It's a Media World After All:

A Survey of Children's Media and Technology Use

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Abstract

We conducted a study of 338 students ages 4-11 attending The Russell Byers Charter School to better understand the role of mass media, popular culture and technology in the lives of young children from an urban community. Significant results include:

- Having a television in the bedroom appears to be the norm. Most Byers School children report being heavy viewers of television. Children's cable television dominates children's viewing choices.
- Most intermediate students report frequently using cell phones for photos, games, music, and text messages. Most Byers school children use the Internet and cell phones to listen to music. Beat, dance potential, and celebrity attachment are children's most common reasons for choosing favorite songs.
- Most intermediate-level children use a computer to go on the Internet at home frequently, primarily for entertainment purposes. Viewing videos and playing games are the most common Internet activities for children at the Byers School.
- Almost all Byers School students play video games. Violence and fighting are the most common reasons students report liking their favorite video games.
- Students watch many scary and R-rated movies at home. Many children report nightmares after viewing violent or scary movies.
- Most children report that their parents do not impose rules about TV content. Parents do not monitor children's Internet use. Many Byers School students say their parents impose time limits for video game play, but they are seldom told what types of videogames to play. Across all media forms, parent regulation of in-home media use is uncommon. However, some parents co-view and talk with children about media.

Broadly speaking our results indicate students at the Byers School live in a media-saturated and technology-intensive environment, with few opportunities to share, discuss, and evaluate these experiences with a caring adult. Our recommendations include:

- Open dialogue with parents and children about media and technology use.
- Make media and technology an area of inquiry.
- Help students acquire critical thinking and communication skills.
- Help students articulate and examine taste.

Children's use of the mass media and technology primarily as an entertainment tool has significant consequences for academic achievement, since children may miss out on the many valuable ways that media and technology can support knowledge acquisition as well as cognitive, social and emotional growth. Educators can maximize children's full potential for the 21st century by helping bridge the gap between the classroom and the culture.

Introduction

To say that media has a presence in the lives of children today would be an understatement. Children access a multitude of media sources, the most common being television, but also video game systems, the Internet, radio, and mobile phones. A national study of 8 to18 year-old children found that 67% of 8 to 10 year-olds live in households with 3 or more televisions, 83% have at least one computer, and 84% have at least one video game systems (Kaiser Family Foundation, 2005). Most of children's waking hours are spent in front of many different screens. African American children spend 5 hours 53 minutes engaged in screen media, which is significantly greater than White children who averaged 3 hours 47 minutes per day. Additional research is needed to explore media use among minorities and low-income families, which has received little attention in previous studies. Research with minorities is especially important considering prevalence of media use in these populations. Furthermore, researchers have reported both positive and negative relationships between children's media use and factors like behavior, academic achievement, and attitudes; understanding media use in underrepresented populations may play an essential role in addressing the disparity between social classes.

This report straddles the intersection of a few purposes, which shape its style and content. As academic researchers, we seek to create new knowledge about media uses of urban children. However, our primary goal is to make our research available to inform the educational policy and culture of the Russell Byers Charter School as it interfaces with the school's exploration of the role of communication arts, media literacy and

technology in the curriculum. Thus, the report strives to speak to the faculty, staff and parents of Byers School children as well as academics in interdisciplinary fields related to mass media and communication. Additionally, this report contributes to course credits earned by members of the research team for a Mass Media and Children graduate-level class. If our endeavor to write for this complex array of purposes and audiences creates any confusion, correspondence about this report is welcome and encouraged.

The research team consists of five Temple University graduate students: a doctoral student in Mass Media and Communications, a doctoral student in Educational Psychology, a master's student in Film and Media Arts, and two master's students in Broadcast, Telecommunications and Mass Media. The research design, collection, analysis and report comprise a required group project for a graduate course in Mass Media and Children taught by Professor Renee Hobbs, Ed.D. in the Spring of 2008.

First, we provide background about the setting and context in which this research took place, followed by evidence from interviews with teachers and school administrators about their perceptions of media' role in the lives of children at the Byers School. This evidence is followed by a review of the scholarly literature related to children's media use behaviors, including television, videogames and the Internet, as they relate to academic achievement, aggressive behavior, and parental monitoring. Next we describe the research methods used to gather information about children's media use, followed by a preliminary summary of the results. Recommendations for action follow in the report's conclusion.

Background and Context; The Russell Byers Charter School

The Russell Byers Charter School, located in Philadelphia, PA, is a public elementary school founded in 2001 by the family of journalist Russell Byers. The Byers family mission for the school is to honor "Russell's lifelong commitment to civic responsibility, community service and academic excellence" (http://www.byerschool.org/about/). The school currently serves 411 students from the Philadelphia area, in pre-kindergarten (including four- and five-year-olds) to sixth grade. The gender distribution is evenly split at 50% (205 females and 206 males); the racial distribution is majority African-Americans (84%), then Caucasian (10%), Hispanic (4%), and Asian (2%) students. The student-teacher ratio is 22:1. Students are selected to attend via a citywide lottery system after their parents or guardians complete an application for admission and attend a mandatory information session. The school also employs a sibling preference policy designed to encourage biological and adopted siblings to attend the school with already admitted family members.

Expeditionary Learning and Achievement

Byers School is an Expeditionary Learning School (ELS) committed to hands-on, interactive learning based on teamwork and service. Developed in 1991, ELS is based on five core practices and ten design principles that: emphasize achievement through a success-failure model intended to build confidence; provide measures to encourage student and cultural diversity; encourage personal reflection and independent learning; and instill in students a sense of civic responsibility. Students at Byers School complete a

series of semester-long projects on special topics in history and science that structure their learning.

Students at the Byers School are required to take the TerraNova standardized test to gauge overall academic performance. Byers School students consistently outperform the average reading and mathematics scores of other schools in the School District of Philadelphia. To encourage smooth development and prevent students from repeating grades, the Byers School employs an early intervention policy that begins at age four to ensure proper emotional, social, and academic development. Graduates have attended private schools and special-admission public schools.

Research Interest in the Russell Byers Charter School

Temple University researchers were eager to participate with the Russell Byers Charter School in a community study of students' media habits. There is a dearth of research material on the media use habits of urban children and children of color, and survey research may help to understand the media use habits of this demographic group.

The Byers School is technologically advanced, from its computerized sign-in process to multiple classroom computers and easily accessible computing facilities lining the hallways. However, it is unclear to what extent understanding of "old" and new media forms are utilized to facilitate learning, even in the immersive and collaborative inquiry-oriented learning environment that the ELS program and the Byers School encourage. To gauge views held by faculty regarding media's influence on Byers students' lives, researchers gathered information on teachers' opinions of children's media use. In the late spring of 2008, researchers will post an online survey for parents, which will enable

us to learn more about parent attitudes and opinions of media, technology, and children's media use in the home.

Teacher Opinions of Children's Media Use

During the week of March 3-7th, 2008, researchers conducted interviews with teachers and staff to gauge their opinions and concerns about their students' media use, including ideas about children listening to music, playing video games, using Internet and cell phones, and watching TV and movies. Researchers approached interviewees during their lunch breaks and spent 10-20 minutes with each of 11 teachers of various grades and subjects, discussing six open-ended questions about children's media use and media's influence on children's learning and behavior in school (see Appendix B). Interviewers wrote notes summarizing conversation points. Researchers analyzed these notes for prominent themes in question responses. Since this data was gathered using a small convenience sample, the following results should not be read as representative of the school's teachers and staff. Instead, this data serves as a preliminary glimpse into teacher's opinions and concerns about their students' media use, which informed both the development of the primary research instruments and the discussion of survey results. Interviews conducted with teachers show a number of key themes, which are described below.

Media Messages Influence Children's Behavior. Teachers believe that children's media use influences students' behaviors, attitudes, relationships, and identities, as well as their learning. The most commonly voiced concerns were about the influence of stereotypical portrayals of gender roles on students' own ideas about gender, particularly

through students' favorite reality TV shows such as *The Flavor of Love*, *A Shot of Love*, *Labor of Love,* and *Rock of Love*. Teachers reported students imitating negative behaviors from favorite TV shows, including inappropriate sexual behavior (kissing, sexualized dancing, etc.) from music videos and Disney's *High School Musical*, and violent acts from wrestling programs. Influence of such media portrayals of violence and sexuality comprised the other most common concerns, which extended to music lyrics and video games. Teachers and staff feared that violent TV and video games taught students to think of violence as a problem solving strategy; some believe that abusive, highly sexualized media had made negative relationships normative among children. Most faculty also worried about social media websites, such as myspace.com, having a hypersexualizing influence on children's self-concepts. Teachers expressed less concern about children' favorites produced by Disney and Nickelodeon, but still commented that these choices offer little educational value and promote commercial culture.

Little Discussion of Media in School. Despite these concerns, only a few teachers and staff reported active discussion of media messages, popular culture or media consumption choices with their students. When asked about media in their classes, teachers mentioned occasional use and recommendation of educational TV/video, video games, and Internet research, but no discussion of the media they feared to be negatively influencing the children. Many teachers expressed frustration that they could not control or affect students' media consumption habits, and that many parents exercised too little restriction allowing children to access inappropriate media.

Media Use Affects Learning. Teachers believe that children's media use has a great impact on their learning. Most teachers cited visual and entertainment media as a

cause of an epidemic of shrinking attention spans for most students. However, teachers also recognized the rich potential of visual media to engage learners deeply. Although several teachers mentioned the positive possibilities for research access, breadth, choice and depth afforded by the wealth of information on the Internet, many voiced concerns about students' lack of basic skills for evaluating sources, contextualizing and synthesizing the fragmented information that the Internet provides. Teachers expressed concern about media use displacing reading time, inside and outside of school, and image-based learning displacing word-based literacy. Furthermore, teachers revealed a school-wide culture which limits media use in classrooms, including limited access to TV/DVD and computers. Still, teachers showed interest in engaging students with media in the future by mentioning a popular culture pedagogy professional development session and expressing a need for teachers to understand the best ways to use media as learning tools with students.

Parents, teachers, politicians and scholars share concerns over media influences on children. The researchers conducted a review of the literature to further explore these media effects. Given the predominantly African American population of the Byers School and the dearth of research on underrepresented populations, special attention was given to studies with low-income and minority populations.

Literature Review

Computers, the Internet, and Low-Income families

Researchers exploring the effects of Internet use on low-income families have reported benefits in both home and school contexts (Jackson et al., 2007; Jackson et al.,

2006; Lee & Chae, 2007; Seiter, 2005). In two longitudinal studies of 140 children, Internet use had a significant positive relationship with state wide standardized test scores after 6 months and GPA after one year (Jackson et al., 2007; Jackson et al., 2006). Specifically, children who spent more time on the Internet, logged into their computers more, and visited more websites saw improvements in academic achievement over time.

These results carry significance considering 66% of low-income families (<35K annually) report having Internet access compared to 84% of families making fifty thousand dollars per year or more. Even though Internet access in low-income families has increased significantly since 1999 (Stanger & Gridina, 1999), the digital divide between the low- and high-income families remains wide (Seiter, 2005). Continuing to explore Internet access and use among low-income and minority youth is a valid and necessary pursuit, which influenced the decision to explore Internet use and access in the present study.

Television and Video Game effects

Scholars in a variety of disciplines have studied the effects of television on children over the past 50 years with mixed results (Berry, 2007). More recently, research on video game effects has gained increased attention. In a 2005 national survey, 87% of African American children (8-18 years-old) reported owning at least one video game system, 69% of 8-10 year-olds reported having a TV in their bedroom, and more than half have a video game system in their bedroom (Kaiser Family Foundation [KFF], 2005). In a second Kaiser Foundation study, parents report almost half of 4-6 year-olds have a television in their bedroom (Kaiser Family Foundation [KFF], 2003).

These statistics are startling considering evidence of negative relationships between television/video game use and academic achievement, exposure to TV/movie violence and aggression, and violent video game exposure and aggressive behavior (Graber, Nichols, Lynne, Brooks-Gunn & Botvin, 2006; Gentile & Walsh, 2002; Anderson & Dill, 2006). For example, Graber et al. (2006) conducted a longitudinal study on a large sample of urban minority 6th graders examining the effects of media on their behaviors. Results indicated that increased use of violent media (including movies, video games, and music) was related to lower academic achievement, aggressive behaviors, and delinquent behavior (Graber et al., 2006).

Other studies with low-income families have found that time spent watching television and having a television in the bedroom have a significant negative relationship with academic achievement. Put in other words, children who watch more television and have a television in their bedroom perform worse in school (Gentile & Walsh, 2002). In experimental and correlational studies examining the influences of video game violence on college students, Anderson and Dill (2006) found that students with aggressive traits who were exposed to violent video games engaged in more delinquent behaviors. Furthermore, after playing a violent video game, participants behaved more aggressively toward opponents in a competitive game (compared to students who played a nonviolent game), and those who spent more time playing video games had lower GPAs. Even though these studies were conducted with college students, they reveal the powerful influence of violent video game play, and further the justification for examining video game use with urban minority children.

Aggression and academic performance are not the only concerns related to media effects. Gentile and Walsh (2002) found that the majority of parents surveyed reported fear reactions to television shows and movies viewed by their children. Therefore, exploring media use and exposure to fear inducing media among urban minority youth is important as well.

Predicting Media Use and Parental Monitoring

Given the influence media has on children, it is important to understand predictive factors of children's media use and parental influences on children's engagement with media. In terms of predicting media use, studies have shown a relationship between ethnicity and family media consumption. For example, Hispanic and African American families are more likely than European American families to have televisions in their bedroom. African American families and Hispanic families also watch significantly more television than European American families (Gentile & Walsh, 2002).

In an attempt to identify factors for predicting media use in three different ethnicities, researchers were less successful overall in predicting media use among African American children than European and Hispanic Americans. The findings suggest that, for African American families, income may be a better indicator than education (both apply for the other 2 groups) for predicting parenting practices that differentiate educational and non-educational media use for children (high income = more educational media). The researchers admit that variables beyond the domains of their model are necessary to better understand patterns of African American children's media use and suggest additional research, which lends credence to the present study (Bickham,

Vandewater, Huston, Lee, Caplovitz, & Wright, 2003).

With regard to parental monitoring, 42% of 8-10 year-olds reported having no rules about television use in the 2005 national Kaiser Family Foundation survey. Few 8-10 year-olds reported having rules related to video game content (32%), and 44% reported rules surrounding computer content (KFF, 2005). Parents of younger children report greater parental monitoring than with older children. The majority of parents (90%) in a national media use survey of children 0-6 years old reported mediating TV content, 68% reported mediating time spent with television, and 87% reported regulating video game content (KFF, 2003).

Recent research has illustrated the importance of parental monitoring of children's engagement with media, particularly co-viewing or co-using. Lee and Chae (2007) found parental restrictions on time spent online and website content had no effect on the actual amount of time spent online or which websites were visited by children, but co-using (when parents go online with their children) was positively related to educational use of the Internet. Co-using was significantly correlated with increases in educational Internet use when the child was using with a parent or guardian and when the child was using the Internet alone.

A review of the research evidence shows that the themes of time spent viewing, location of television in the bedroom, exposure to violent films, television programs and videogames, and the type of parental monitoring used in families are important topics. Next we describe the approach we used to gather information about children's media and technology use, followed by a summary of the results.

Research Methods

Participants

Participants included 338 children in pre-kindergarten 4 (PK-4) through 6th grade attending the Russell Byers Charter School. All students present at the time of data collection were included in the study. The breakdown by grade of the 338 students was as follows: 35 were PK-4 students; 41 were PK-5 (pre-kindergarten 5) students; 45 were in 1st grade; 42 were in 2nd grade; 45 in 3rd graders; 56 were 4th graders; 37 were in the 5th grade; and 38 were in 6th. There were 2-3 classes in each grade. The Russell Byers Charter School is an urban charter school, located in Philadelphia, with a majority of students from underrepresented populations.

Materials

The research team developed an interview protocol for discussing issues related to children, media and technology with Byers School faculty. We developed an orally administered survey for PK 4 through 1st grade students, an orally administered survey for 2nd grade students, and paper-pencil questionnaires for children in 3rd through 6th grades. Additionally, a "Draw your favorite TV show" exercise was included for children in all grades. This exercise was incorporated to engage the child in the data collection process and to collect information on the child's favorite TV show.

We developed the instruments with sensitivity to the developmental needs of young children, using oral administration for younger children and clear and age-appropriate questions for older children. The Canadian Teachers Federation media survey for grades 3-6 (Canadian Teachers' Federation, 2008) was used as a model for creating the 3rd–6th grade questionnaires. Question items included fill-in-the-blanks (i.e.

"My favorite song is _____"), multiple-choice type items (i.e. "Have you ever seen something scary on…" The news, TV show, Movie at home, Movie in the theater, The Internet; more than one could be chosen), and Likert-type scale items (i.e. "I play games…" never, a little, sometimes, a lot, all the time). The 3rd grade questionnaire was divided into 6 sections and the "Draw your favorite TV show" exercise. Items in each section were geared toward particular variables including: favorite music/musical artist; television use and sources of fear inducing media; video game use; computer use and co-using; Internet activities; house rules; and demographic information (age, gender, and number of siblings). The 4th – 6th grade questionnaire also included an additional section on cell phone activities. To make the 3rd – 6th grade questionnaire visually appealing "fun" fonts, clip art, and easy-to-understand formatting were incorporated in the final draft.   It should be noted that the reliability and validity of results are limited by self-report survey issues such as student fatigue (does not feel like answering the questions), social desirability (answers to please teacher or researcher), group interactions (participants influence each other) and question comprehension.

Literature on conducting qualitative research with children was consulted in creating the PK-4 through 2nd grade surveys. For example, to determine when children watched television, we asked if they did so before school and after school rather than asking for the time of day. The questions were asked in this way, because young children fair better when they are asked to refer to elements of their daily routines in their responses rather than utilizing temporal concepts (Greig, Taylorand, & MacKay, 2007). The PK-4 and PK-5 interview protocol included items on television use, fear-inducing media, and parental monitoring of television, as well the drawing exercise. The 1st grade

protocol added video games as a variable, and the 2nd grade protocol included items

regarding video games and home computer use. The surveys were designed as group

interviews due to the wide range of literacy skills in 4-7 year-olds and for efficiency of

data collection. It should be noted that social desirability issues (answering yes to a

questions because other children answer yes) are a concern with small children, and small

group or individual interviews would have been preferable. Unfortunately individual or

small group interviews were impossible due to time and resource constraints. Even so,

we believe our methods will provide fairly reliable responses from the children. Finally,

prior to administration of the surveys the Byers School Director of Curriculum reviewed

question items for all grades to ensure the age-appropriateness of the items. Final

adjustments to the instruments were made after this review.

Procedures

Permission to collect data was given by the school on an agreed upon date.

Teachers were informed of the project, and asked to make time for administration of the

instruments. Four facilitators arrived at the school on a Friday morning and administered

the surveys and questionnaires throughout the day (all data was collected in one day).

Primary Level Children. A facilitator administered the survey questions orally to

children in Grade PK to Grade 2, with each class in groups of various sizes. In the initial

phase of the interview children were asked to respond by raising their hand if they were

in agreement with the question (e.g. *"Who has a TV in their bedroom?"*) There were a

total of 6 - 10 questions asked in this manner. In most classes, immediately following the

series of hand raise questions, the children were asked to respond to questions regarding

their exposure to fear inducing media (the two 2nd grade classes were not asked these

questions due to time constraints). For this portion of the data collection, children were

to raise their hand if they wanted to offer information. The facilitator then called on

individual students at random and recorded their responses (not all children were called

upon). Finally, the class was asked to complete a drawing exercise as part of the data

collection process. Children were asked to draw some aspect of their favorite TV show,

indicate the name of the show and why they liked it. Some classes completed this

exercise after questioning by the researcher, and some completed as questioning was

being conducted (in these cases questioning by the researchers was conducted in smaller

groups). It should be noted that these variations in data collection might limit the

reliability and validity of the results.

Intermediate Level Students. Students in 3rd through 6th grade were administered a

paper-pencil questionnaire during regular class periods. The 3rd and 4th grade classes

were administered the instrument in the morning, before lunch, and the 5th and 6th grade

classes completed the instrument in the afternoon, after lunch. The facilitator passed out

the questionnaire, read the directions allowed, and remained in the room to answer any

questions.

Data Analysis

Prior to the statistical analysis all instruments were coded and inputted into an

excel spreadsheet by a team of coders (see acknowledgments in Appendix H). The

coders were instructed to key in the data exactly as presented on the collection

instruments. Following coding of the data the research team examined the spreadsheets

for any erroneous or obviously made-up responses. All responses falling into either

category were eliminated from the final analysis. The research team set mutually agreed

upon limits to determine what should be eliminated. For example, it was agreed that

responses of 30 or more television shows in any given timeslot would negate the data set

for that particular question. So if a student reported watching 80 shows in the morning it

was assumed the data was unreliable for that particular question. Finally, any errors in

coding were corrected by the research team as well. Once all of the coding sheets were

cleaned all responses were entered into a statistical software program for analysis. Simple

descriptive statistics were used to analyze the data (i.e. frequencies and means)

quantitatively.

Following the initial statistical analysis, the research team reviewed the results to

identify relevant trends and "top line" results. Much of the data was broken down into

proportions of student responses, as this seemed the most appropriate approach for our

data. For example, we determined the percentage of children who reported various

sources of fear inducing media (*news, TV shows, movies, and Internet*). Means (average

scores) were also reported where appropriate. For example, we provided the average

response for house rules in 3rd – 6th grade students (*never*=0 to 4=*all the time*). Finally,

we created measures to determine frequency of television use. So, in addition to

reporting the average number of TV shows watched in a day, we determined a mutually

agreed upon cut-off for high, moderate and low television users. We set the cutoff for

high users at 9 or more shows in one day. Children who reported watching 5-8 shows per

day were defined as moderate users, and those who reported 4 shows or less were defined

as light users. To determine the cutoff points we reasoned that each show, on average

would be a 30 minute episode. Given this reasoning 6 shows reported would be the equivalent of approximately 3 hours of television, which is close to reported averages of children's time with television in national surveys (KFF, 2005).   We concluded that this should serve as the midpoint or "moderate user" category. We acknowledge that this is an imperfect approach, but felt this approach, coupled with reports of the number of TV shows and television viewing frequency (the total number of timeslots in a day a student reports watching television), would provide a reasonably accurate picture of Byers School students' television use.

The research team also analyzed the qualitative data collected. The researchers looked for patterns and themes related to the amount of television use in the home, parental involvement in children's media use, and children's exposure to fear-inducing media. Themes appearing in the children's selection of their favorite television shows and their descriptions of these shows were also explored. When available, ratings for television shows and movies mentioned by the children were added using the Common Sense Media website (www.commonsensemedia.org).

Research Results

Our results show that Byers School children are indeed living in a media saturated world, but without much in the way of adult guidance. In this section, we report the most striking data regarding various media uses from our surveys and group interviews with the children. These results include brief discussion and references to prior research reviewed above (see *Literature Review)* to provide some context for the data. Tables in

Appendix A provide more complete detail for the results in each section, including break downs by grade, and for some variables, by gender.

We begin with evidence about children's television use, followed by results on their interest in popular music and cell phones. We examine children's activities while using the Internet and the types of videogames they like to play. We inquire about children's exposure to fear-inducing media and violent media. We conclude with results exploring children's perception of parental monitoring and regulation of in-home media use.

Having a television in the bedroom appears to be the norm for the vast majority of Byers School children: 87% of intermediate-level children report having a TV in their bedroom; and 59% of primary-level children report having a TV in their bedroom. As children get older, larger proportions report having a TV in the bedroom (43% PK 4, 54% PK 5, 62% 1st grade, 75% 2nd grade). Table 2 displays these results. Intermediate-level children report an average of 4 working televisions in the home. As mentioned earlier, recent research has linked having a television in the bedroom with lower academic achievement, as well as exercising less, and eating poorly (Shute, 2008).

Most Byers School children report being heavy viewers of television. Nearly two thirds (64%) of 3rd through 6th graders report watching 9 or more TV shows per day, which we defined as "heavy viewers." Half reported watching 15 or more shows per day. Tables 5 and 6 display these results. When we looked at children's use of television before school, after school, after dinner and at bedtime, we found that 75% of 3rd to 6th graders who each reported watching TV shows in three of four daily time slots (before school, after school, after dinner, at bedtime); 48% reported watching shows at all four

times. See Table 1. Although the simplified questions and group interview structure limits interpretation of heavy verses light viewers for younger students, greater than 80% of PK4 to 2nd graders report watching television in each time slot, suggesting that a majority of primary-level children are heavy TV viewers. See Table 3 for these results. Previous research has shown that children from urban and high poverty areas tend to watch more television, so this data confirms that television has a particularly pervasive presence in the lives of Byers school children.

Children's cable television dominates children's viewing choices. *SpongeBob Squarepants* (Nickelodeon) and *Hannah Montana* (ABC/Disney) are the most popular shows in each and every grade. *Family Guy* (FOX), a TV-14 rated show, is also very popular with 3rd and 6th graders. Superhero/action shows are popular for PK4 to 2nd graders, including *Spiderman, Superman, Batman, Pirates of the Caribbean, Lord of the Rings,* and *Star Wars.* For PK4 to 2nd graders, age-inappropriate shows/movies were more popular with boys than girls.

Most Byers school children use the Internet and cell phones to listen to music. Table 18 shows that 78% of 3rd-6th graders report using the Internet for listening to music *sometimes, a lot,* or *all the time.* Table 17 shows that 68% of 4th-6th graders report using cell phones to listen to music. Listening to music ranks as the second most frequent purpose for use of Internet and cell phones (after talking). This data serves as an important reminder of how prevalent music is in children's media environments even when using technology most often related to other purposes.

Most intermediate students report frequently using cell phones for photos, games, music, and text messages. Although Byers School policy prohibits cell phone

use at school, most 4th to 6th graders report using them for a variety of purposes *sometimes, a lot,* or *all the time*: 69% take photos with cell phones; 68% report listen to music; 65% report playing games; and 49% text message.

Beat, dance potential, and celebrity attachment are children's most common reasons for choosing favorite songs. Third and fourth graders were more likely to list a favorite celebrity as a reason for liking a song than 5th and 6th graders. The most popular musician among 3rd to 6th graders was Chris Brown, an R&B singer known mostly for love ballads. Following Chris Brown the most popular musicians were rappers Soulja Boy and Lil' Wayne, as well as R&B singer Beyonce Knowles.

Most children in grades 2-6 use a computer to go on the Internet at home frequently, primarily for entertainment purposes. Nearly 9 in 10 students (89%) report using a computer to go on the Internet at home. Second and fifth grade students had the greatest proportions (95% and 94% respectively). Children reported frequently (*sometimes, a lot, and all the time*) using the Internet for a variety of purposes, including for playing games (90%), listening to music (78%) and watching videos (76%), while visiting TV websites (65%), seeking information (50%), and looking for stuff to buy (46%) were also common. Thus, Byers school children do not seem to be impacted by the "digital divide" as much as children from other Philadelphia schools.

Viewing videos and playing games are the most common Internet activities for children at the Byers School. While teachers and parents consider the Internet to be a source of information and education for children, online games, YouTube, MySpace and paperdoll websites are children's favorite Internet activities. Among intermediate-level students, the most popular single website is YouTube. Online gaming websites like

addictinggames.com, miniclip.com, and agame.com are the very popular. Many students also report using MySpace, a social media websites for meeting friends through common media tastes and messaging, and Stardoll.com, a fashion site that presents celebrities in their underwear ready to be "dressed up" virtually. Stardoll also offers short celebrity bios and a rating system through which users can judge the fashion choices of their online peers. Only girls voted Stardoll.com as their favorite website. There did not seem to be any other significant gender gaps in preferred online sites—girls were just as likely as boys to list Youtube, Myspace, or an online games site as their favorite website.

Almost all Byers School students in grades 2-6 play video games. Only one or two children in each grade report *never* playing; and one third (33%) of 3rd to 6th graders report playing video games *a lot* or *all the time* with the highest proportions in 3rd (40%) and 4th (38%) grades. Most second graders say they play video games after school and after dinner (15 of 20 students for each time slot). Table 15 displays these results.

Violence and fighting are the most common reasons students report liking their favorite video games. Younger children were more likely than older children to list violence, fighting, shooting, or amount of blood as the reason they liked the game they listed. The second-most popular reason given was an interactive learning, social, or skill-building experience, including building a virtual community (The Sims), learning to play the guitar (Guitar Hero), or learning to cook (Cooking Mama). Sports (basketball, football, and boxing) and racing were also popular. Language used to describe violent video games was frequently graphic or hostile. Examples include "you get to fight people you don't like;" "it has blood and gore and feels exactly like being in Iraq or Saudi Arabia;" "I like violence;" "It's fun and cool to hurt some people I don't like;" and "it's

about war." In contrast, language used to describe interactive non-narrative games like "Cooking Mama" and "The Sims" emphasized creativity and possibility: "you get to make and learn different recipes from around the world;" "it's like having a second life;" "you get to be creative and make people/houses;" "it's fun and creative;" and "you get to make your own friend then dress it up and name it."

Students watch scary and R-rated movies at home. Table 7 shows that 61% of intermediate-level students watch scary movies at home, more than in the theater (45%). This result is curious since, intuitively, it seems that parents may be able to have more control over their children's in-home movie viewing more than in theaters. We asked children to name fear-inducing movies they had seen; then we categorized these titles by indexing the film rating for each film. Most fear inducing media reported by 3rd to 6th graders is rated R, which requires children under 17 to be accompanied by a parent. Table 14 shows that 68% of the fear inducing media reported by 3rd – 6th graders are rated R movies. In younger grades, a few rated R horror movies came up in group interviews, including *Saw 4* and *Chucky* (from the *Child's Play* franchise), and these were occasionally viewed with parents. Several PG-13 horror movies, such as the recent theatrical zombie release *I am Legend,* were also discussed by PK4, Kindergarten and 1st graders. While some research shows that children practice important coping strategies through engagement with horror films, other research links exposure to graphic violence with violent and anti-social behaviors and attitudes. Children should have ample opportunity to discuss their interpretations of fear-inducing media because research has shown that violent and fear-inducing media has the potential to shape perceptions, attitudes and world views.

Many children report nightmares after viewing violent or scary movies.
Children are ambivalent about the anxieties produced by watching violent and scary movies, but many report effects on sleep behaviors. Table 7 shows that 49% of 3rd – 6th graders report that fear inducing media does not bother them, but 44% report having nightmares. Girls report only slightly more nightmares than boys (46% vs. 42%), but a larger proportion of girls report being afraid (25% vs. 9%). Younger children in grades PK 4 and PK 5 describe fearful fantasy monsters while 1st graders describe fearful images of graphic, physical violence. Common themes that arose in group interviews with PK4 and PK5 were monsters, mummies, vampires, ghosts, witches, aliens, dinosaurs. In grade 1 interviews, talk about bleeding, dismembered body parts, and graphic death were more common.

Most children report that their parents do not impose rules about TV content: 49% of intermediate-level students say parents *never* or *hardly ever* tell them which shows they can and can't watch; 65% of younger children report no limits. Parents limit TV viewing time more regularly according to 3rd -6th graders (71% report sometimes), but only 45% of PK4-2nd graders report having limits. 68% of PK 4 – 2nd grade students report that their parents co-view with them, 35% report regulation of TV content (2nd grade is only 10%, which pulls down the average), and 45% report having their time with TV regulated. Oddly, younger children report having fewer rules about TV viewing than do older children, which runs counter to most studies. This may be an artifact of the style of whole-group interview that we used with the younger children. For some children, fewer rules may hold status value among group members. Similarly, older children might under-report lack of house rules to give answers they think adult

researchers and teachers would like, a phenomenon known as the social desirability bias. On the other hand, few studies ask younger children themselves about these rules. Young children may not seek out or choose age inappropriate shows as much as older children, and thereby parents may not need to impose rules as such, or children may not perceive parental choices for their viewing as rules. These questions merit more research and/or dialogue with children and parents.

Parents do not monitor children's Internet use. More than half of children report that parents impose no rules about visiting websites (53%), and 51% talk about the Internet with their parents *never* or *a little*. Table 11 shows these results. Table 19 shows that most intermediate-level students use the Internet alone (67%), while very few use the Internet with a parent or guardian (15%). Although concerns and fears about Internet safety from experts and parents alike abound in popular news media, more than half of the Byers School students surveyed report little to no parental involvement in their Internet use.

Byers school students say their parents impose time limits for video game play, but they are seldom told what they are allowed to play. Table 10 shows that 45% of children in 3rd -6th grade report *never* having limits for video game content, and Table 11 shows that 69% report *little* or *no parental monitoring*. In fact, when comparing parental monitoring of television, Internet, music, movies, and videogames, the lowest average score (*never*=0 to 4=*always* scale) was in regulating video game content (1.11), while the highest average score was for limiting video game time (2.38). This data suggests that parents may have concerns about the amount of time spent playing video games, but may not worry about violent, racist or sexist content of the games. This

finding suggests a ripe opportunity for the development of parent education programs. Previous research has not been conducted to examine African-American parents' attitudes about monitoring videogame use, so this evidence points to some important avenues for future research.

Across all media forms, parent regulation of media is uncommon. Overall 43% of children in 3rd to 6th grade responded *little* or *never* for frequency of parental mediation for questions across all categories of media use. Video game content is the least regulated, while video game time is most regulated. As discussed above, this may be particularly troubling given the active role children play in video games and the negative gender stereotypes and violent behaviors that popular games involve.

Some parents co-view and talk with children about media. Most PK4-2nd grade children report co-viewing and most 3rd to 6th graders report talking with parents about Internet and video games. 68% of PK 4 – 2nd grade students report that their parents co-view with them. Among 3rd to 6th graders, 52% talk with parents about video games, 51% talk about Internet and 48% talk about music. While they are not likely to control or restrict viewing, these are significant results which suggest the need for more research on parental monitoring strategies in urban families. Prior research has shown that media time and content restriction are the most common parental monitoring styles, while talking about media is much less common (Mendoza, 2007). Children like to talk with parents about media, and this represents an important base upon which to develop parental outreach programs. Parents who feel comfortable in talking about media and who offer guidance and support to children can help make media use in the home more educationally meaningful in ways that directly support academic achievement.

Concluding Thoughts & Suggestions

The research reported here only scratches the surface of the deep relationships with media that Byers School children experience every day. However, our data clearly shows that children frequently use video games, television, Internet, music and cell phones for a variety of reasons without a sense of much adult guidance. Given the concerns of Byers faculty about negative media effects on children's behavior, attitudes, and academic performance along with prior research substantiating such concerns, we encourage the Byers School to address their students' apparent need for guidance. Research suggests several ways that the Byers School may be able to help children manage, process, and use the media in their lives in positive ways for health, social relationships, and learning. Here are some suggestions for how educators at the Byers Charter Elementary School can deepen their connection to children's media-saturated lives.

Open dialogue with parents and children about media and technology use. Our data shows that television in bedrooms and Internet use at home are norms for Byers School children. While faculty may have little control over the presence and use of technology outside of the school, raising issues and awareness of media use with parents and students is a crucial first step in identifying concerns. In addition to encouraging participation in the online parent survey developed by the research team, student media diary projects are a good way to initiate parental involvement that allows concerns to emerge from a diversity of parenting styles.

Make media and technology an area of inquiry. Preliminary research revealed serious concerns among Byers School faculty about children unwittingly reiterating stereotypes, negative behavior and messages from the media they consume. Our data shows some support for such concerns as many children report engaging with media targeted for older audiences. Making media an area of inquiry can begin to address these issues.

Children' relationships to media change when they ask key questions about: how and why messages are constructed in different media; who is involved in producing media and who watches; how their responses and participation differ from others; and what is left out of media messages and experiences. Asking such questions as children study and create various media may help students become more active consumers of media and more critically thinking participants in media games and communication. The expeditionary model of learning at the Byers school may fit especially well with inquiry models of media literacy education (see, for example, AMLA, 2008).

Many media educators also emphasize the importance of using popular culture in the classroom in order to help students develop habits of inquiry involving media texts that are important to them (see e.g. Alvermann, 2005, 2003; Buckingham, 2003). Such inquiry habits and skills can not be assumed to transfer from educational texts in a school context to popular media texts outside of school; students are more likely to apply learning from popular media texts in school to various media texts outside school (for rationale, see Perkins & Salomon, 1988).

Help students acquire critical thinking and communication skills. Faculty concerns about negative media effects on children can be addressed directly by helping

students develop media literacy skills and knowledge. A few studies have shown media literacy, broadly defined as the ability to access, analyze, evaluate and create messages in a variety of media (Aufderheide & Firestone, 1993), to mitigate some of the influences of media messages on risky behavior and attitudes (see, e.g., Austin, et al., 2002; Primack, et al., 2006). Another study has shown that practicing media literacy skills may positively affect traditional literacy achievement (Hobbs & Frost, 2003). It has also been theorized that developing media literacy affects cognitive processing in such a way that media messages may have less attitudinal and behavioral influence on individuals (Potter, 2000). Although the pervasive presence and cultural norms of media use may be largely beyond the Byers school's sphere of influence to affect, faculty can help students develop media literacy, which may help their intellectual, social and academic development.

Help students articulate and examine taste. Our research data and data collection experience provoked two especially interesting observations; Byers School children were very excited to share and detail their favorite TV shows, but they had difficulty elaborating the reasons for their choices of favorites—that is, they could detail *what* they liked but could not explain *why they liked it*. Children use their tastes in media to build a sense of identity, of who they are and who they may become, and claims about music and other media tastes carry much significance for social status, or cultural capital, among youth as they grow up (Richards, 1998). By helping children articulate and share their reasons for their strong attachments to certain media texts, faculty can validate children's identities while opening up the inquiry process to consider how tastes shape personal and social possibilities. This is a tricky process as it is difficult for adults to both reserve their judgment of youth attachments, and help students respect each others' views

(Buckingham, 2003). However, practice with articulating and discussing taste in class can allow teachers to take on these challenges in ways that are deeply meaningful to students.

Conclusion

In this report, we have provided compelling data about individual and group uses of video games, television, Internet, music and cell phones, and about children' perceptions of parental monitoring, but further research would be needed to investigate correlations with academic achievement, attitudes, beliefs and behaviors. Further analysis could compare Byers School children's reports with national averages for media use among children of comparable demographics, which was beyond the scope of this report. The Russell Byers Charter Elementary School provides urban children with the rare opportunity to grow as expeditionary learners in a caring environment. We hope this report will help Byers School faculty support children in growing "roots and wings" to explore and secure their media saturated worlds.

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Appendix A

Results tables

<u>**Television**</u>

Table 1–Average number of TV shows watched during the day for $3^{rd} – 6^{th}$ grade

Time of day	Grade 3	Grade 4	Grade 5	Grade 6	Total
Morning	1.24	**1.38**	**.74**	.95	1.15
N	41	54	33	32	156
SD	1.22	1.62	.81	1.80	1.32
After school	**5.38**	**6.04***	8.18	6.72	**6.58***
N	42	55	33	32	158
SD	4.07		7.94	9.00	
After dinner	4.47	**4.60***	5.69	**4.03**	**4.70***
N	42	54	35	32	159
SD	4.82		7.34	5.68	
Bedtime	2.93	2.65*	**4.94**	**2.11**	3.16*
N	41	54	32	32	155
SD	4.07		9.77	3.00	
Sum of means	**14.02**	**14.67**	**19.55**	**13.81**	**15.59**

*Adjusted means after removal outliers (outlier = 30+ shows reported in any one timeslot); N=number of students; SD=standard deviation

Table 2–Percentage of children with TVs in the bedroom & average number of working TVs in the house - 3rd -6th grade

	Grade 3	Grade 4	Grade 5	Grade 6	Total
TV in bedroom	86%	**96%**	81%	82%	**87%**
N	44	56	37	38	170
SD	.40	.19	.40	.39	.34
Number of working TVs	3.78	4.25	3.78	3.88	**3.92**
N	44	52	37	34	163
SD	1.60	1.45	1.40	1.55	1.48

N=number of students; SD=standard deviation

Table 3 – Percentage of students who watch TV at 3 different time periods-PK4–2nd Grade

Watch TV	_Grade pk4_ N=35	_Grade pk5_ N=41	_Grade 1_ N=45	_Grade 2_ N=42
Before school	66%	66%	60%	83%
After school	80%	80%	80%	93%
After dinner	57%	61%	71%	81%

N=number of students

Table 4–Percentage of students with a TV in their bedroom and who have seen a fear inducing TV show or movie – PK 4 – 2nd grade

Grade	TV in bedroom	Fear inducing TV / Movie
PK 4 (N=35)	43%	60%
PK 5 (N=41)	54%	95%
Grade 1 (N=45)	62%	47%
Grade 2 (N=42)	75%	*N/A*
Total	59%	*67%*

N=number of students

Table 5 – Percentages of heavy, moderate and light TV users per day

Total # of shows reported	*Grade 3*	*Grade 4*	*Grade 5*	*Grade 6*	*Total*
15 shows or more	42%	40%	34%	30%	37%
9 shows or more	79%	56%	59%	63%	64%
5-8 shows	5%	33%	28%	17%	21%
4 shows or less	16%	10%	13%	20%	15%

Table 6 – Percentages of heavy users by number of timeslots reported watching TV shows 3rd-6th grade

No. of timeslots television use reported	*Grade 3*	*Grade 4*	*Grade 5*	*Grade 6*	*Total*
3 or 4	77%	78%	72%	73%	75%
4	61%	54%	38%	40%	48%
3	16%	24%	34%	33%	27%
2	16%	14%	19%	17%	17%
1	8%	8%	9%	10%	9%

Table 7 – Sources of fear inducing media

Source	*Grade 3*	*Grade 4*	*Grade 5*	*Grade 6*	*Total*
News	**2%**	**20%**	**30%**	**38%**	**21%**
N	45	56	37	37	175
SD	.15	.40	.46	.49	.41
TV Shows	**20%**	**30%**	**32%**	**32%**	**29%**
N	45	56	37	37	175
SD	.40	.46	.47	.47	.45
Movie (home)	**55%**	**64%**	**68%**	**54%**	**61%**
N	45	56	37	37	175
SD	.50	.48	.47	.51	.49
Movie (theater)	**40%**	**36%**	**46%**	**62%**	**45%**
N	45	56	37	37	175
SD	.50	.48	.51	.49	.50
Internet	**11%**	**18%**	**22%**	**30%**	**19%**
N	45	56	37	37	175
SD	.32	.39	.42	.46	.40

N=number of students; SD=standard deviation

Table 8 – Effects of fear inducing media-3rd to 6th grade

	Grade 3	Grade 4	Grade 5	Grade 6	Total
Does not bother me	**31%**	**32%**	**50%**	**46%**	**49%**
N	45	56	36	37	174
SD	.47	.47	.51	.51	.49
Sometimes has nightmares	**47%**	**50%**	**39%**	**35%**	**44%**
N	45	56	36	37	174
SD	.50	.50	.49	.48	.50
Sometimes afraid of others	**18%**	**18%**	**11%**	**19%**	**17%**
N	45	56	36	37	174
SD	.39	.39	.32	.40	.37
I get excited	**16%**	**13%**	**17%**	**22%**	**16%**
N	45	56	36	37	174
SD	.37	.33	.38	.42	.37

N=number of students; SD=standard deviation

Table 9 – Effects of fear inducing media by gender – 3rd-6th grade

	Boys	Girls
Does not bother me	**41%**	**34%**
N	85	85
SD	.50	.48
Sometimes has nightmares	**42%**	**46%**
N	85	85
SD	.50	.50
Sometimes afraid of others	**9%**	**25%**
N	85	85
SD	.29	.43
I get excited	**19%**	**13%**
N	85	85
SD	.39	.34

N=number of students; SD=standard deviation

Parental Monitoring

Table 10 – Percentage of 3rd-6th grade house rules

Rules for…	*Never*	*A little*	*Sometimes*	*A lot*	*All the time*
TV content N=175	22%	26%	28%	6%	17%
TV time N=174	17%	11%	24%	20%	29%
Computer time N=172	15%	16%	31%	13%	24%
Website content N=174	33%	21%	19%	9%	18%
Video game time N=149	16%	13%	22%	16%	34%
Video game content N=172	45%	24%	15%	6%	10%
Talk about TV N=172	20%	16%	26%	16%	22%
Talk about music N=169	23%	25%	21%	15%	16%
Talk about video games N=169	27%	24%	22%	12%	14%
Talk about movies N=166	15%	18%	26%	21%	20%
Talk about the Internet N=172	29%	22%	20%	13%	16%

N=number of students

Table 11 – Percentage of 3rd-6th grade reporting *little or no parental monitoring*

Rules for…	*Grade 3*	*Grade 4*	*Grade 5*	*Grade 6*	*Total*
TV content	50%	46%	46%	53%	49%
N	44	56	37	38	175
TV time	37%	20%	24%	32%	28%
N	43	56	37	38	175
Computer time	33%	26%	32%	38%	31%
N	43	55	37	37	172
Website content	49%	54%	43%	68%	53%
N	43	56	37	38	174
Video game time	40%	27%	22%	25%	29%
N	43	33	37	36	149
Video game content	57%	73%	72%	74%	69%
N	42	56	36	38	172
Talk about TV	39%	38%	38%	29%	36%
N	41	56	37	38	172
Talk about music	50%	50%	50%	41%	48%
N	40	56	36	37	169
Talk about video games N	53% 40	50% 56	49% 35	55% 38	52% 169
Talk about movies	37%	30%	39%	29%	33%
N	41	54	36	35	166
Talk about the Internet N	54% 41	55% 56	38% 37	55% 38	51% 172
Overall with little or no monitoring	45%	43%	41%	45%	43%

N=number of students; results include students who circled *never* or *a little* in House Rules section

Table 12 – Average scores on house rules for 3rd-6th grade

	TV content	TV time	Computer time	Internet content	Video game time	Video game content
Mean	1.69	2.33	2.16	1.60	2.38	1.11
N	175	174	172	174	149	172
SD	1.34	1.42	1.37	1.48	1.46	1.31

N=number of students; SD=standard deviation; scale - *never=0 to all the time=4*

	Talk about TV	Talk about music	Talk about video games	Talk about movies	Talk about going online
Mean	2.03	1.76	1.62	2.13	1.65
N	172	169	169	166	172
SD	1.42	1.39	1.38	1.34	1.43

N=number of students; SD=standard deviation; scale - *never=0 to all the time=4*

Table 13 – Students who report parental monitoring of media PK 4 – 2nd grade

	PK 4 N=35	PK 5 N=41	Grade 1 N=45	Grade 2 N=20	Total
Parents co-view	66%	66%	73%	65%	68%
Regulate TV content	43%	34%	53%	10%	35%
Regulate TV time	40%	49%	64%	25%	45%
Regulate computer time	N/A	N/A	N/A	20%	20%
Regulate Internet content	N/A	N/A	N/A	25%	25%

N=number of students

Table 14 – Percentage of non-age appropriate content viewed by students PK4-6th Grade

	PG/TV-PG and over – Favorite TV show	PG-13/ TV-14 and over – Favorite TV show	PG-13 and over for fear inducing media	R rated fear inducing media
PK 4 (N=35)	17%	0%	14% (N=14)	7% (N=14)
PK 5 (N=41)	52%	35%	67% (N=12)	42% (N=12)
Grade 1 (N=45)	–	15%	76% (N=17)	71% (N=17)
Grade 2 (N=42)	–	16%	*N/A*	*N/A*
Grade 3	–	–		73%
Grade 4	–	–		71%
Grade 5	–	–		50%
Grade 6	–	–		77%
Total				68%

N=number of students

Video games

Table 15 – Percentage of students who play video games

Frequency	Grade 3 N=45	Grade 4 N=56	Grade 5 N=37	Grade 6 N=38	Total N=176
Never	2%	4%	0%	0%	1.7%
A little	13%	4%	5%	13%	9%
Sometimes	22%	30%	16%	45%	28%
A lot	40%	38%	22%	24%	32%
All the time	0%	0%	5%	0%	1%

N=number of students

Table 16– Percentage of 2nd grade students who play video games and timeframes for play

	Play video games	*Play Before School*	*Play After school*	*Play After dinner*
N=20	90%	35%	75%	75%

N=number of students

Cell Phones

Table 17 – Percentage of student cell phone use at least some of the time-4th to 6th Grade

Cell phone activity	*Grade 4*	*Grade 5*	*Grad 6*	*Total*
Play games	66%	73%	54%	65%
N	56	37	37	130
Text message	46%	43%	58%	49%
N	56	37	38	131
Listen to music	64%	75%	66%	68%
N	56	36	38	130
Take photos	66%	75%	68%	69%
N	56	36	38	130
Download music	39%	47%	32%	39%
N	56	36	38	130
Send/receive photos	46%	43%	50%	47%
N	56	37	38	131

N=number of students; indicates responses of *sometimes* through *all the time* in cell phone section

Computers/Internet

Table 18–Percentage of student Internet activities as least some of the time

Activity	Grade 3	Grade 4	Grade 5	Grade 6	Total
Play games	86%	100%	89%	79%	90%
N	43	56	37	38	174
Seek information	35%	54%	69%	43%	50%
N	43	56	36	37	172
Watch videos	67%	77%	65%	95%	76%
N	43	56	37	38	174
Listen to music	77%	71%	77%	89%	78%
N	43	56	35	38	172
Email/IM	26%	36%	36%	53%	37%
N	43	56	36	38	173
Purchases	44%	61%	54%	32%	46%
N	43	56	35	37	171
Visit TV websites	74%	68%	65%	50%	65%
N	42	56	37	38	173

N=number of students; indicates responses of *sometimes* through *all the time* in cell phone section

Table 19–Percentage of students who use the Internet at home and report co-using

	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Total
Use Internet at home	**95%**	**82%**	**88%**	**94%**	**87%**	**89%**
Co-using						
With friends	*N/A*	13%	14%	22%	18%	**17%**
With parent/guardian	*N/A*	20%	13%	14%	11%	**15%**
With sibling	*N/A*	22%	25%	16%	35%	**25%**
Alone	*N/A*	64%	59%	68%	78%	**67%**

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