

Conclusion

The launch of the Digital Entertainment Network (DEN.net) in 1998 was accompanied by fanfare typical of the dot-com boom. Armed with a new “killer application” that used streaming video technology to bring TV programs to the Web, DEN promised a “24/7” menu of interactive programming for teens, interlaced with a powerful mix of advertising, sponsorship, product placement, and e-commerce, and supported by an impressive roster of “charter sponsors” that included Ford, Microsoft, Pepsi, and Blockbuster.³⁰³ “[Generation Y] is looking for a new brand of entertainment on a medium of their choice,” proclaimed DEN’s president, David Neuman. “This audience is leaving TV in record numbers, and nobody else had laid claim to this space.”³⁰⁴ Nevertheless, despite a generous influx of cash and a major investment by NBC, the pioneering Netcaster was forced to declare bankruptcy in May 2000.³⁰⁵

The circumstances behind DEN’s demise are still debated. Some see it as one of the first casualties of the ensuing shakeout that claimed many dot-coms, including such teen site victims as MXGonline, MXGtv, and iCanBuy.³⁰⁶ Others believe that the television-like network was simply ahead of its time, before enough teens had access to high-speed broadband Internet service. And some industry observers concluded that the site self-destructed because of a weak business model, complicated by a scandal over lavish spending and other alleged improprieties.³⁰⁷

Whatever the reasons, DEN’s failure is emblematic of the particularly volatile nature of the online media during this early stage of the digital era. No one can predict exactly who the winners and losers will be. Many experts view the recent fluctuations in the Internet economy as a period of readjustment in an over-hyped industry where venture capital has flowed in too often on the basis of rather shaky business plans. “The Internet is undergoing a vast weeding-out,” remarked one market research executive, noting that “E-survivors” are finding the right combination of business practices to enable them not only to stay afloat but to generate a profit.³⁰⁸

But the starts and stops in the dot-com marketplace should not divert our attention from the inexorable movement of digital media into the lives of teens. This generation is growing up at the center of the technological explosion that has transformed the media system. Their coming of age is occurring simultaneously with the growth and maturity of the new digital media culture. Their increased personal spending power, combined with their technological savvy, have made teens a particularly powerful target market for online businesses, generating a cornucopia of varied content and activities on the Web, tailored specifically to their interests.

Teenagers have embraced this new online world with great enthusiasm, responding eagerly to its invitation to share ideas, contribute content, and otherwise place their stamp on a media system that they themselves create and manage. Teens have also seized upon all manner of electronic gadgets—from pagers to mobile phones to PDAs. And with the promise of Internet connectivity to all of these devices and others just around the corner, teens are marching into the future with the potential for unprecedented levels of communications and information retrieval at their fingertips.

The media world that teens inhabit departs in significant ways from the one their parents knew during their own adolescence. The digital media are challenging many of the conventions and institutions of the past, blurring or obliterating the boundaries between public and private, commercial and noncommercial, school and home, local and global. The properties of the interactive media are particularly seductive to adolescents, tapping into many of their developmental needs, capturing their imaginations, and kindling their hopes and desires. Online communication tools enable instantaneous and constant contact with peers; personal home pages offer compelling opportunities for self-expression and identity exploration; and ubiquitous portable devices facilitate mobility and independence. The Internet's extensive reach and its promise of anonymity create an environment that encourages information-seeking on a wide variety of topics inaccessible or taboo for earlier generations. Chat rooms and forums allow teens to engage in discussion and debate without fear of exposure.

As the features and functions of this new digital online marketplace are being tested and refined, teens serve as subjects for continuous and pervasive market research, connected through electronic umbilical cords to a phalanx of companies that monitor their every online move. As a consequence, a unique symbiosis has developed between the creators of this digital culture and its most avid users; today's teens are eager and willing partners in the design and implementation of an array of cultural products and practices. Their engagement with digital media is ushering in a new set of behaviors, values, and expectations that this generation has internalized and will carry with them into adulthood.

Our exploration of this teen online culture was designed to serve as a first map of this uncharted digital territory. While we were not able to document all of its multi-layered dimensions, we believe our report has captured the basic contours of the new-media landscape as well as the major forces that are shaping it.³⁰⁹ With the whirling pace of change in communication technologies as we move toward an increasingly converged media environment, it remains vital to keep abreast of these developments. In the meantime, the findings from our study raise a number of issues that need further exploration.

The Research Gap

There is an urgent need for further research on the role that new media are playing in the lives of youth. We find it very troubling that so much of what is known about how teens are interacting with the new digital media is confined to the proprietary domain of market research, where it is either completely off-limits to outsiders or priced so prohibitively as to be inaccessible to the public. Except for a handful of scholars, the academic community has failed to respond in a timely or effective fashion to the dynamic changes in the media environment of young people.³¹⁰ Conventions and constraints within academic institutions keep scholars far behind the rapid pace of change in the media. For example, traditional methods for studying mass media content do not lend themselves easily to analyses of Internet content and services. As a consequence, many scholars are hesitant to tackle the methodological risks of conducting such studies. Restrictions on human-subject research too often put academic scholars at a great disadvantage in comparison to their counterparts in the market research industries, who have ready access to a stable of teen focus group and survey participants. The long gestation period, limited distribution, and high cost of peer-reviewed academic journals too often result in outdated research that reaches only a small segment of the scholarly community and has virtually no impact on public debate.³¹¹

We believe that our work investigating and analyzing the current trends in teen online culture will be helpful as a guidepost to other researchers. Numerous questions remain about the impact of these new media on the lives of individual adolescents. For example, with the variety of options available for plugging in, teens have adapted, in part, by developing the ability to engage in several activities simultaneously. But no one knows what this means for the depth of their processing or whether the high level of stimulation from a variety of media affects attention span, although these are concerns that have been raised among parents and educators.³¹² Additionally, the access to boundless information without leaving home is unique. How will the present and coming generations of adolescents differ from earlier generations as a result of ready access to information, especially about traditionally private or forbidden topics?³¹³

Exactly how the new digital media culture interacts with a teen's developing identity remains a question that is wide open for investigation. For example, as teens create and inhabit their own online communities, are they being drawn even further away from their families? Does the Web accelerate the trends toward independence and separation? Can it jump-start that process? Does the ability to extend friendships online or create friendships without the baggage that goes along with physical encounters connect with new or shifting developmental processes? Is there any difference between talking on the phone, chatting online, one-to-one, one-to-

many, or many-to-many, in terms of how relationships are likely to develop—their depth, the level of loyalty, and the like? It seems as though teens are “hard-wired” for seeking peer input, as a way of helping them know who they are, where they stand, and how they feel about themselves. We recognize that relationships with peers figure in the changing identity of youth, but we do not know how this process occurs. Does identity crystallize as a result of or in conjunction with relationships? Why are some relationships central to emerging identity while others have little or no impact?

Personal home pages are a unique new form of self-expression that can be a particularly potent tool in the exploration of identity.³¹⁴ But while teen home pages function on a very personal level, they are also public documents, available to a global audience of onlookers. This is only one example of how the Internet has turned the personal lives of adolescents into an open book. What are the implications for this blurring of public and private? Where do teens themselves draw the lines around their own private domains? To what extent is the public nature of the various forms of self-expression on the Web a factor in decisions about what to share and when? How will these shifting boundaries affect young peoples’ sense of these two realms as they move into adulthood?

Research that goes beyond the more narrow concerns of individual use and impact is also needed. Adolescents are not a monolithic group, after all. There are not only personal differences, but income, ethnic, geographic, and sexual differences within this highly diverse group of young people. The way these various subgroups relate to the new media may differ sharply from what is known in the existing research literature. Since so much of this new-media culture is rooted in very sophisticated technologies, we need to understand more fully the inherent properties and capabilities of these new digital tools, and how they can be harnessed most effectively to serve the needs of children and adolescents. We also need studies of the institutions that are creating this digital culture, both its commercial and its noncommercial sectors. What are the economics of this new industry? How are economic forces influencing content? Given the global nature of the Internet, a good deal more research should be done to understand the content and services being created outside of the U.S.

Some recent reports provide a glimpse into how children and youth are accessing and using the Internet in the U.S., Canada, and Europe.³¹⁵ Taken together these studies provide evidence of differences in Internet use and attitudes between youth and their parents, as well as differences that can be connected with age, gender, socio-economic status, and nationality. Young people’s rising involvement with the interactive features of the Net for communicating with peers to supplement other forms of communication is confirmed by these recent studies, and they

suggest that the more experience teens and adults have online, the less concerned they are about the potential dangers.

According to Sonia Livingstone, the comprehensive 1997-98 media-use survey of 15,000 children and young people in 12 countries across Europe (and Israel) “...refutes the technologically determinist view that the media in and of itself turns children into television, computer or Internet addicts.” She also observes that “(i)nformation and communication technologies are appropriated into particular social contexts, subject to specific national policies and valued within certain cultural frameworks.”³¹⁶

With respect to the psychological aspects of identity construction in a culture of simulation, the Pew Internet and American Life report on teenage online behavior supports Sherry Turkle’s predictions.³¹⁷ “Fully 56 percent of online teens,” according to the Pew report, “have more than one e-mail address or screen name and most use different screen names or e-mail addresses to compartmentalize different parts of their lives online, or so that they can experiment with different personas.”³¹⁸ At the same time, according to the report, “(s)ome teens feel that the Internet frees them to be more fully their true selves. That makes it easier to make friends online than doing so face to face, they believe, because these relationships begin with assessments that focus on personality and intellect, rather than the attractiveness and ‘style’ of the new acquaintance.”³¹⁹

Academic research on teens and new media will benefit from going beyond measuring penetration of new technologies and uses, to investigation of psychological and developmental aspects and meanings as they relate to engaging with new technologies in everyday life.

In order to understand fully the new media culture, its institutions, and its various roles in the lives of children and youth, it will be important to foster a broad range of research, drawing on a wide diversity of fields.³²⁰ Multidisciplinary approaches are needed, combining the contributions of historians, sociologists, anthropologists, and economists, who can study new media in all of their dimensions. Although longitudinal studies of the impact of media are important, we also need focused, policy-relevant research that addresses specific issues and needs. Sometimes this research may not be entirely conclusive, and the fluid nature of the media system may pose methodological challenges to researchers. But the need for serious appraisals at this critical, early stage of the new media’s development seems clear.

These studies are of broad public interest and should be widely disseminated. This will require finding new ways of making research on new media available in a timely fashion, not

only within the community of scholars, but to a larger audience of parents, health professionals, educators, and policymakers.

Several issues identified in this study not only call for further research but also raise critical public policy issues.

The Branded Digital Environment

The new-media environment for teens is primarily commercial in nature, positioning youth as consumers of popular culture and as a market for a multitude of products and services. In some respects these trends are logical extensions of what has been happening throughout this century, with the increasing number of products and services created for and marketed to youth, fueled by the rise in young people's spending power.³²¹ But the nature and extent of marketing in the online world is unprecedented, with the digital media intensifying many of the existing trends in the commercialization of children's lives. At every turn, from home to school to shopping mall, teens encounter various efforts to involve them in commercial transactions. By exploiting the interactive capacity of the online media to involve youth themselves (wittingly or not) in the marketing of various products, marketers have taken a qualitative leap in their use of sales tactics to shape and influence teen behavior.

In addition to the merger of content and commerce, and the ease of buying products online through e-commerce (which will become even easier in new interactive TV implementations), the push toward impulse buying is made stronger. The new media have spurred an alphabet soup of commerce, including e-commerce, t-commerce, and m-commerce (covering the worlds of the Internet, television, and mobile communications). In a culture that is already commercialized and market-driven, the ready availability of instant gratification (and delayed payment) online raises questions about the new media's impact on young people in particular and the quality of our culture in general.

Many teenagers work at after-school jobs, often to pay for the many consumer goods and services targeted directly to their "demographic." These trends have raised concerns among parents and educators, as many high school students find it difficult to work and keep up with their schoolwork.³²² Consumer groups note with alarm that credit card debt is rising among young people.³²³ New digital marketing strategies will very likely compound these trends, as ubiquitous marketing tools—on wireless devices, in wired classrooms, and through interactive television—will target teens throughout the day and night with seductive appeals designed to encourage impulse buying, and with special digital credit devices to facilitate instantaneous

purchases. Consumer protection policies will be needed to ensure that teens are not unfairly taken advantage of in the digital marketplace.

One area that ought to be examined closely is the role of the new “e-commerce enablers” that have been developed especially for the teen market. For example, companies such as RocketCash promote themselves to teens as a means of exercising their freedom to shop online and spend their own money without needing parents (or their parents’ credit cards). These sites serve, in effect, as monetary handlers or financial intermediaries, in much the same way that credit card companies and banks do in the offline world. But while these companies replace traditional banking institutions in facilitating online transactions (in this case, serving minors who are not yet old enough to have their own credit cards), it is not clear whether they fall under existing financial-privacy regulations. Nor, for that matter, is the status of these regulations clear, since financial institutions in the U.S. face the prospects of legislation that will attempt to modernize the industry.³²⁴ This modernization includes provisions to promote consumer financial privacy, although some protections recently enacted have been criticized for not being stringent enough.³²⁵ In light of the growing popularity of online transactions, however, there is also need for privacy protection for consumers who use less orthodox financial institutions for services normally rendered by banks and credit cards. As such, the e-commerce enabler sites illustrate how money handling and finances are changing faster than the protections provided for consumers—especially when those consumers are minors who might not be fully aware of their rights and obligations in financial affairs.

Another set of issues is raised by the Web sites that “employ” teens as part of their profit-seeking ventures, such as the “get-paid-to-surf-the-Web” companies (e.g., Cashesurfers or PaidForSurf).³²⁶ Teens are the most avid participants in such programs, which pay them both to post a “viewbar” or “paybar” at the bottom of their screens while they surf the Web, and to recruit other into the program. The viewbar exhibits various advertisements and companies monitor the amount of time users spend on the Web (and thus, ideally, watch ads on the viewbar) and pay them an hourly rate (e.g., 10 cents an hour). Similar programs pay teens to use branded e-mail programs or to listen to streaming audio programming.³²⁷ Not only do teens take advantage of this “easy” way to make money online, but many become marketers themselves by posting entire pages that list pay-for-surf companies, as a means of generating additional payments for referrals. Although these are strictly voluntary programs (many of which place a daily limit on the number of hours for which they’ll pay users to surf), regulators should examine this form of marketing closely and consider possible policies against any unfair practices targeted at under-age youth in the digital environment.

The Need for Privacy Policies

Teen privacy protection is a particularly urgent concern that merits public attention and consideration for policy formation. Often, the concept of teens' online safety is framed as protection from stalkers and insulation from online pornography or other inappropriate material. While these are legitimate causes for concern, the collection of personal data for commercial purposes is more pervasive. Thus we need to broaden the concept of online safety to include the maintenance of personal privacy. Younger audiences (or even adult audiences, for that matter) may not understand that when they provide personal information online, they may be compromising the sanctity of their own personal privacy. When a Web site such as Bolt or Thirsty prompts teens to share their names, addresses, and other information in the interest of "community," or when teens give in to the very natural adolescent tendency to share personal information as a means of expressing themselves and bonding with others, they stand to lose much more than they gain. Coupled with other databases and profiles both online and off, the isolated bits of information that teens surrender in registering for site membership and contests, or in the course of online chats and discussions, may add up to a complete loss of privacy.

Market research also plays a role in this regard. Teenagers who freely discussed what they liked and disliked about the Ford Focus advertising campaign in the Ford-sponsored car section of Bolt may not have realized that their feedback (and quite possibly their names and other personal information) are now the property of Bolt. Such data can be sold to other market researchers who are a part of the \$1.5 trillion industry of direct marketing and advertising databases.³²⁸ Moreover, even if such Web sites post privacy policies that explain that they are, indeed, collecting teens' personal information to use as market research or sell to other companies, it is questionable whether teens will search for such policies (or understand the legalese they encounter therein).³²⁹

Many online "privacy policies" are notoriously vague, and the promise to keep information within the confines of a site's corporate owner means little in this era of bankruptcies, mergers, and acquisitions. For example, when online toy store ToysMart.com declared bankruptcy during the spring of 2000, the site's pledge never to sell customers' personal information was abandoned, leading to a much-publicized lawsuit that charged ToysMart with unfair and deceptive business practices.³³⁰

Teens report that they are aware of privacy issues and rate privacy among their top concerns when using the Internet.³³¹ However, it is unclear whether teens are fully aware of how data gathering and online marketing affect them. A study released by the Annenberg Public Policy Center of the University of Pennsylvania in May 2000 stated that 22 percent of children aged

10 to 17 responded that they would disclose personal information, including name, address, and likes or dislikes, in exchange for a “great free gift.” When the interviewer asked this group of respondents if they would be willing to surrender personal information in exchange for a gift worth \$25, 30 percent of respondents said that they would. At a level of \$100, 45 percent of respondents said they would be willing to disclose personal information.³³²

Children under the age of 13 are currently protected under the Children’s Online Privacy Protection Act (COPPA), which took effect in 2000. COPPA prohibits commercial Web sites and online services from collecting personal information from these children without parental consent and proper notification.³³³ To date, however, teens are not afforded any privacy protections in the digital media. As content and services for teens continue to migrate to cell phones and other “smart” wireless devices with global positioning systems (GPS), threats to their privacy will grow. Public concerns over privacy are already on the rise, prompting a proliferation of congressional hearings and a number of legislative proposals. A coalition of consumer groups formed this year to promote the need for privacy policies, especially for the digital media.³³⁴ The particular concerns of adolescents will need to be included in any legislative or regulatory remedies.

The central role that market research is playing in the digital teen culture is of special concern. Never before has there been a medium with the ability to tap into the needs, desires, interests, and behaviors of children and youth. Never before has there been such an intertwining of the machinations of the marketplace with the activities of young people. Some of the market research practices—such as the creation of online focus groups disguised as “e-zines” or chat rooms—may well be deceptive, a matter that the Federal Trade Commission (FTC) should investigate. Close attention should be paid to these online market research practices as well as those being developed for other digital technologies. Parents, health professionals, and policymakers will need to be particularly vigilant as marketers continue to focus attention on younger and younger age groups, grooming the so-called “tweens” for their role as teen consumers. The American Psychological Association has been looking into the questionable role played by some child psychologists who sell their services to market research firms, and is developing ethical guidelines for the profession.³³⁵

While technologically savvy and comfortable with digital media, children and youth may not be as sophisticated as they need to be to protect themselves from manipulative and exploitative marketing and data collection practices in this new interactive world. Clearly, there is a need for comprehensive consumer education in the schools, with a curriculum that is sufficiently flexible to stay current in this rapidly changing marketplace. Parents, no longer able simply to draw on their own experience with the media, will also need to be informed on

an ongoing basis concerning the new media in their children's lives. Ultimately, it will take a combination of government policy, responsible industry self-regulation, public education, and activism to ensure that this new digital consumer culture treats young people fairly.

Realizing the Internet's Full Potential

Though the need for consumer safeguards is serious, it should not be the only focus of public debate. The digital media also create unique opportunities to harness the power of technology as a positive force in the lives of children and youth. This report has identified many of the benefits that young people are already reaping in their use of the Internet. However, the full potential of the digital media will not be realized unless there are clear public and private policies to help guide their development. In order to achieve this goal, we need a new framework for thinking about the media and their relationship to children and youth.

For decades, much of the public debate over television and children has focused primarily on the impact of harmful content on individual behavior. For example, thousands of scientific studies (and considerable federal money), as well as countless articles in the popular press, have been devoted to assessing the relationship of televised violence to anti-social behavior.³³⁶ While these issues are important and will remain so in the future, the emergence of digital media provides an opportunity to define some new goals for the media system, and to take steps to ensure that these goals are realized.

A central guiding question should be: What role can and should the media play in assisting children to grow up to become effective and active participants in our democratic society? This is an issue of special urgency, as concerns continue to rise over the declining civic and political participation of youth. As Robert Putnam documented in his book, *Bowling Alone: The Collapse and Revival of American Community*, the United States is experiencing a "civic malaise" that poses a threat to a healthy democracy. Particularly troublesome is the fact that the decline in political participation is a generational trend, with each successive generation of Americans less inclined to vote than its immediate predecessor.³³⁷

What does our examination of teen online culture reveal about the potential for new media to improve youth civic engagement? Already at this early stage, two conflicting tendencies are in evidence. On the one hand, the Internet has fostered many opportunities for community-building, participation, information-seeking, and collaboration. All of these activities can contribute to the development of the necessary attributes for citizenship. On the other hand, the rapid and pervasive commercialization of the digital media may be moving the culture in the opposite direction, encouraging values, attitudes, and behaviors that are aimed at grooming

avid consumers rather than effective citizens. Recruiting teens for participation in “branded communities” may undermine the potential of the Internet to enable authentic community experiences. Highly personalized, ubiquitous, one-to-one marketing could create a media ethic that promotes self-obsession, instant gratification, and impulsive behaviors. And while important social and political issues may find their way into popular teen Web sites, the commercial context may ultimately trivialize them.³³⁸

There are some hopeful signs in the nascent, fragile, civic enterprises that have taken root on the Web. Our survey of these sites shows promise for the new digital media to create an environment in which a diversity of voices can be heard, one that positions young people as assets to society, as creators of serious content, and as powerful agents of change for the common good. Because most of these sites are noncommercial in nature, freedom from the profit motive can allow them to make unique contributions to the public conversation, and in turn to the strengthening of democratic principles.

But there are a number of challenges that must be met if we are to see the emergence and survival of a healthy youth civic sector in the digital landscape. The dominance of the for-profit model on the Web raises serious questions about the continued viability of the truly noncommercial content and services that are integral to the authenticity of an alternative online culture.³³⁹ As the Internet continues to make its transition to the next generation—moving from slow, fixed dial-up connections to broadband access, interactive television, and wireless mobile devices—the noncommercial civic media initiatives that are visible on today’s Web may either be marginalized or may disappear altogether. Foundation grants, government support, and contributions from the private sector will all be needed to sustain nonprofit, civic, and grassroots sites. Only with the effort of informed and active citizens, and with public policies that are conducive to the development of an online civic sector, will such support mechanisms be put in place.

A number of efforts in this regard are already underway, involving schools, libraries, public broadcasters, and other community organizations. Some of these projects (e.g., the Digital Promise) are concerned with identifying sources of funding for the production of noncommercial civic, educational, and cultural materials online.³⁴⁰ Other projects (e.g., the New Information Commons) are designed to test the online civic-sector concept at the community level.³⁴¹ Still other projects (e.g., the Communitarian Network), primarily academic in nature, explore the philosophical underpinnings of the “commons” concept.³⁴² What is missing in all of these efforts (and there are many others) is a means of coordinating them in some fashion, helping to create a critical mass of civic content online that will serve both local needs and national interests. At present, such voices are scattered widely across the vast expanses of the Internet,

with no guarantee that they will be heard above the din of the global, conglomerate popular culture.

Finally, despite the rapid penetration of the Internet into American homes, there remains a troubling “digital divide” that threatens to leave many youth behind in the technological revolution of the twenty-first century.³⁴³ Even though programs such as the “e-rate” are making it easier for less-advantaged schools and libraries to gain affordable access to the Internet, the rapid introduction of broadband technologies may undercut the positive impact of these policies.³⁴⁴ More youth may have access as Internet penetration continues to grow, but the quality of that access may suffer in comparison to new premium services that are being introduced. As a result, a new digital divide might emerge, separating those with rudimentary, dial-up access from those who enjoy sophisticated, state-of-the-art communications. The content of the new broadband universe, moreover, will reflect these inequities.³⁴⁵

Such is the ambivalent picture that inevitably results from a serious appraisal of the new Web culture. Attractive in its ease of use, its ready access to seemingly boundless information, its open invitation to users to submit their own content, potentially even strengthening the bonds of community, the Web also raises serious concerns. Is it simply becoming another extension of the mass media, and a more intrusive one at that? Will its vaunted information resources be reduced largely to sales catalogs and product pitches, its interactivity limited to impulse purchases and video-on-demand, its community-building potential squandered on special-interest groups and closed cliques of like-minded individuals?

Fortunately, the digital age is still very much in formation, and the answers to these questions await our active participation in fashioning the kind of new media system that will serve the public interest as effectively as it generates private profits. We stand, in short, on the threshold of a new era. We have a unique window of opportunity to ensure that the potential benefits of the new media for teens and children are fully realized, while the harms and negative impacts are minimized. To achieve this goal, however, we will need a broad-based movement, enlisting all those who care about the quality of the media culture, both to explore and assess the system we have today, as well as to envision and enact a more promising system for tomorrow.

Recommendations

For the Academic Research Community

There is an urgent need for further research on the role that new media are playing in the lives of youth. Much of what is known about how teens are interacting with the new digital media is confined to the proprietary domain of market research, which is either completely off-limits to outsiders or priced so prohibitively as to be inaccessible to the public.

Using CME's investigation and analysis of current trends in teen online culture as a guidepost, academic researchers should look further at the impact of these new media on the lives of individual adolescents.

1. Research addressing the impact of these new media on the lives of individual adolescents should include the following questions:
 - What will be the impact of teens' "multi-tasking" (engaging in several media and communications activities simultaneously) on the depth of their processing and the length of their attention spans?
 - How will the present and coming generations of adolescents differ from earlier generations as a result of ready access to increasing amounts of information, especially about traditionally private or forbidden topics?
 - How will the new digital media culture interact with and affect a teen's developing identity?
2. In addition to longitudinal studies of the impact of media, focused, policy-relevant research should address specific issues and needs. Such research should go beyond the more narrow concerns of individual use and impact, taking into account not only personal differences, but also income, ethnic, geographic, and sexual differences within this highly diverse group of young people.
3. To fully inform the public, the research must be disseminated in a timely fashion, not only within the community of scholars, but to a larger audience of parents, health professionals, educators, and policymakers.

For Government Policymakers, Industry, Educators, and the Public

It will take a combination of government policymakers, responsible industry self-regulation, public education, and citizen activism to ensure that this new digital consumer culture treats young people fairly. Again using CME's investigation and analysis the following recommendations are put forth:

For Government Policymakers

1. Consumer protection policies are needed to ensure that teens are not taken unfair advantage of in the new digital marketplace. Policies should protect teens' personal and financial privacy in the online, wireless and interactive television environment and should also address possible exploitation by offline and online credit and debit cards.
2. The Federal Trade Commission (FTC) and the Federal Communications Commission (FCC) should enact and enforce clear and effective safeguards now to protect teens from manipulative and exploitative advertising in interactive television.
3. Privacy protections afforded by the Cable Communications Policy Act of 1984 should be extended to cover all interactive media, regardless of the delivery method.
4. Safeguards should be established to protect the privacy of teens on their cell phones and other "smart" wireless devices that employ Global Positioning Systems (GPS) location positioning software so that marketers cannot use these E-911 technologies for location-based direct advertising pitches.
5. The FTC should investigate new market research practices (such as the creation of online focus groups disguised as "e-zines" or chat rooms) that may well be deceptive.
6. The FCC should continue to support the e-rate for schools to provide the broadest access to the Internet for youth and teens, including underprivileged and underserved. Access to digital media in schools, communities and homes is indispensable in an information-age democracy.

7. The Department of Education should promote awareness of students' online privacy concerns and protections. In addition, it should establish safeguards to protect students' privacy from in-school marketing practices.
8. The government should endorse and publicly fund an "electronic commons" to provide significant space in this new media for all types of noncommercial content.

For Industry

1. Surreptitious e-commerce marketing practices, such as data mining should be discontinued. Such practices are developing faster than policies to protect teen consumers. At the very least, market researchers should be more truthful in notifying teens about their data collection practices and offer teens the option to delete any personal information that might have been collected.
2. Clear delineation between content and advertising must be established.
3. The media industries must do more to support a quality civic media culture, one that will serve teens as citizens. Active support and encouragement should be given to an "electronic commons" where teens and youth can go to access resources for citizen involvement.
4. The media industries should use their digital capacity to provide broadband or data-casting services to local schools, libraries or community centers that serve youth.

For Educators

1. There is a need for comprehensive consumer education and media literacy training in the schools, with a curriculum that is sufficiently flexible to stay current in this rapidly changing marketplace.
2. Schools, information technology centers and libraries should be encouraged to guide youth to the civic content available on the Web and assist them in interacting with it.

3. The educational system should explore and utilize electronic media as a resource for building active, skilled citizens and provide opportunities for youth to learn how to produce their own civic content. Schools should develop curriculum in civic education, service learning and media arts that maximize both.
4. Teachers who use computers in their curriculum should make their students aware of the importance of privacy and caution them about divulging too much personal information.

For the Public

1. Parents and guardians should inform themselves about the new media their children are using.
2. Parents, caretakers and others involved with children should teach them the importance of protecting their personal privacy online.
3. A broad public education effort is necessary focussing on new media market research practices and how to safeguard children from them.