Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington DC 20554

In the Matter of

Empowering Parents and Protecting Children in an Evolving Media Landscape

MB Docket No. 09-194

To: The Commission

COMMENTS OF THE
THE NATIONAL ASSOCIATION OF BROADCASTERS

Jane E. Mago
Jerianne Timmerman
Ann West Bobeck
In-Sung Yoo
Kelly Williams
THE NATIONAL ASSOCIATION OF BROADCASTERS
1771 N Street N.W.
Washington, D.C. 20036
(202) 429-5430

February 24, 2010
TABLE OF CONTENTS

EXECUTIVE SUMMARY ................................................................................................. i

I. Empowering Parents through Additional Information, Media Literacy and Technological Tools Is a Shared Goal................................................................. 2
   A. The Commission Should Explore with Federal Partners a Comprehensive Media Literacy Campaign................................................................. 3
   B. The Commission Should Explore Additional Means for Promoting E/I Programming ........................................................................................................... 5
   C. The V-Chip Was Not Designed to Effectively Select E/I or Other Programming. ............................................................................................................. 6

II. There Is a Wealth of Educational Content on Broadcast Channels .......... 8
   A. Broadcast E/I Programming Is Robust. ................................................................. 9
   B. Beyond Core Programming, Broadcasters’ Commitment to Children Is Exemplary. ....................................................................................................... 13
   C. There Is a Wealth of Educational Content on Non-Broadcast Electronic Media ........................................................................................................ 15

III. While the Commission Should Continue to Promote E/I Programming, It Should Refrain from Dictating Specific Content Requirements for Such Programming ................................................................. 16

IV. The Commission Should Encourage Development of Marketplace Technologies to Empower Parents But Not Mandate Specific Technological Tools................................................................. 22
   A. It Is Unsurprising that Adoption Rates for the V-Chip Are Different than Other Parental Control Technologies ................................................................. 22
   B. There Are Serious Technical and Practical Impediments to Rating and Blocking Broadcast Advertisements ........................................................................................................... 25
   C. The Commission Should Not Attempt to Impose Additional Ratings Systems or Uniform Ratings Across Platforms ................................................................. 29

V. Conclusion...................................................................................................................... 33
EXECUTIVE SUMMARY

The National Association of Broadcasters (NAB) hereby responds to the Commission’s Notice of Inquiry regarding children’s television programming and the evolving electronic media landscape. NAB continues to share the Commission’s goals of promoting quality educational and informational children’s programming and empowering parents with information and tools to guide media usage for their families.

In the Children’s Television Act of 1990 (CTA), Congress enlisted broadcasters to advance the nation’s interest in educating its youth. Broadcasters have provided beneficial free over-the-air programming for America’s youth since the inception of television, and are today providing more high-quality, diverse educational and informational programming for children than ever before. Utilizing the benefits of digital technology, the nation’s commercial television broadcasters are amply meeting the needs of young viewers. On both their main and now nationwide over 1,400 multicast channels, television broadcasters are fulfilling the goals of the CTA both by offering programming specifically designed to serve the educational and informational needs of children, as well as programming aimed at broader audiences that nonetheless serves those needs.

In today’s evolving media landscape, local broadcasters – like other advertising supported media – are facing unprecedented economic and competitive challenges. Television stations have implemented new services, including high definition programming, and are developing exciting new digital applications, including Mobile DTV, to retain and attract viewers in a rapidly changing media environment. If anything, reaching young viewers may be broadcasters’ greatest challenge because children and
teenagers today routinely utilize other media, including cable and satellite television, the Internet, DVDs and video games.

As the Commission has recognized, in the 20 years since the passage of the CTA, the electronic media landscape has changed dramatically. Beyond the services provided by the nation’s commercial broadcast stations, parents have abundant additional choices of educational and informational programming specifically designed to meet children’s unique needs. These choices include programming on noncommercial broadcast stations; children’s programming carried on numerous cable/satellite channels and on-demand from cable/satellite systems; programming and content available via the Internet; and child-oriented DVDs and videos.

In light of this strong record of services and options, as well as bedrock First Amendment principles counseling a light regulatory touch in the area of program content, we again urge the Commission to adhere to its long-standing practice of relying on broadcasters’ good faith judgments as to whether programming serves the educational and informational needs of children. Given the Commission’s very limited authority to regulate program content, increased FCC involvement in determinations as to whether particular programs meet children’s educational and informational needs would raise serious First Amendment concerns.

As the Notice suggests, the Commission should focus on ensuring that parents have the necessary tools to make informed decisions about their families’ media needs and interests. In particular, the Commission should consider, and explore with other federal partners, the creation and distribution of a comprehensive media literacy campaign so that parents and children can make more effective choices among the vast
array of media resources available today. NAB and broadcasters look forward to working closely with the Commission and other content providers to accomplish these goals.
Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington DC 20554

In the Matter of
Empowering Parents and Protecting
Children in an Evolving Media Landscape MB Docket No. 09-194

To: The Commission

COMMENTS OF THE
THE NATIONAL ASSOCIATION OF BROADCASTERS

The National Association of Broadcasters (NAB)\(^1\) submits these comments in response to the Commission’s *Notice of Inquiry* in the above-captioned proceeding.\(^2\)

Offering educational and informational programming is a responsibility that broadcasters take very seriously. We regard serving our child audiences as an integral part of our duty to serve the public interest. Broadcasters’ collaboration with Congress, the FCC and children’s advocates during the past twenty years to address challenging issues (including the quantitative guidelines for stations’ airing of children’s educational and informational (E/I) programming; appropriate displays of Internet website addresses during children’s programming; and limitations on preemptions of children’s programming) demonstrates our commitment. We look forward to continuing our collaboration to ensure that parents have the necessary tools to make informed decisions for their children.

\(^1\) NAB is a trade association that advocates on behalf of local radio and television stations and also broadcast networks before Congress, the Federal Communications Commission and other federal agencies, and the courts.

decisions about their families’ media needs and interests. Below we address questions raised in the Notice that pertain to the broadcast component of the media ecosystem.3

I. Empowering Parents through Additional Information, Media Literacy and Technological Tools Is a Shared Goal.

Given today’s diverse array of video options, many children may well prefer to receive their video programming from non-broadcast sources, such as cable channels dedicated to kids’ programming, DVDs or on-line. The recent Kaiser Family Foundation report4 highlights the fact that children’s media consumption has radically changed since the passage of the Children’s Television Act (CTA).5 In its findings, the report concludes that 20% of children’s media consumption occurs on mobile devices, and nearly an hour of daily media consumption consists of “old” television and music content delivered through new pathways on a computer (such as Hulu™ or iTunes©). 2010 Kaiser report at 3. Moreover, the amount of time children spend watching regularly scheduled television programs has declined in the past decade, even as there has been a proliferation of consuming video content through non-broadcast means. Id. Efforts to promote parental empowerment and to protect children – whether focusing on media literacy, technological tools or programming – will serve the public interest most effectively if they include all the video platforms that children routinely access.

3 We note that many of the issues raised were addressed in detail in our comments and reply comments to the Commission’s inquiry in preparation for the Child Safe Viewing Act Report, and that the Commission will incorporate those comments into this record. Notice at ¶ 10.


Regulatory requirements applicable solely to television broadcast licensees make little sense in today’s multichannel, multiplatform environment.

A. The Commission Should Explore with Federal Partners a Comprehensive Media Literacy Campaign.

The Commission can effectively serve child audiences and empower parents by facilitating federal discussions on a comprehensive media campaign. As the Commission notes, significant information on media literacy is available, and the challenge is to find effective ways to harness and distribute that information. Notice at ¶ 52. Any media literacy campaign in the digital age should encompass all video platforms, including the Internet, wireless, DVDs, gaming and all television programming providers. Thus, we encourage the Commission to reach out to its federal partners, including the administration and the Department of Education, to examine the viability of a comprehensive media and technology literacy campaign. One means of doing so would be the creation of a media literacy campaign task force.

To the extent that broadcasters can assist in a comprehensive media literacy campaign, we look forward to future discussions with the Commission on the most effective ways to leverage the power of television to promote parental education and empowerment. The television industry has extensive consumer education experience. For example, in 2006, NAB, the National Cable and Telecommunications Association (NCTA), the broadcast networks, the Motion Picture Association of America (MPAA), the Consumer Electronics Association (CEA) and the satellite industry joined the Ad Council in launching a national multi-media “TV Boss” campaign to educate and inform
families about how they can monitor and supervise their children’s television consumption.\(^6\)

Recently, Disney and Common Sense Media launched a media literacy campaign designed to help kids, teens and parents navigate the Internet and other digital platforms.\(^7\) This initiative includes both on-air promotions and a website featuring the characters from the hit animated series Phineas and Ferb, and supports Common Sense Media “Rules of the Road” for smart and safe use of digital media, including privacy and identity, balancing time spent in cyberspace and thinking before texting or posting material online. Additionally, earlier this month Disney announced the launch of its “Let’s Move” media campaign in collaboration with First Lady Michelle Obama.\(^8\) This educational campaign will feature a series of public service announcements (PSAs)

\(^6\) See Joint Comments of NAB, NCTA and MPAA, MB Dkt No. 09-26, at 12-13 (filed April 16, 2009). This campaign included PSAs on television and radio, as well as advertisements in print publications and on the Web, highlighting parents’ ability to control television programs that enter the home by whatever delivery method they have chosen. Several of the most familiar PSAs showed parents talking to fictional television characters and telling them that programs in which the characters appeared would be blocked because the content was not suitable for their children. Through a concerted industry-wide effort, this “TV Boss” campaign received an extraordinary level of donated media, amassing more than $340 million from its inception through December 2008. The “TV Boss” campaign included other elements as well. For example, the consumer electronics industry made educational and instructional materials available to parents at retail stores. In addition, the campaign developed a new website – www.TheTVBoss.org – that provides information on managing media in the home via blocking technologies, program ratings and other means. The campaign also involved outreach to parents’ and other advocacy groups with information that could be redistributed to their members.

\(^7\) For more information, visit www.disney.com/commonsense.

\(^8\) See http://disney.co.com/crrreport/childrenandfamily/positivedevelopment/kidshealthandnutrition.html.
featuring the First Lady and leading Disney Channel stars to promote healthier eating habits, nutritional awareness and physical activity.

These types of initiatives illustrate the creative power and public/private partnerships that media companies can harness to promote positive messages for children and parents, both over-the-air and online. Should the Commission wish to explore additional means for promoting media literacy via all the platforms on which parents and children access educational and entertainment programming, broadcasters will be supportive of this endeavor.


The Commission has asked whether its rules implementing the CTA have been effective in promoting the availability of educational content on broadcast television. *Notice* at ¶ 27. In addition to the onscreen E/I icon, as well as the requirement to publicize the availability of the FCC’s Form 398, the Commission’s rules require that broadcasters provide information on E/I programming to publishers of program guides, including the age group for which the program is intended. See 47 C.F.R. § 73.673. Broadcast licensees, however, do not exercise control as to whether publishers (1) actually publish such information; (2) incorporate E/I information into electronic programming guides; or (3) display this information in a consistent or even centralized location. Thus, parents that are interested in accessing E/I programming for a given station or market may have, on occasion, difficulty in easily accessing E/I information. NAB suggests that the Commission work with broadcasters to examine whether additional sourcing of E/I information, such as to the Commission’s website, may be helpful in empowering parents.
C. The V-Chip Was Not Designed to Effectively Select E/I or Other Programming.

Beyond the publicizing and accessing of E/I information, the Commission asks whether it is possible to utilize technologies to select or “white list” E/I programming. See Notice at ¶ 26. While this may be possible for multichannel video programming distributors, the V-chip system for over-the-air television broadcasting is, fundamentally, a “blocking” technology rather than a “selecting” technology. Blocking technology cannot be adapted to simultaneously highlight certain programs but block others. Indeed, use of the V-chip beyond its original intent presents numerous technical challenges, as described below.

The V-chip is an integrated system consisting of the transmission of (1) a ratings methodology, contained in Rating Region Tables (RRTs), which a digital television (DTV) receiver is expected to store when received, and (2) a Content Advisory Descriptor (CAD). The CAD contains a pointer to the value in the RRT that designates the actual rating attached to each program; this function, along with the software imbedded in a DTV receiver that manages and interprets the ratings data, allows consumers to set their parental control preferences and blocks programs based on those preferences. The current V-chip capability is principally defined in two

________________________

9 RRT-01 is the Rating Region Table that contains the existing Television Parental Guidelines (i.e., the existing television program ratings system).
10 The RRT and the CAD are carried in a DTV station’s Program and System Information Protocol (PSIP) data.
technical standards, one from the ATSC and one from CEA. Implementing white list capability as part of the current V-chip construct is not technically feasible because all existing DTV sets are designed to conform to those standards.

By the Commission’s question as to whether it might be possible to simply “add” white listing functionality to the V-chip, we presume the FCC envisions expanding RRT-01 to include an E/I code and referencing such a code in the CAD for programs designated as E/I. This would require changes to the relevant ATSC standard. While theoretically it would be possible to undertake a standards development process to accomplish this, the current RRT-01 has no room for expansion. Simply adding an E/I code would have no effect without some concomitant change in receiver software to recognize and process the new code. Thus, no existing receivers would be able to take advantage of this new capability, frustrating the intended goal of adding the new code. With over 150 million DTV receivers in the marketplace, most parents would not have access to such white listing capabilities.

Moreover, all legacy DTV receivers have RRT-01 “hard coded” in them so that if a DTV set were to receive a CAD with a pointer to the newly-defined value of E/I, there would be no corresponding value in the set’s internal RRT-01. At best, some receivers might simply ignore the CAD with the E/I code. At worst, the DTV set could


12 This is because the industry generally understood that RRT-01 would not change, only that additional RRTs might be created sometime in the future.
become confused by this anomalous condition, resulting in unpredictable behavior, such as the E/I program being blocked or even causing the receiver to “lock up.” Accordingly, if a parent wanted to use the V-chip to affirmatively select programming, the parent would need to block all other programming, except those programs designated E/I. Parents would therefore find using the V-chip, as well as any downloadable ratings system, a very cumbersome and impractical way to assure that only E/I programs were received. Attempting to backwards-retrofit a white list capability into a blocking environment is technically unworkable and would not further the Commission’s goal of empowering parents with content information.

II. There Is a Wealth of Educational Content on Broadcast Channels.

As discussed above, even though there are many practical problems associated with white listing E/I programming through V-chip technology, there may be additional means by which broadcasters and the Commission can promote such programming. Today’s children can view a wealth of E/I programming on broadcast television. The Commission asks whether there is presently a sufficient amount of educational content available for children, including programming for non-English speaking children. See Notice at ¶ 25. Broadcasters have provided beneficial free over-the-air programming for America’s youth since the inception of television, and are today providing more high-quality, diverse E/I programming for children than ever before, amply meeting the needs of young viewers. Just six months after the transition to digital television, broadcasters
are airing over 1,400 multicast channels. Multicast programming is bringing additional quality E/I children's programming choices to viewers.

A. Broadcast E/I Programming Is Robust.

To illustrate the diversity of E/I content available to child audiences through free-over-the-air commercial broadcast stations, below is list of programs that are available on main and multicast channels in three markets:

**Washington, DC**


Analog LPTV station WZDC (Telemundo) airs the following programs in primarily Spanish: The Zula Patrol, Shelldon, Jane and the Dragon, My Friend Rabbit and Willa’s Wild Life.


13 According to Media Access Pro(tm), BIA/Kelsey.

14 Programming information was compiled from the Fourth Quarter 2009 FCC Form 398 Children’s Television Reports, available on the FCC’s web site as of February 24, 2010.
Houston, Texas


Milwaukee, Wisconsin


These markets illustrate how local broadcasters are airing a diverse mix of E/I programming, in both English and in Spanish, on both their main and multicast channels, with programming specifically designed for a wide range of targeted age groups. Further, the majority of broadcasters are offering multicast programming that is different from the E/I programming aired on their main channels.

Indeed, one broadcast network, Ion Media Networks, dedicates a full-time multicast channel to children’s programming. Qubo launched its dedicated 24-hour digital channel across ION’s nationwide station group in January 2007. Since its debut, Qubo continues to be the only full-time children’s television service that is distributed nationally, for free over-the-air on a 24/7 basis. Qubo features a line-up of popular educational children’s programming from the libraries of Qubo’s leading content partners, including Nelvana’s Jane and the Dragon, NBC Universal’s Boo! and Classic Media’s 3-2-1 Penguins. ION stations offer the Qubo channel on one of their free, over-
the-air digital broadcast feeds.\textsuperscript{15} Additionally, Telemundo airs Qubo programming in Spanish on weekend mornings.

Beyond the diverse mix that is offered by commercial broadcasters, public television stations have also begun to utilize their multicasting capabilities to aim channels at child audiences. PBS Kids airs a robust schedule of educational programming, including Sesame Street, Clifford the Big Red Dog, Word Girl, Cyberchase and Dragon Tales. Additionally, PBS has a library of online educational resources for children and educators.

Finally, NAB notes that the Commission and the television industry have successfully worked together to craft new rules that apply the CTA to the digital age.\textsuperscript{16} This collaboration resulted in the establishment of quantified E/I guidelines for each multicast digital channel broadcast free over-the-air; limited the display of Internet Website addresses during children’s programming; and revised policies on promotions

\textsuperscript{15} See Statement of John Lawson, Executive Vice President, Ion Media Networks, Inc., Before the Senate Committee on Commerce, Science, and Transportation, \textit{Rethinking the Children’s Television Act for a Digital Media Age}, July 22, 2009. Qubo originated in May 2006 when ION, NBC Universal, Scholastic Entertainment, Corus Entertainment and Classic Media announced their plan to launch a new entertainment network that views the FCC’s children’s educational and informational television requirements not as an obligation, but as the core of its proposition. Beyond ION’s digital broadcasting outlets, this collaboration extends to an interactive website visited by millions of families every month, the educational, literary, and creative assets of Scholastic, and the combined content libraries and production facilities of Nelvana, Classic Media, Big Idea, and NBC Universal, which also dedicated its Saturday morning lineups to Qubo programming.

\textsuperscript{16} See \textit{In the Matter of Children’s Television Obligations Of Digital Television Broadcasters}, Second Report and Order and Order on Reconsideration, MM Docket No. 00-167 (Sept. 29, 2006).
during children’s programming with respect to commercial limits. Thus, broadcasters’ obligations to their child audiences have already been revised to reflect developments in the digital environment.

B. Beyond Core Programming, Broadcasters’ Commitment to Children Is Exemplary.

Broadcasters’ service to children in their local communities goes well beyond the airing of educational, informational and entertainment programming. From fundraisers to PSAs to community outreach, every day across the nation, television and radio stations are committed to ensuring that they serve child audiences and address issues affecting children and their families. Here are some recent examples of broadcasters’ service that stations have provided to NAB:

- Whether it’s a tip on how to wear a bike helmet properly or encouragement to stand up and tell the truth, KUSI-TV in San Diego, Calif., has dedicated a regular PSA series to its youngest audience. The station’s "Tips for Kids" campaign provides advice on an array of topics and airs each Saturday during the station’s children’s programming. In addition to tips featuring KUSI news anchors and reporters, the station has given kids the opportunity to share tips with their fellow youngsters by inviting all first- through sixth-grade teachers in the county to write PSAs with their classes. Morning meteorologist Renee Kohn, accompanied by a camera person, visited each school to record the announcements. During these classroom visits, the children also appeared live on "Good Morning San Diego," where they were able to pass along their tips to the many adults tuned in throughout the viewing area.

- The creativity of staff at KNIN-TV in Boise, Idaho, provided Northwest Children’s Home with an award-winning PSA, which uses animation to show the safe haven the organization represents for troubled girls. These animated drawings have become the "face" of the group’s brand. The detailed process of creating the PSA started with the station arranging for still photos to be taken of models; these photos were transformed into line drawings and, finally, animation accompanied by a voiceover that explains what the organization does and how the community can support it. The station aired the PSA for several years, updating it as needed, and also provided 30-second spots that featured the home’s 100th anniversary. Northwest Children’s Home also receives inclusion of its events and fundraisers on the station’s community calendar and a link to the organization from the station’s website.
● Evan Thompson had a wish very close to the heart of the staff at WGCL-TV in Atlanta, Ga. The child with neuroblastoma wanted his own television show. WGCL lent the use of its studio, and with the help of Make-A-Wish, Thompson's dream came true. As media sponsor for all local Make-A-Wish events, WGCL has a hand in bringing hope and joy to many young Atlantans. PSAs, live remotes, news stories, website support and staff participation in Make-A-Wish events are all part of the partnership. The station aids with fundraising by promoting the annual Celebration of Wishes Gala on the air, which raises hundreds of thousands of dollars. During the holiday season, the station participated in the "Stories of Light Wish-A-Thon," a five-day news campaign, which allowed children to tell their wish stories and encouraged viewers to visit the station website and donate to the foundation. Money raised goes toward the hundreds of wishes planned for local children. "A dedicated and dynamic media partner to Make-A-Wish, WGCL has effectively spread the word about our wish children," said Chandra McLean, communications and marketing manager for Make-A-Wish Foundation of Georgia and Alabama. "We have received numerous emails and phone calls from people in the community who have been motivated to share the power of a wish after tuning in to WGCL and watching children's dreams become reality."

● Helping children find "forever homes" is one of the many ways KDAF-TV in Dallas, Texas, puts its community first. The station sponsors "A Child to Love" program, which involves the Gladney Center for Adoption and the Texas Department of Family and Protective Services. Each week, a child in need of a permanent home is featured during the station's "News at Nine" broadcast. KDAF promotes the segment with PSAs profiling the child and through the station's website. The station celebrated the airing of its 100th child profile with its Dolls & Balls Toy Drive, Easter Egg Hunt and Adoption Expo, during which viewers donated toys for children in foster care, 100 foster children participated in an egg hunt and information about adoption was distributed to prospective families. The station's efforts to produce, promote and air "A Child to Love" total more than $160,000 in donated airtime annually. KDAF was the recipient of the 2007 Bonner McLane Public Service Award presented by the Texas Association of Broadcasters.17

17 Numerous other examples of broadcasters' service to their communities generally and to children specifically can be found at http://www.broadcastpublicservice.org/campaigns.asp.
C. There Is a Wealth of Educational Content on Non-Broadcast Electronic Media.

The means by which video and audio content is delivered to the home and accessed by children has changed dramatically since the CTA was first enacted. The Internet did not exist for parents and children in 1990. According to SNL Kagan, in 1990 cable and satellite penetration was at less than 58%; today it is approximately 84%.

And in recent years there has been a proliferation of educational and entertainment content that is accessible to parents via these other platforms. Full-time children’s cable channels such as Nickelodeon, Noggin’, ABC Family and the Disney Channel, are flourishing, as well as other channels such as Discovery, which provide educational and informational programming attractive to viewers of all ages. Attachment A to these comments identifies numerous major Internet sites where parents and schools may obtain K-12 educational materials, both free and via subscription, including Federal Resources for Educational Excellence, IPlayMathGames, LeapFrog, National Geographic Kids, PBS Kids, Scholastic Kids, etc. Beyond the Internet, parents have educational gaming, DVDs, and emerging wireless resources.

The statutory requirement that the Commission expressly consider children’s programming in the license renewal process was adopted based on Congress’ finding – made in reliance on a record that is now two decades old – that market forces were not at the time ensuring that commercial television stations provided a sufficient quantity of children’s educational and informational programming. See S. Rep. No. 227, 101st Cong., 1st Sess., at 9 (1989) (Senate Report).
broadcasters and the numerous other outlets and programmers in the digital video marketplace are serving the needs of children by providing a wide array of high-quality, diverse programming.

III. While the Commission Should Continue to Promote E/I Programming, It Should Refrain from Dictating Specific Content Requirements for Such Programming.

As discussed above, parents have abundant choices across a number of platforms of educational and informational programming specifically designed to meet children’s unique needs. There has been a sea change in the amount and availability of children’s programming since the adoption of the CTA. In light of this strong record of services and options, as well as bedrock First Amendment principles counseling a light regulatory touch in the area of program content, the Commission should adhere to its long-standing practice of relying on broadcasters’ “good faith judgments” as to whether programming serves the educational and informational needs of children.19 Indeed, in enacting the CTA, Congress, as the Commission previously has recognized, “enlisted the creativity of broadcasters to advance the nation’s powerful interest in educating its

19 47 C.F.R. § 73.671, Note 1 (2007); see also 1996 Children’s Television Report & Order, 11 FCC Rcd at 10663 (¶ 7) (referencing the need to ensure that the children’s programming rules are “appropriately tailored to provide flexibility for broadcasters” in order for them to pass constitutional muster); Policies & Rules Concerning Children’s Television Programming: Revision of Programming Policies for Television Broad. Stations, Notice of Proposed Rulemaking, 10 FCC Rcd 6308, 6341 (¶ 66) (1995) (recognizing that the Commission, in adopting requirements related to broadcast content, must carefully “consider any limitations imposed by the First Amendment of the Constitution”).
As evidenced by the wide range of programming available on broadcasters’ primary and multicast channels, that interest is being advanced.

The CTA requires the Commission, in its review of each television broadcast station’s license renewal application, to “consider the extent to which the licensee . . . has served the educational and informational needs of children through the licensee’s overall programming, including programming specifically designed to serve such needs.” In enacting this mandate, Congress recognized, as the Commission itself has acknowledged, that broadcasters should be afforded “flexibility in determining how to meet their obligation to children.” Allowing broadcasters to rely on “general audience programming” to at least partially satisfy their statutory duty is an important part of the flexibility that Congress intended to provide, as the Commission itself has stated. It is plain that, in considering whether the goals of the CTA are being met, the FCC must consider not only programming that is specifically directed at the educational and informational needs of children and meets other specified criteria, but also other

__________________________

23 See 47 U.S.C. § 303b (directing FCC to focus on licensee’s service of educational and informational needs of children via “overall programming, including programming specifically designed to serve such needs”) (emphasis added); see also 1996 Children’s Television Report & Order, 11 FCC Rcd at 10672 (¶ 24) (citing Senate Report at 3)). Despite this clear statutory language, the Commission has historically focused primarily on the extent to which broadcasters provide programming that is “specifically designed” to serve children’s needs. In particular, the Commission has adopted a specific regulatory definition of “Core Programming” – i.e., programming specifically designed to serve the educational and informational needs of children, among other factors. 47 C.F.R. § 73.671(c).
programming that serves those needs. After all, children can clearly benefit from programming that may not fit within the Commission’s definition of E/I or “Core” programming; for example, programming that is aimed at a broader audience or is not regularly scheduled can obviously educate and inform young viewers.

The Notice specifically seeks comment on the Children NOW\textsuperscript{24} 2008 study’s assertions that there is an imbalance in the types of E/I programming available in the marketplace. Notice at ¶ 27. Authors of the NOW study report that only 30% of programs focus on cognitive/intellectual content, while 67% conveys a social/emotional primary lesson. Although the authors suggest that the television industry should be focusing more on cognitive/intellectual programs, this is a subjective conclusion. Another perspective based on this data could be that broadcasters’ programming appropriately matches primary lessons with program targets by age. Fully 33% of programs coded by NOW are targeted to preteen/teen viewers while 66% are targeted to elementary school and preschool viewers. This mapping fits with educational theories suggesting the importance in early childhood education of building a strong social/emotional foundation for school success. Social/emotional and cognitive/intellectual development are both important, with a focus on cognitive/intellectual development gaining importance as children mature.\textsuperscript{25}


\textsuperscript{25} See Peth-Pierce, Robin, \textit{A good beginning: Sending America’s children to school with the social and emotional competence they need to succeed} (2000), available online at http://www.casel.org/downloads/goodbeginning.pdf. See also California Department of Education, Guiding Principles: First Class: A Guide for Early Primary Educational; Middle School Curriculum; High School Curriculum, 2010; Clearing House on Education (continued…)}
Further, the NOW data demonstrate that broadcasters show
cognitive/intellectually focused lessons to children younger than preteen. NOW data
reveal that elementary school (27%) and preschool (25%) targeted episodes present
cognitive/intellectual primary lessons. By contrast, nearly four out of ten (37%)
preteen/teen targeted episodes focus on cognitive-intellectual content and another 10%
focus on health related primary lessons, for a total of 47% of preteen episodes focusing
on what could be interpreted as cognitive/intellectual topics. Respectfully, broadcasters
strongly disagree with the premise that the E/I programming that they make substantial
investments in, and air, for the benefit of America’s children, is “educationally
insufficient.”26 While Children NOW is entitled to its own opinion regarding the relative
desirability or quality of particular educational lessons, these subjective opinions cannot
provide any legal or empirical basis for Commission action.

Certainly NAB recognizes the value of programming teaching basic academic

__________________________


26 Beyond the NOW survey categorizing programs as “social/emotional” or
“cognitive/intellectual,” the study also attempted to judge whether programs were of
“minimal,” “moderate” or “high” quality, and claimed that the amount of “high” quality E/I
programming had declined over time, as shown by comparison to earlier studies
conducted by the Annenberg Public Policy Center. See NOW study at 17. However,
the NOW study focused on a national sample of stations while the Annenberg studies
focused on a sample of stations in Philadelphia. This difference alone means that the
NOW study should not be directly compared to the findings of the Annenberg studies. In
addition, key measures of educational quality were changed in the NOW study from the
earlier Annenberg studies, and the authors of the NOW study do not show that they
investigated the validity or reliability of their newly created quality index. Thus, neither
the FCC nor readers can tell whether these recent purported changes in the quality of
E/I programming were the result of real changes in programming or changes NOW
made to the measurement index.
skills, but neither the CTA nor the Commission’s rules prohibit broadcasters from fulfilling their obligations to children through programming that imparts social/emotional messages. Notably, in the 1996 Children’s Television Report & Order, the Commission considered and rejected the argument put forth by commenters in the Child Safe Viewing Act proceeding that programs “specifically designed” to further educational and informational needs must advance children’s cognitive/intellectual development.27 Recognizing that educational programs must still be entertaining and attractive to children, the FCC found that:

[The CTA] does not draw a distinction between educational and informational programming that furthers children’s cognitive and intellectual development and educational and informational programming that furthers children’s social and emotional development. We decline to draw that distinction ourselves and accordingly conclude that both fall within the scope of our definition. We underscore that we are not interested in influencing—or even knowing—the viewpoint of any core programming.28

The record in this proceeding provides no basis for the Commission to alter its statutory interpretation or depart from well-established precedent so as to require broadcasters to air certain amounts of programming specifically designed to meet children’s cognitive/intellectual needs.29 Regulatory intervention is inappropriate in the absence of a record establishing the existence of a problem, for “a regulation perfectly

28 Id. at 10,701 (¶ 87). The Commission emphasized that, in adopting the processing guideline, they were not “telling licensees what topics to discuss.” Id. at 10,730 (¶ 151).
reasonable and appropriate in the face of a given problem may be highly capricious if that problem does not exist.”\textsuperscript{30} Indeed, the Commission’s authority to adopt rules significantly implicating program content – as an increase in governmental oversight regarding whether particular programs meet children’s educational and informational needs would undoubtedly do – is extremely limited.\textsuperscript{31} For such a content-based restriction on broadcast speech to pass constitutional muster, it must be “narrowly tailored to further a substantial governmental interest.”\textsuperscript{32}

NAB agrees that the government’s interest in ensuring that the needs of child audiences are met may well qualify as a “substantial” one in the abstract. However, the Supreme Court has clearly held that the FCC does not have the power to require broadcasters to air particular program content, stating that:

\begin{quote}
[T]he FCC’s oversight responsibilities do not grant it the power to ordain any particular type of programming that must be offered by broadcast stations; for although the Commission may inquire of licensees what they have done to determine the needs of the community they propose to serve, the Commission may not impose upon them its private notions of what the public ought to hear.\textsuperscript{33}
\end{quote}

In light of the evidence that broadcasters are providing a wide array of diverse programming that meets the educational and informational needs of children,\textsuperscript{34} there is

\begin{footnotes}
\item[30] \textit{HBO v. FCC}, 567 F.2d 9, 36 (D.C. Cir. 1977) (citation omitted).
\item[31] \textit{E.g., Motion Picture Ass’n of Am. v. FCC}, 309 F.3d 796, 802-03 (D.C. Cir. 2002).
\item[33] \textit{Turner Broad. Sys., Inc}, 512 U.S 622, 650 (1994) (internal citation omitted). NAB further notes that governmental involvement in judging the quality or merit of children’s, or any other, television programming would raise particular First Amendment concerns. See Comments of NAB in MB Dkt No. 04-261, at 35-36 (filed Oct. 15, 2004).
\item[34] See supra Section II.
\end{footnotes}
simply no basis or need for the Commission to increase its oversight of programming content. And the large, and ever-increasing, number of additional outlets and other sources of video programming and products that are available to meet those needs lessen any possible practical or legal justification for intruding on broadcasters’ good faith judgments as to whether programming serves the educational and informational needs of children.

IV. The Commission Should Encourage Development of Marketplace Technologies to Empower Parents But Not Mandate Specific Technological Tools.

While NAB shares the Commission’s goal of shielding children from potential risks associated with accessing electronic media, the Commission should exercise caution in mandating the use of specific technological tools or ratings systems in pursuit of this goal. Over-the-air broadcasting is uniquely reliant on advertising to support E/I programming and other quality content. The Commission should be careful to refrain from regulatory actions that could unintentionally harm broadcasters’ ability to continue delivering E/I and other quality programming to child audiences. And as discussed below, while there are differences in the adoption rates of blocking technologies for different electronic media platforms, such differences are only to be expected in light of today’s diverse media landscape and the differing characteristics of various media outlets.

A. It Is Unsurprising that Adoption Rates for the V-Chip Are Different than Other Parental Control Technologies.

The Notice specifically cites difficulty in using the V-chip and a lack of understanding of the current television program ratings system as factors limiting parental adoption of the V-chip. Notice at fn. 87. This statement appears somewhat
inconsistent with the leading surveys on use of the V-chip and program ratings system by the Kaiser Family Foundation. The 2007 Kaiser report found that more than half (53%) of all parents reported using the TV Parental Guidelines.\(^{35}\) Almost 90% of those parents found the ratings to be useful, including almost half who found them “very useful.” 2007 Kaiser report at 21. While fewer parents set the V-chip than utilized the program ratings,\(^{36}\) the vast majority (89%) of parents using the V-chip said they found the V-chip to be useful. Nearly three-quarters (71%) who had used the V-chip found it “very useful.” 2007 Kaiser report at 10. And among parents who are aware of the V-chip but who have chosen not to use it, 50% report that an adult is usually nearby to monitor their children’s television viewing and 14% say they “trust their kids to make their own decisions.” 2007 Kaiser report at 10. Thus, parents who choose not to set the V-Chip make this choice for a variety of reasons other than a belief that the technology is too difficult to employ or not effective.

Parents today use a range of non-technological strategies to oversee their children’s television use, including, for example, watching television with their children, and enjoy greater technological options than ever before for screening video programming. Twenty-five percent of parents report using parental controls provided through a cable or DBS provider. 2007 Kaiser report at 10. A number of parental


\(^{36}\) The 2007 Kaiser report found that 16% of parents used the V-chip, a significant increase over the 7% that used the V-chip in 2001. See News Release, Kaiser Family Foundation, *Few Parents Use V-Chip to Block TV Sex and Violence* (July 20, 2001).
control solutions are available from third-party sources as well. Any discussion about the V-chip adoption rate must be within this broader context of the wide variety of tools available to parents to help manage their children’s television viewing. Indeed, given the range of options available to parents today, it is unsurprising that no single tool is used by large majorities of parents.

The Commission also queries why the adoption rate of the V-chip is low compared with blocking or filtering technologies for other media platforms, such as the Internet. Notice at ¶ 46, fn. 88. There are a myriad of factors affecting differences in adoption rates. Today, only about 32% of U.S. households have children under the age of 18. Older adults (especially those over the age of 55) spend more time watching television than other age groups; in fact, children ages 2-11 and teens ages 12-17, along with young adults ages 18-24, spend less time watching traditional television than all other age groups. One would therefore not expect adoption rates of technologies for blocking television programming in many households to be significant.

Beyond these demographic factors, differences between broadcast content and online content – and the different risks inherent in these platforms – are likely the primary factors in differing adoption rates for broadcast television and online blocking and filtering technologies. The Internet offers an almost unlimited array of entertainment and educational resources for children, but also presents risks that are not found in over-the-air broadcast media. For example, approximately one in seven

37 See Joint Comments of NAB, NCTA and MPAA, MB Dkt No. 09-26 at 15-16 (filed April 16, 2009).
youths (10 to 17 years) experience a sexual solicitation or approach while online.\textsuperscript{39} Access to pornographic or sexually explicit websites is another concern. In a recent survey, 96\% of teens interviewed had Internet access, and 55.4\% reported that they had visited a sexually explicit website.\textsuperscript{40} And with millions of pornographic websites that can be accessed even accidentally (\textit{e.g.}, \url{www.whitehouse.com}), parents have great incentive to ensure that the blocking, filtering or ratings technologies they may choose to employ in their households address these concerns. Because these potential risks associated with online content are not associated with over-the-air broadcast content, it should be expected that parents have a higher adoption rate for online blocking technologies.

\textbf{B. There Are Serious Technical and Practical Impediments to Rating and Blocking Broadcast Advertisements}

The Commission asks whether it is feasible to block advertising content “inappropriate” for children on various platforms. \textit{Notice} at ¶ 40. Rating advertisements within broadcast programming so that the V-chip may block them presents significant technical and operational challenges. Given the thousands of commercials aired in television programming every day, just the sheer volume of content that would need to be rated presents massive logistical issues.

Moreover, under current FCC regulations that require compliance with the ATSC PSIP standard, in order to transmit content ratings for advertisements, the ad would have to be treated as if it were an actual program, resulting in a confusing and unreadable Electronic Program Guide (EPG). PSIP was conceived as a system that sends information to DTV receivers about an entire program, not portions of a program. In PSIP, a program is known as an “event,” and the data describing that program is transmitted in an Event Information Table (EIT). The Content Advisory Descriptor (CAD) is one of the descriptors carried in the EIT for each event. When a DTV set receives an EIT, it knows that, by definition in the ATSC and CEA standards, the information in this table refers to all the programs in a three-hour period. This allows receivers to very rapidly block any program as the program begins, based on the CAD contained in the previously-sent EIT. In order to send a new or different program rating (such as for an advertisement), a television station would need to define a new event into which the CAD for the advertisement could be placed.

A DTV receiver will use the information contained in the EITs to populate its EPG. A DTV set will interpret any new event in the EIT as signaling a new program and will display it as such in its EPG. If all advertisements contained separate program ratings, an EPG would be flooded with innumerable entries that would divide the


42 The EIT also carries information such as the program title and description, the start time and end time, type of audio, etc.

43 We note that inserting different CADs in an event (i.e., a program) during commercials would violate the PSIP standard and could even change the rating of the event, as well as presenting other technical difficulties.
existing guide into myriad segments, making it unreadable to the consumer and significantly undermining its usefulness. Therefore, sending ratings for advertisements in the ATSC A65 environment is both impractical and technically unworkable.

NAB notes that an alternate method exists for conveying the rating of a program. Within the MPEG-2/ATSC transport stream construct is a table called the Program Map Table (PMT).\textsuperscript{44} It tells a DTV receiver, or any ATSC decoder, where to find the component parts of a program. ATSC television signals contain many packets of digital data. Some of those packets represent video, some represent the English audio track and others might represent a second language audio track. The PMT provides the decoder with a “map” of where to find the component pieces of a program. The PMT also contains a number of descriptors, including ones that can point to the content ratings of a program.\textsuperscript{45}

Because DTV receivers do not typically use the PMT to generate EPGs, advertisement ratings theoretically could be transmitted via the PMT without impacting the EPG. However, NAB stresses that sending ratings in this manner is not compliant with ATSC A65 and Commission rules, which require information in the PMT’s descriptors to be identical to the corresponding descriptors in the EIT for a particular program.

In addition, as a practical matter, if a station were to transmit a CAD with only program ratings in the EIT but transmit additional advertisement ratings descriptors in ________________

---

\textsuperscript{44} The PMT is not a PSIP table.

\textsuperscript{45} Unlike the EIT, which is transmitted for programs that will occur in the future (FCC regulations require EITs to be sent for programs three hours in advance), the PMT can be thought of as a “what’s happening right now” table.
the PMT, then these two tables would not match, potentially resulting in a conflict leading to unknown behavior in DTV receivers. It is also unknown whether existing DTV receivers process the ratings information contained in the PMT and, if so, whether receivers would recognize frequent changes in the PMT. And irrespective of what method might be used to convey advertisement ratings, there still remains the general expectation that the data contained in both the EIT and PMT pertain to entire programs.

Finally, regardless of how ratings for advertisements might be transmitted, attempting to do so would present additional significant technical and operational challenges at the station level. As an initial matter, the software in PSIP generators would have to be completely redesigned. The database structure within PSIP generators is designed to manage information about entire programs, updating the relevant tables typically at half hour or one hour intervals. The PSIP generator would need to be redesigned to support program segments and update tables in intervals as short as 10 to 15 seconds – this would be a significant undertaking. In addition, the typical broadcast station does not have the infrastructure in place to convey information about advertisements to the PISP generator. Even presuming a broadcaster could acquire the advertisement ratings information, a method to interface the PSIP generator to the station’s traffic and automation system would need to be developed through a cooperative effort between the respective manufacturers. Consequently, transmitting ratings for advertisements would require broadcasters to implement an infrastructure

46 Under the ATSC and CEA standards, receivers are not required to read the PMT for the CAD, but they are required to examine the EIT for the CAD.

47 A traffic and automation system is used in a broadcast station to schedule and manage the playout of commercials.
that does not currently exist.\textsuperscript{48} For all these reasons, rating the thousands of advertisements shown daily in television programming is practically and technically infeasible.

It is, moreover, worth restating that because advertisements are a critical source of revenue for the development and distribution of high quality programming, the unintended consequence of increased blocking of commercials would likely be to limit the audience for advertisements and thereby diminish this vital revenue stream. The Commission should not recommend impracticable proposals that would unintentionally undermine economic support for television programming, including E/I programming.

\textbf{C. The Commission Should Not Attempt to Impose Additional Ratings Systems or Uniform Ratings Across Platforms.}

Beyond the difficulties associated with rating advertisements, the Commission has asked whether a uniform rating system for programming across multiple platforms is an appropriate objective. See \textit{Notice} at ¶ 48. The broadcast and cable television industries are continually trying to make the TV Parental Guidelines even easier and more effective for parents. As part of the development of the television program ratings system, the television industry established a Monitoring Board, comprised of experts from the television industry and children’s advocacy groups, that responds to consumer

\textsuperscript{48} On July 23, 2009, Wi-LAN V-Chip Corp. demonstrated to the Commission a method capable of providing blocking technology for advertisements that apparently does not adversely impact EPGs. See Letter from Murray Eldon to the Commission, MB Dkt No. 09-26 (filed July 24, 2009). While Wi-LAN does not describe its technology, using the PMT method is the only way known to NAB to accomplish this without creating a proprietary technology wholly noncompliant with ATSC standards. Wi-LAN states that the implementation of commercial ratings “can be accomplished with a software patch at the transmission end.” We believe that Wi-LAN has significantly underestimated the level of software redesign needed on the transmit side and ignored the impact on receivers.
questions and complaints about the ratings system and works with companies to ensure that the ratings are applied accurately and consistently to television programs. The Monitoring Board’s efforts have resulted in meaningful improvements in the application of television ratings and are ongoing. The industry is also constantly exploring ways to increase parental awareness and understanding of the ratings systems and V-chip.49

As previously discussed by NAB and other parties,50 the record simply does not support a one-size-fits-all approach for parental controls. The marketplace has already responded with robust choices for parental control tools and technologies on a variety of content distribution platforms. Beyond television, the record in Child Safe Viewing Act proceeding reflects that there are numerous parental control solutions available for use on Internet, wireless, gaming and other platforms. This multiplicity of options is a benefit, not a disadvantage. Given the significant technological differences between media platforms, and the different approaches parents take in determining what is appropriate for their families, a range of solutions should be available to meet parents’ differing needs. The market-based innovation that has created multiple parental control technologies and devices should be maintained so that parents have continued flexibility to tailor their families’ media consumption as they find appropriate.

Beyond likely inhibiting continued innovation, requirements mandating the use of a particular ratings system would raise very serious constitutional and legal concerns. As NAB has previously shown, mandated program ratings would violate the First

49 See Joint Comments of NAB, NCTA and MPAA, MB Dkt No. 09-26, at 9-13 (filed April 16, 2009).
50 See id. at 21-22; Joint Reply Comments of NAB, NCTA and MPAA, MB Dkt No. 09-26, at 15-17 (filed May 18, 2009).
Amendment rights of programmers and distributors.\textsuperscript{51} In fact, the courts have invalidated on constitutional grounds past attempts to incorporate voluntary media ratings (including MPAA movie ratings) into laws regulating speech.\textsuperscript{52} Attempts to impose mandatory ratings would also exceed the authority Congress granted the FCC in this area. NAB has previously explained that, under the 1996 Telecommunications Act, the Commission cannot mandate the use of, or require changes or additions to, the current program ratings system voluntarily adopted by the television industry.\textsuperscript{53}

In addition to these legal and constitutional impediments, the imposition of a uniform (and presumably different) ratings system, or a requirement to carry multiple ratings systems, would have serious practical implementation problems. Although manufacturers have begun building television sets capable of implementing flexible ratings, there is an embedded base of more than 150 million V-chip-equipped television sets that can only respond to the current TV Parental Guidelines and the MPAA movie ratings and that cannot be made to work with a different ratings system. To the extent there is concern about the usage levels of the V-chip and the TV Parental Guidelines, 

\textsuperscript{51} See Joint Comments of NAB, NCTA and MPAA, MB Dkt No. 09-26, at 19-20 (filed April 16, 2009); Joint Reply Comments of NAB, NCTA and MPAA, MB Dkt No. 09-26, at 9-10 (May 18, 2009); Joint Reply Comments of NAB, NCTA and MPAA, ET Dkt No. 97-206, at 5 (filed Dec. 8, 1997) (explaining that a mandatory system would constitute compelled speech subject to strict scrutiny).


\textsuperscript{53} See NAB Reply Comments in MB Dkt. No. 04-261, at 10-13 (filed Nov. 5, 2004) (discussing in detail Section 551 of the 1996 Act and the FCC’s very limited regulatory role in the television industry’s establishment of voluntary ratings). We note that any mandate requiring broadcasters to rate advertisements would be similarly inconsistent with the First Amendment and the Commission’s statutory authority.
changing this system and/or adding additional ratings to programs could well make these tools more, not less, difficult to use, by adding new levels of complexity and creating consumer confusion.

While it is true that the ATSC standards (and the Commission’s rules) provide for the ability to download additional ratings systems to DTV sets through, for example, the use of RRT-05, this system is not infinite in its scope.\textsuperscript{54} Under the current construct, whatever number of additional ratings systems that might be used would all need to fit within a single RRT-05 that would transmitted by all stations in a market.

Moreover, it is entirely unknown how DTV receivers would react if a DTV station were to transmit an RRT-05 that contains one ratings system, but another station in the same market transmits an RRT-05 containing a different ratings system. Current receivers are not designed to store multiple versions of the same RRT. Again, such a discrepancy in data received by a current DTV set could have an adverse affect on the receiver causing it to behave unpredictably or even to lock up. There are many unanswered questions about how RRT-05 and its associated CAD would be practically implemented. Thus, it would premature to begin an open V-chip system until the relevant standards bodies have provided technical and operational guidance on its implementation.\textsuperscript{55}

With regard to previous suggestions that third parties should rate video programming using their own ratings systems (which broadcasters and cable operators

\textsuperscript{54} The ATSC reserved RRT-05 for an unspecified alternative U.S. rating system or systems.

\textsuperscript{55} See Joint Reply Comments of NAB, NCTA and MPAA, MB Dkt No. 09-26, at 14-15 (filed May 18, 2009).
would then be required to use), there is no practical way for a third-party organization to review and rate in advance the thousands of hours of programming airing on television every day. It is also unclear what type of process the government might use to select a third-party ratings system or systems; obviously, any such process would be complex, time-consuming, and present numerous complex practical, legal and policy considerations. Once any alternative systems were selected, it would require lengthy development and consensus approval of technical standards and costly modifications to broadcast and cable equipment. Alternative ratings systems might also create substantial consumer confusion by requiring the display of multiple icons at the beginning of the rated program; it would be difficult to accommodate two or more ratings icons without blocking out portions of the program on the television screen. And as described above, most legacy television equipment could not even respond to any third party ratings system.

V. Conclusion.

Broadcasters deeply value our commitment to America’s children, and we will continue to create quality programming to serve their needs in the digital age. We urge the Commission to focus on ensuring that parents have access to information about the range of parental control technologies available in the marketplace and information about effectively using these tools. In this regard, the Commission should consider whether a comprehensive technical and media literacy campaign could enhance parents’ and children’s access to the wealth of educational content available today both over-the-air and through other electronic media.
Respectfully submitted,

Jane E. Mago
Jerianne Timmerman
Ann West Bobeck
In-Sung Yoo
Kelly Williams
THE NATIONAL ASSOCIATION OF
BROADCASTERS
1771 N Street N.W.
Washington, D.C. 20036
(202) 429-5430

February 24, 2010
<table>
<thead>
<tr>
<th>Site Name</th>
<th>URL</th>
<th>Grades</th>
<th>Short Profile</th>
<th>Free, Cost or Sub?</th>
<th>Subject Matter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambium Learning Group, Inc.</td>
<td><a href="http://www.cambiumlearning.com/">http://www.cambiumlearning.com/</a></td>
<td>PreK-12</td>
<td>Cambium Learning Technologies, which includes ExploreLearning, IntelliTools, Kurzweil and Learning A-Z. Through its core divisions, it will provide research-based education solutions for students in Pre-K through 12th grade, including intervention curricula, educational technologies and services.</td>
<td>Free Trial</td>
<td>Reading, writing, science, and math</td>
</tr>
<tr>
<td>Creativity Express</td>
<td><a href="http://www.madcaplogic.com/index.php">http://www.madcaplogic.com/index.php</a></td>
<td>K-12</td>
<td>To check out this animated art lesson from Creativity Express, features the color wheel, complementary colors, a quick evaluation, and more.</td>
<td>Free</td>
<td>Art, Design</td>
</tr>
<tr>
<td>Finding Education</td>
<td><a href="http://findingeducation.com/">http://findingeducation.com/</a></td>
<td>K-12</td>
<td>Finding Education is a FREE educator tool that helps you find the best online resources and share them with your students.</td>
<td>Free</td>
<td>All Subjects</td>
</tr>
<tr>
<td>Finding Dulcinea: The Librarian for the Internet Age</td>
<td><a href="http://www.findingdulcinea.com">http://www.findingdulcinea.com</a></td>
<td>K-12</td>
<td>Presents only credible, high-quality and trustworthy Web sites, saving time for the novice and the experienced user alike.</td>
<td>Free</td>
<td>All Subjects</td>
</tr>
<tr>
<td>Site Name</td>
<td>URL</td>
<td>Grades</td>
<td>Short Profile</td>
<td>Free, Cost or Sub?</td>
<td>Subject Matter</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>---------------------------------------------------</td>
<td>----------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>Florida Virtual School</td>
<td><a href="http://www.flvs.net/">www.flvs.net/</a></td>
<td>K-12</td>
<td>Florida Virtual School is an accredited, public, online e-learning school serving students in grades K-12 all over the world. FLVS serves students in grades K-12 and provides a variety of custom solutions for schools and districts to meet student needs.</td>
<td>Free for Florida residents; non-Florida residents take courses based on tuition rates.</td>
<td>Art/Visual Arts Business Tech. Computer Science English Social Studies Foreign Language Health/Phys. Ed Math</td>
</tr>
<tr>
<td>Free Teaching Aids.com</td>
<td><a href="http://www.freeteachingaids.com/">http://www.freeteachingaids.com/</a></td>
<td>K-12</td>
<td>Supplementary teaching aids like teacher's guides, films, computer programs, filmstrips, maps, posters, books, slides.</td>
<td>Free</td>
<td>All Subjects</td>
</tr>
<tr>
<td>KidsSkinHealth.org</td>
<td><a href="http://www.kidsskinhealth.org/">http://www.kidsskinhealth.org/</a></td>
<td>Kids ages 8-12</td>
<td>The American Academy of Dermatology has an interactive Web site where kids can find out what happens if they run into poison ivy, forget to apply sunscreen, or don't practice good hygiene.</td>
<td>Free</td>
<td>Health</td>
</tr>
<tr>
<td>LeapFrog Enterprises, Inc. LeapFrog Learning Path</td>
<td><a href="http://www.leapfrog.com/">http://www.leapfrog.com/</a> <a href="http://www.leapfrog.com/en/play/information_center.html">http://www.leapfrog.com/en/play/information_center.html</a></td>
<td>PreK-8</td>
<td>LeapFrog Learning Path is a free online tool the parent see the child's learning progress with LeapFrog products.</td>
<td>Free; Parents must register online</td>
<td>Reading</td>
</tr>
<tr>
<td>Site Name</td>
<td>URL</td>
<td>Grades</td>
<td>Short Profile</td>
<td>Free, Cost or Sub?</td>
<td>Subject Matter</td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td>------------------------------</td>
<td>--------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------------------</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td>Lectr.com</td>
<td><a href="http://www.lectr.com/">http://www.lectr.com/</a></td>
<td>K-12</td>
<td>Educational video sharing site that focuses primarily on educational content. It provides videos of lectures given by various teachers and professors on a variety of topics and subjects that could prove helpful for college students. You can search for videos on topics you want to learn by typing in the query. Everyone can upload tutorial videos after signing up.</td>
<td>Free - Signup required</td>
<td>All subjects</td>
</tr>
<tr>
<td>National Aeronautics and Space Administration (NASA)</td>
<td><a href="http://hubblesite.org/gallery/">http://hubblesite.org/gallery/</a></td>
<td>K-12</td>
<td>Site for sharing the amazing discoveries of the Hubble Space Telescope with the American public.</td>
<td>Free</td>
<td>Science, Astronomy</td>
</tr>
<tr>
<td>National Geographic Kids</td>
<td><a href="http://kids.nationalgeographic.com/">http://kids.nationalgeographic.com/</a></td>
<td>Kids ages 6- to 14-year-old</td>
<td>A mix of articles on wildlife, entertainment, science, technology, extreme sports, adventures, amazing kids, and world wonders.</td>
<td>Free</td>
<td>Science, Technology</td>
</tr>
<tr>
<td>Site Name</td>
<td>URL</td>
<td>Grades</td>
<td>Short Profile</td>
<td>Free, Cost or Sub?</td>
<td>Subject Matter</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>------------------------------------</td>
<td>--------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Scholastic Corporation</td>
<td><a href="http://www.scholastic.com/kids/stacks/videos/">http://www.scholastic.com/kids/stacks/videos/</a></td>
<td>K-12</td>
<td>Scholastic Corporation (Scholastic), together with its subsidiaries is a global children’s publishing, education and media company. The Company is the publisher and distributor of children’s books, and a developer of educational technology products.</td>
<td>Free</td>
<td>Reading</td>
</tr>
<tr>
<td>Sweet Search Web Links</td>
<td><a href="http://www.sweetsearch.com/weblinks.html">http://www.sweetsearch.com/weblinks.html</a></td>
<td>K-12</td>
<td>A collection of model Web Links to help educators introduce students to the best Web resources.</td>
<td>Free</td>
<td>All Subjects</td>
</tr>
<tr>
<td>Teachers.Net</td>
<td><a href="http://teachers.net/gazette/">http://teachers.net/gazette/</a></td>
<td>K-12</td>
<td>The Teachers.Net Gazette features exciting education news, insightful commentary, clever teaching tips, engaging lesson plans, pedagogy, classroom crafts, recipes, inspiration, humor, and a huge collection of free printables for the classroom!</td>
<td>Free</td>
<td>All Subjects</td>
</tr>
<tr>
<td>The Zinn Education Project</td>
<td><a href="http://www.zinnedproject.org/">http://www.zinnedproject.org/</a></td>
<td>6-12</td>
<td>The Zinn Education Project promotes and supports the use of Zinn's bestselling book, A People's History of the United States, along with other materials, for teaching a people's history in middle and high school classrooms throughout the country.</td>
<td>Free</td>
<td>History</td>
</tr>
<tr>
<td>World History: Online Holocaust Workshop</td>
<td><a href="http://www.ushmm.org/education/foresetutors/workshop/">http://www.ushmm.org/education/foresetutors/workshop/</a></td>
<td>K-12</td>
<td>This online workshop includes video segments (from a workshop presented in Baltimore, Maryland), which include historical and artifact photographs, text, and links to related sites.</td>
<td>Free</td>
<td>History</td>
</tr>
<tr>
<td>Site Name</td>
<td>URL</td>
<td>Grades</td>
<td>Short Profile</td>
<td>Free, Cost or Sub?</td>
<td>Subject Matter</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>-------------------------------------------------------</td>
<td>------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>Your America Student Guide (PBS)</td>
<td><a href="http://www.pbs.org/now/youramerica/YA-Student-Guide.pdf">http://www.pbs.org/now/youramerica/YA-Student-Guide.pdf</a></td>
<td>9-12</td>
<td>Free 21-page guide to inspire civic awareness among students. Read and share your story of what you’ve done to create change in your community.</td>
<td>Free</td>
<td>Civics</td>
</tr>
<tr>
<td>Blackboard Learn</td>
<td><a href="http://www.blackboard.com/Solutions-by-Market/K-12/Learn-for-K12/Overview.aspx">http://www.blackboard.com/Solutions-by-Market/K-12/Learn-for-K12/Overview.aspx</a></td>
<td>K-12 and beyond</td>
<td>Blackboard is a US based company that provides e-Education enterprise software applications and related services to the education industry.</td>
<td>Not Free</td>
<td>All Subjects</td>
</tr>
<tr>
<td>EdisonLearning; Edison Schools Inc.</td>
<td><a href="http://www.edisonlearning.com/">http://www.edisonlearning.com/</a></td>
<td>K-12</td>
<td>EdisonLearning works with educators and communities to improve public schools and boost student performance.</td>
<td>Not Free</td>
<td>All Subjects</td>
</tr>
<tr>
<td>Gale</td>
<td><a href="http://www.galeschools.com/">http://www.galeschools.com/</a></td>
<td>K-12</td>
<td>Gale®, part of Cengage Learning, is a world leader in e-research and educational publishing for libraries, schools and businesses. The company creates and maintains more than 600 databases that are published online, in print, as eBooks and in microform.</td>
<td>Not Free; Online Catalog, some free tutorials on website</td>
<td>Business, Language Arts, Math Science Social Studies History</td>
</tr>
<tr>
<td>Site Name</td>
<td>URL</td>
<td>Grades</td>
<td>Short Profile</td>
<td>Free, Cost or Sub?</td>
<td>Subject Matter</td>
</tr>
<tr>
<td>------------------------------</td>
<td>------------------------------------------</td>
<td>--------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>K12</td>
<td><a href="http://www.k12.com/about_k12/">www.k12.com/about_k12/</a></td>
<td>K-12</td>
<td>K12 offers individualized, one-to-one learning solutions and online schooling programs to students from kindergarten through high school across the country.</td>
<td>Pay for courses</td>
<td>Language Arts  Math, Science History, Art Music</td>
</tr>
<tr>
<td>Pearson plc</td>
<td><a href="http://www.pearson.com/">http://www.pearson.com/</a>  <a href="http://www.pearsoned.com/">http://www.pearsoned.com/</a> <a href="http://www.pearsonschool.com">http://www.pearsonschool.com</a></td>
<td>K-12</td>
<td>Pearson is the world’s leading education company, providing educational materials, technologies, assessments and related services to teachers and students of all ages; also a leading provider of electronic learning programs and of test development, processing and scoring services to educational institutions, corporations and professional bodies around the world.</td>
<td>Not Free</td>
<td>Math Reading Language Arts Science Social Studies</td>
</tr>
<tr>
<td>PLATO Learning, Inc.</td>
<td><a href="http://www.plato.com/">http://www.plato.com/</a></td>
<td>K-12</td>
<td>Online instruction, curriculum management, assessment and related services to K–12 schools, community colleges and other educational institutions across the country.</td>
<td>Not Free</td>
<td>Reading, Math</td>
</tr>
<tr>
<td>Site Name</td>
<td>URL</td>
<td>Grades</td>
<td>Short Profile</td>
<td>Free, Cost or Sub?</td>
<td>Subject Matter</td>
</tr>
<tr>
<td>---------------------------</td>
<td>------------------------------------------</td>
<td>--------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------</td>
<td>-----------------------------------------------------</td>
</tr>
<tr>
<td>Primary Source.biz</td>
<td><a href="http://primarysource.biz/-strse-template/about/Page.bok">http://primarysource.biz/-strse-template/about/Page.bok</a></td>
<td>PreK - 2</td>
<td>Various units, games, center activities, instructional posters, worksheets, and classroom management materials for Pre-K, Kindergarten, 1st Grade, and 2nd Grade classrooms. All of our products are offered as ELECTRONIC DOWNLOADS.</td>
<td>Price depends on quantity ordered.</td>
<td>Math, Reading, Science, Seasonal, Social Studies, Teacher and Classroom Resources, Writing</td>
</tr>
<tr>
<td>Proquest K-12</td>
<td><a href="http://proquestk12.com">http://proquestk12.com</a></td>
<td>K-12</td>
<td>Proquest provides access to information from periodicals, newspapers, multimedia and image collections, out-of-print books, dissertations, and scholarly collections in various formats as research solutions for elementary, middle, and high school (K-12) classrooms and libraries.</td>
<td>Subscription required; free trials for some research tools.</td>
<td>All subjects.</td>
</tr>
<tr>
<td>Provost Academy</td>
<td><a href="http://www.co.provostacademy.com">www.co.provostacademy.com</a></td>
<td>9-12</td>
<td>Provost Academy is a tuition-free public online high school. Provost Academy Colorado is an online public high school serving grades 9 to 12 that is uniquely designed to address student needs on an individual basis.</td>
<td>Tuition free for CO students. Minimal costs to families for optional extracurricular activities and fieldtrips, and peripherals like binders, pens, etc.</td>
<td>English, Math, Science, Social Science, World Languages</td>
</tr>
<tr>
<td>Renaissance Learning, Inc.</td>
<td><a href="http://www.renlearn.com/">http://www.renlearn.com/</a></td>
<td>PreK-12</td>
<td>Renaissance Learning, Inc. is a provider of computer-based assessment technology for pre-kindergarten through senior high (pre-K-12) schools and districts.</td>
<td>Not Free</td>
<td>Reading, writing and math.</td>
</tr>
<tr>
<td>Site Name</td>
<td>URL</td>
<td>Grades</td>
<td>Short Profile</td>
<td>Free, Cost or Sub?</td>
<td>Subject Matter</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>----------------------------------</td>
<td>--------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------</td>
<td>---------------------------------------------------------------------</td>
</tr>
<tr>
<td>School Specialty, Inc.</td>
<td><a href="http://www.schoolspecialty.com/">http://www.schoolspecialty.com/</a></td>
<td>PreK-12</td>
<td>School Specialty, Inc. (School Specialty) is an education company serving the pre-kindergarten through twelfth grade (preK-12) market with value-added instructional solutions that address a spectrum of educational needs, from basic school supplies to standards-based curriculum solutions.</td>
<td>Not Free</td>
<td>Planning &amp; Student Development; Intervention; Science; Physical Education</td>
</tr>
<tr>
<td>Scientific Learning Corporation</td>
<td><a href="http://www.scilearn.com/">http://www.scilearn.com/</a></td>
<td>K-12</td>
<td>Scientific Learning Corporation (Scientific Learning) develops and distributes the Fast ForWord family of software. The Company’s products build learning capacity by applying neuroscience-based learning principles to improve the fundamental cognitive skills required to read and learn.</td>
<td>Subscription</td>
<td>Reading</td>
</tr>
<tr>
<td>The Princeton Review, Inc</td>
<td><a href="http://www.princetonreview.com/">http://www.princetonreview.com/</a></td>
<td>9-12 and beyond</td>
<td>The Princeton Review, Inc. provides integrated classroom-based, print and online products and services that address the needs of students, parents, educators and educational institutions through three divisions: the Test Preparation Services division, the Supplemental Education Services (SES) division, and the K-12 Services division, which provides a range of services to K-12 schools and school districts to help primary and secondary school students and teachers improve academic performance.</td>
<td>Not Free</td>
<td>All Subjects</td>
</tr>
</tbody>
</table>
## Educational Websites

<table>
<thead>
<tr>
<th>Site Name</th>
<th>URL</th>
<th>Grades</th>
<th>Short Profile</th>
<th>Free, Cost or Sub?</th>
<th>Subject Matter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wimba</td>
<td><a href="http://www.wimba.com/solutions/k-12/">www.wimba.com/solutions/k-12/</a></td>
<td>K-12</td>
<td>A set of collaborative learning solutions that integrates video, voice, chat, application sharing and white boarding into typically static, text-based online classes or the traditional classroom to enhance the learning experience through greater collaboration and interaction.</td>
<td>Pay for Subscription and Tech Support.</td>
<td>All subjects.</td>
</tr>
</tbody>
</table>