΑZ	5,580,811	2,390,500	\$0.43	36
IL	12,653,544	5,284,200	\$0.42	37
MN	5,059,375	1,903,000	\$0.38	38
NV	2,241,154	700,000	\$0.31	39
МО	3,190,099	90,000	\$0.03	40
	192,661,061	267,593,623	\$1.39	

APPENDIX B

FLORIDA PUBLIC TELEVISION AUDIENCE DISTRIBUTION: AGE AND GENDER

Figure 1 Florida PTV Whole Week Audience Distribution

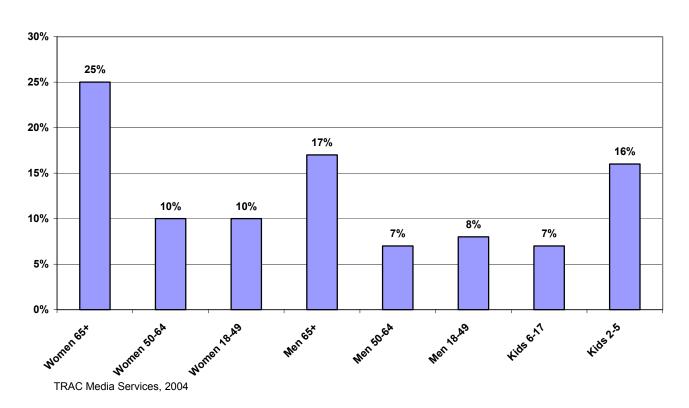
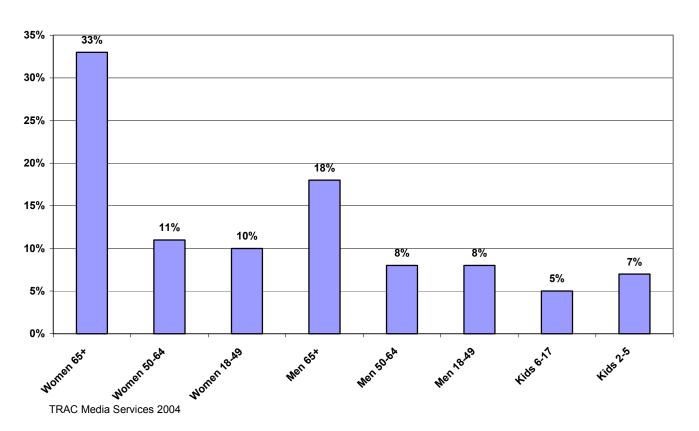


Figure 2 Florida PTV Weekend Audience Distribution



APPENDIX C ANNUAL VIEWER INCOME

Figure 1 Annual Viewer Income WMFE-TV Orlando

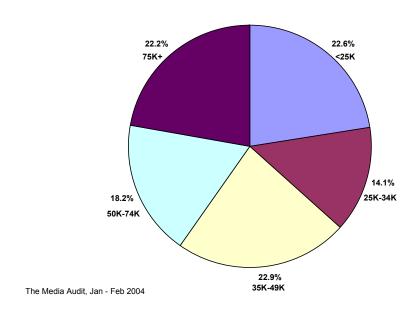


Figure 2 Annual Viewer Income WGCU-TV Ft. Myers

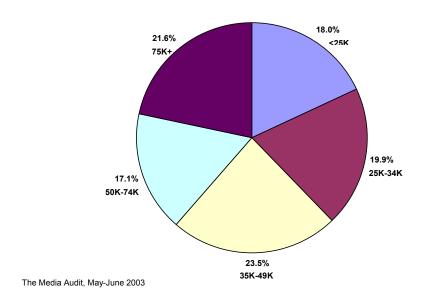


Figure 3 Annual Viewer Income WJCT-TV Jacksonville

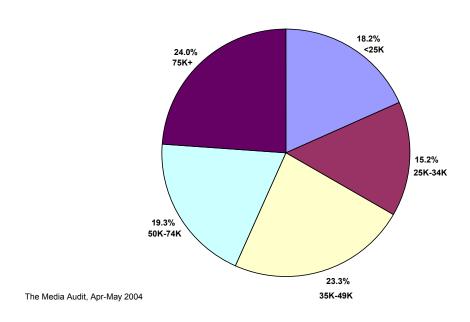


Figure 4 Annual Viewer Income WCEU Daytona Beach

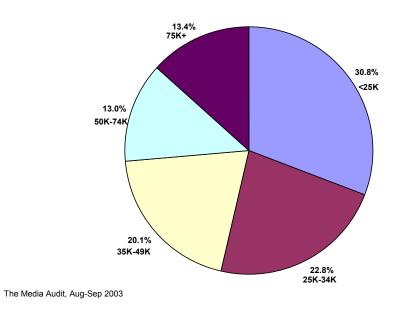


Figure 5 Annual Viewer Income WEDU-TV Tampa

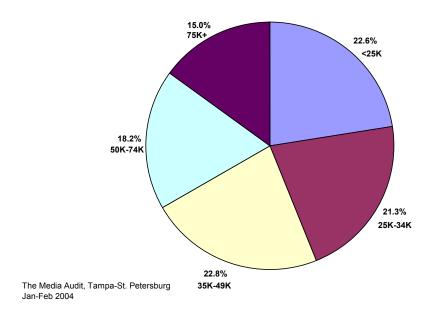


Figure 6 Annual Viewer Income WUSF Tampa-St. Petersburg

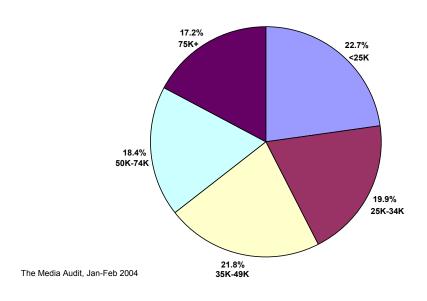


Figure 7 Annual Viewer Income WXEL W. Palm Beach

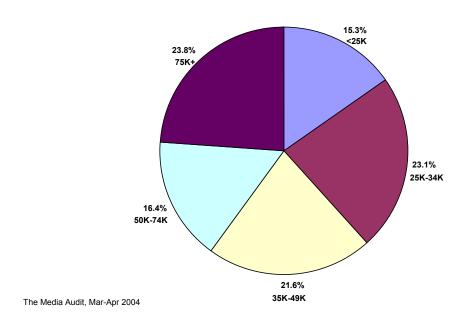


Figure 8 Annual Viewer Income WPBT Miami-Ft. Lauderdale

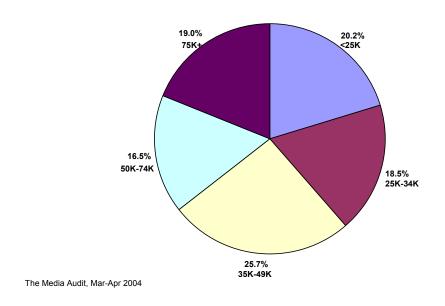
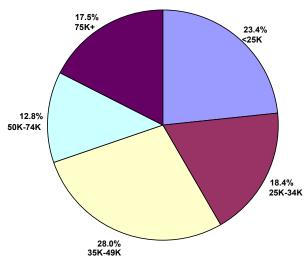


Figure 9 Annual Viewer Income WLRN Miami-Ft. Lauderdale



The Media Audit, Mar-Apr 2004

APPENDIX D

READY TO LEARN PARTNERSHIP DATA FOR FLORIDA

Florida RTL Partnerships		
2/28/03 - 3/1/04		
K-3 schools	106	
Child care centers	94	
Others	54	
College/University	47	
Head Start Program	36	
Preschools	33	
Even Start Program	28	
Libraries	28	
Family Literacy Programs	27	
Family childcare providers	23	
Businesses	23	
Child care R&R Agencies	15	
Community Action Agency	17	
AEYC	6	
PTAs	3	
Parents as Teachers	2	
United Way	2	
YMCA/YWCA	2	
21st Century Comm. Learning Ctr.	1	
Source: PBS Ready To Learn 2004	•	

APPENDIX E

PBS TEACHERLINE ENROLLMENT AND COMPLETION BY STATE (Sept 01-May03)

State	Completion Rate	Enrollment ¹
AZ	63.8%	1064
CO	58.6%	389
OH	62.9%	377
NV	40.2%	331
FL	80.0%	320
TX	29.7%	290
LA	35.7%	235
MN	47.9%	219
WY	76.4%	203
MS	40.8%	174
WI	87.2%	125
NY	57.8%	116
PA	80.7%	114
MD	59.8%	112
SC	85.7%	112
UT	71.0%	107
TN	46.3%	95
IA	62.0%	79
SD	85.5%	76
MI	93.8%	48
NM	56.3%	48
VA	62.2%	45
WA	43.9%	41
MA	54.3%	35
MO	10.7%	28
AR	80.0%	15
VT	72.7%	11
DC	25.0%	4
KS	0.0%	4
AL	33.3%	3
CT	33.3%	3
KY	66.7%	3
ID	50.0%	2
IN	50.0%	2
GA	100.0%	1
ME	0.0%	1
NJ	100.0%	1
RI	100.0%	1
	59%	4834

^{1.} Enrollment figures include duplicates

Source: PBS TeacherLine Evaluation, The Hezel Alliance, 9/03

References

Between the Lions Mississippi Literacy Imitative (2002). <u>Project Overview and Research Findings</u>. University of Mississippi.

Bryant, Jennings et al. (1999). <u>Longitudinal Effects of PBS Ready to Learn Outreach Initiative</u>. Institute for Communication Research, University of Alabama.

Grunwald Associates PBS survey (2004). http://www.pbs.org/aboutpbs/news/20040825_teacherfavorite.html

Grunwald Associates PBS survey (2002). http://www.pbs.org/aboutpbs/news/20030529_educators.html

Huston, A. et al. (2001). Sesame Street Viewers as Adolescents: The Recontact Study. In S. Fisch and R. Truglio (editors), "G" is for Growing: Thirty Years of Research on Children and Sesame Street (pp. 97-114). Mahweh, New Jersey: Lawrence Erlbaum Associates.

Linebarger, D. (2000). <u>Summative Evaluation of Between the Lions: A Final Report to WGBH Educational Foundation</u>. University of Kansas.

Rust, L. (2001). <u>Summative Evaluation of Dragon Tales: Final Report</u>. Sesame Workshop and Langbourne Rust Research, Inc.

The Hezel Alliance (2003). PBS TeacherLine Evaluation. The Hezel Alliance, Syracuse, NY.