

Pediatricians, Schools, and Media

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ABBREVIATION

AAP—American Academy of Pediatrics

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In 2012, schools increasingly have to compete with the media for the attention and time of children and adolescents. Young people currently spend more time with media (>7 hours/day) than they do in school.¹ Far more research is now available about the impact of media on school-aged children and teenagers^{2,3} and the efficacy of teaching media literacy in the classroom.⁴ Since the development of *Sesame Street* 40 years ago, teachers have felt increasing pressure to entertain their students as well as to teach them.⁵ New technology in the classroom offers nearly limitless educational possibilities but potential problems as well (eg, students may be physically present in the classroom but downloading videos online or texting classmates). A recent longitudinal Canadian study of >1300 children at 29 months and in fourth grade found that for every additional hour of television viewed per day at 29 months of age, there was a 6% to 7% decrease in classroom participation, a 10% increase in victimization by classmates, a 9% decrease in physical activity, and a 5% increase in BMI by the fourth grade.⁶ Now that the American Academy of Pediatrics (AAP) has made Children and Media one of its new strategic priorities, pediatricians may want to familiarize themselves with this issue and how they can play a key role.

THE IMPORTANCE OF MEDIA LITERACY

A century ago, to be “literate” meant that you could read and write; in 2012, literacy may need to be redefined to include reading, writing, texting, downloading, surfing the Internet, and tweeting. Now more than ever, children and teenagers need to be taught about the impact of media and how to use media wisely.^{2,3} Currently, there is some evidence that media education can mitigate against harmful effects of media violence,⁷ cigarette smoking and advertising,⁸ alcohol advertising,^{9,10} and Internet misuse.¹¹

PROBLEM AREAS OF MEDIA FOR SCHOOLS

The media can have a significant impact on virtually every concern that parents and teachers have about young people, from academic performance and learning disabilities to health concerns such as aggressive behavior, obesity, sexual activity, and drug use.^{2,3} Media research makes it increasingly clear that media use can be associated with bullying^{12,13} and aggressive behavior,^{14,15} obesity,^{16,17} early onset of sexual intercourse,¹⁸ and drug use.^{19,20} Several preliminary studies also have linked media use in preschool-aged children with attention-deficit disorders,^{21,22} and many studies have found a link between heavy media use and poor academic performance.^{23–26} Advertisers have specifically targeted school populations to reach younger and younger audiences, and many cash-strapped schools have cooperated.²⁷

Only a decade ago, cyberbullying and sexting were unknown terms. In 2012, national surveys show that 10% to 33% of teenagers have experienced online bullying or harassment^{12,13} and 5% have engaged in sexting or received sexted messages.²⁸ With new technology have come new issues and concerns for schools: should students be allowed to carry cell phones? Should Internet access be available in class? If so, what kind of screening or blocking mechanism is appropriate? Should school libraries use Internet-blocking technology? Should students be allowed to complete joint projects in chat rooms online?

POSITIVE USES OF MEDIA IN SCHOOLS

The good news is that there is now an explosion of interest among educators about how to use new technology to teach. One Web site provides daily e-mail updates on the uses of new technology in the classroom (www.smartbrief.com). More than 600 school districts are using iPads instead of textbooks.²⁹ Teachers are using Twitter to get students to chime in with questions and answers during lectures.³⁰ Special education students can ask their iPads how to spell and define words,³¹ and students from rural areas are benefiting from online courses. Many schools are experimenting with “blended learning”: using online learning for at least part of the school day to improve productivity and attention. At the cutting edge of new technology, avatars are being used to interact with grade school students one-on-one and can be customized for each individual, following their eye-tracking on the computer screen and keeping them motivated.³² Although schools should have policies on all technology, such policies do not necessarily have to involve blanket prohibitions. One Florida school is using cell phones to augment Spanish instruction: the teacher sends students text messages in Spanish and asks

them to respond.³³ Text messaging can also be used to remind students of important homework assignments.³⁴

In addition, new technology may be revolutionizing the way young people learn.³⁵ Arguably, new technology could be revolutionizing basic educational paradigms as well as teaching techniques. Some might question why we ask students to memorize dozens of names and dates in US history when in the near future, their wristwatches and cell phones will be 10-gigabyte computers capable of instantaneously spitting out whatever facts are needed. Instead, the need to teach critical thinking and how to sift through the vast amount of information (some of it good, some of it not so good) in written materials, on television, and on the Internet has become of paramount importance. Similarly, the availability of new technology should be making classroom teaching easier and more effective. Textbooks remain important, but there are instances in which a video (eg, Ken Burns’ extraordinary *Civil War* series) might be used to augment a textbook. Teachers can now choose from 10 different DVD versions of *Romeo and Juliet* (and Shakespeare wrote his plays to be performed and seen, not to be read).

Far more research is needed into media use in the classroom, but pediatricians, as experts on the impact of media on children and adolescents, could be at the forefront of helping schools adapt to the new technology revolution by working collaboratively with parents and schools via school health advisory committees to^{36–39}:

- Encourage schools and teachers to use media creatively in classrooms and incorporate media education into existing sex education, drug education, and violence prevention programs.
- Advise and assist schools in establishing media education programs.

Now more than ever, children and teenagers need to be taught about the impact of media and how to use media wisely.

- Encourage schools, administrators, and educators to continue to reassess their education paradigm to ensure critical thinking skills are part of every curriculum.
- Encourage schools to establish written policies regarding cell phones, Internet use, texting, sexting, and Internet bullying.
- Encourage school boards to try to eliminate all commercial influences from schools. The message must be made clear: children and teenagers are not for sale.
- Encourage parents to keep bedrooms free of televisions and other electronic devices but also encourage schools to consider changing their early morning start times for teenagers because they tend to stay up late with their media use.

Pediatricians could also work via the AAP to try to influence Congress and federal regulatory agencies to⁴⁰:

- Curtail or ban in-school advertising. The AAP has issued many calls for this but to no avail.
- Generate increased funding for media research in general and specifically for research on the efficacy of media education programs and the use of new technologies in the classroom.

Although some might feel that this advice encroaches on what is rightfully the exclusive domain of educators and administrators, the AAP has held pediatricians up as the experts on child health and media. Collaborative efforts between pediatricians and schools will undoubtedly result in improvements in education for children and adolescents and creative and pro-social uses of media in classrooms and schools.

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