Using Participatory Media and Public Voice to Encourage Civic Engagement

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As increasing numbers of young people seek to master the use of media tools to express themselves, explore their identities, and connect with peers—to be active creators as well as consumers of culture—educators have an opportunity to encourage young media makers to exercise active citizenship. Might teachers enlist these young people's enthusiasm for using digital media in the service of civic engagement? I propose one way to do this: help students communicate in their public voices about issues they care about.

The eager adoption of Web publishing, digital video production and online video distribution, social networking services, instant messaging, multiplayer role-playing games, online communities, virtual worlds, and other Internet-based media by millions of young people around the world demonstrates the strength of their desire—unprompted by adults—to learn digital production and communication skills. According to a 2005 survey by the Pew Internet and American Life Project, "The number of teenagers using the internet has grown 24% in the past four years and 87% of those between the ages of 12 and 17 are online." This interest by American (and Brazilian, British, Chinese, Indian, Japanese, Persian, etc.) youth in media production practices might well be a function of adolescents' needs to explore their identities and experiment with social interaction—and can be seen as a healthy active response to the hypermediated environment they've grown up in.

Whatever else might be said of teenage bloggers, dorm-room video producers, or the millions who maintain pages on social network services like MySpace and Facebook, it cannot be said that they are passive media consumers. They seek, adopt, appropriate, and invent ways to participate in cultural production. Another recent Pew study found that more than 50 percent of today's teenagers have created as well as consumed digital media. This chapter focuses on those avid young digital media makers in the knowledge that addressing the needs of those who are not able to participate in cultural production, the other half of the digital divide, remains an important task. Although significant barriers remain in regard to less-privileged youth, this chapter addresses the educational needs and opportunities of the large minority of young people around the world, of many nationalities and socioeconomic levels, who are avid digital media creators.

Some recent data indicates that American youth are interested in civic engagement as well as in playing with media. A research team commissioned by MTV interviewed more than twelve hundred young people, conducted expert interviews and ethnographies, and took a national poll of a representative sample ages 12–24, between December 2005 and April 2006. Although the research found, "With 70% believing in the importance of helping the community, 68% already doing something to support a cause on a monthly basis and 82%
describing themselves at least ‘somewhat involved,’ it does seem that the majority of young people are convinced that supporting a social cause is something they should do. However, there is a strong disparity between interest and involvement, an ‘activation gap,’ and there is significant room for growth.”

Michael Xenos and Kirsten Foot, in their chapter for this volume, warn, in regard to youth involvement with traditional election campaigns: “Based on the best available indicators and techniques for understanding both what young people are looking for in an electoral politics experience on the Web, and what campaign organizations are providing, a substantial gulf is evident between them. If this gap is left unaddressed, we believe future developments in online campaigning will fail to attract all but the most politically oriented young voters into greater involvement with the electoral system. In the long run, this means that the potential of new media to help reverse significant declines in youth political involvement may go unrealized.” Other authors in this volume—Bennett, Bers, Coleman, Earl and Schussman, Montgomery, Raynes-Goldie and Walker—echo this opinion in different ways.

Jennifer Earl and Alan Schussman in particular note, “If young people are growing up in movement societies, where scripts and practices from social movements have become part of everyday thinking, and producing online protest actions (which embodies these pervasive social movement schemas) has become extremely inexpensive, particularly to those who have moderate computing skills, then we should expect that young people will begin to use online protest-organizing tools to mount protests about issues they care about.” Indeed, Kathryn Montgomery notes in her chapter in this volume that young people have used online social networks to engage one of the most contentious techno-political issues today, with more than seventeen thousand of them signing up as “friends of network neutrality” on MySpace.

The MTV-sponsored study group suggested, among other measures, that educators “integrate pro-social goals into activities that young people already enjoy doing.” Yet another pair of US researchers, Skelton and Valentine (2003), looked at youth political activism and argued that “when young people’s action is looked for, rather than focusing on what they are not doing, it becomes clear that even groups of young people traditionally assumed not to be active social agents are in fact demonstrating forms of political participation and action.” Earl and Schussman in this volume assert, “One must ask whether existing notions of what comprises civic engagement tend to ignore, devalue, and otherwise marginalize ways in which younger citizens are connecting with one another to collectively make a difference in their own worlds.”

A U.K. research group that surveyed over a thousand young people, age eighteen and up, was less sanguine about the value of online media practices, concluding that “the broad decline in youth participation might be better redressed through offline initiatives, strengthening the opportunities structures of young people’s lives and the ‘communities of practice’ available to them, rather than building Web sites which, though they will engage a few, will struggle to reach the majority or, more important, to connect that majority to those with power over their lives in a manner that young people themselves judge effective and consequential.” Livingstone, Couldry, and Markham, the authors of the U.K. study, added, “Rather than blaming young people for their apathy, the finger might instead be pointed at the online and offline structures of opportunity that facilitate, shape and develop young people’s participation. Focus groups with young people suggest a generation bored with politics, critical of the online offer, instead interested in celebrity and conforming to peer norms. Young people protest that ‘having your say’ does not seem to mean ‘being listened to,’ and so they feel justified in recognising little responsibility to participate.”
These trends suggest the importance of social scaffolding for any interventions involving self-expression—other peers in the class and the teacher must act as the first “public” that reads/views/listens and responds. For example, Peter Levine’s chapter in this volume focuses on the problem of “finding appropriate audiences for students’ work.” Preliminary effort to recruit respondents willing to provide feedback from interest groups, peer communities, community organizations, the press, and especially political leaders and civil servants are essential to proper preparation. It isn’t “voice” if nobody seems to be listening. Finding the first publics who can respond to bloggers is as important as introducing people to blogs as vehicles of potential public influence. In the blogosphere, speaking your mind is necessary to be hearable, but doesn’t guarantee that you will be heard.

**Participatory Media in the Curriculum—and in Society**

What if teachers could help students discover what they really care about, then show them how to use digital media to learn more and to persuade others? Constructivist theories of education that exhort teachers to guide active learning through hands-on experimentation are not new ideas, and neither is the notion that digital media can be used to encourage this kind of learning. Marina Bers in this volume offers a constructivist approach to using virtual worlds as an avenue to civic engagement for young people. What is new is a population of “digital natives” who have learned how to learn new kinds of software before they started high school, who carry mobile phones, media players, game devices, and laptop computers and know how to use them, and for whom the Internet is not a transformative new technology but a feature of their lives that has always been there, like water and electricity. This population is both self-guided and in need of guidance: although a willingness to learn new media by point-and-click exploration might come naturally to today’s student cohort, there’s nothing innate about knowing how to apply their skills to the processes of democracy. Internet media are not offered here as the solution to young people’s disengagement from political life, but as a possibly powerful tool to be deployed toward helping them engage.

It is not easy for many teachers to adopt this perspective and put it into action in the classroom—the political and economic necessity of teaching to the test leaves little room to fit these kinds of skills lessons into mandated and standardized curriculum. “Accountability” and innovation are often locked into a zero-sum game. Lack of resources, training, and technical support offer significant additional obstacles.

In *Confronting The Challenges of Participatory Culture: Media Education for the 21st Century*, Jenkins et al. see an entirely new kind of culture emerging from the use of participatory media, characterizing the shift as one that should not be reduced to the enabling technology, but “rather represents a shift in the way our culture operates.” This context places new emphasis on the need for schools and afterschool programs to devote attention to fostering what we are calling the new media literacies—a set of cultural competencies and social skills which young people need as they confront the new media landscape. Participatory culture shifts the focus of literacy training from individual expression onto community involvement: the new literacies are almost all social skills which have to do with collaboration and networking. These skills build on the foundation of traditional literacy, research skills, technical skills, and critical analysis skills which should have been part of the school curriculum all along.

If print culture shaped the environment in which the Enlightenment blossomed and set the scene for the Industrial Revolution, participatory media might similarly shape the cognitive and social environments in which twenty-first-century life will take place (a shift in the way
our culture operates). For this reason, participatory media literacy is not another subject to be shoehorned into the curriculum as job training for knowledge workers. Jenkins et al. put it this way:

Much of the resistance to embracing media literacy training comes from the sense that the school day is bursting at its seams, that we cannot cram in any new tasks without the instructional system breaking down altogether. For that reason, we do not want to see media literacy treated as an add-on subject. Rather, we should see it as a paradigm shift, one which, like multiculturalism or globalization, reshapes how we teach every existing subject. Media change is impacting every aspect of our contemporary experience and as a consequence, every school discipline needs to take responsibility for helping students to master the skills and knowledge they need to function in a hypermediated environment.12

Arguing for the place of participatory media literacy in the curriculum is not a peripheral debate, but is part of one of the defining conflicts of our time, a power struggle that involves political, economic, technological, as well as educational dimensions. Participatory media literacy is an active response to the as-yet-unsettled battles over political and economic power in the emerging mediasphere, and to the possibility that today’s young people could have a say in shaping part of the world they will live in—or might be locked out of that possibility. The struggle for participatory media literacy in schools must be seen in the context of these broader societal conflicts.

Participatory media include (but aren’t limited to) blogs, wikis, RSS, tagging and social bookmarking, music-photo-video sharing, mashups, podcasts, digital storytelling, virtual communities, social network services, virtual environments, and videoblogs. These distinctly different media share three common, interrelated characteristics:

- Many-to-many media now make it possible for every person connected to the network to broadcast as well as receive text, images, audio, video, software, data, discussions, transactions, computations, tags, or links to and from every other person. The asymmetry between broadcaster and audience that was dictated by the structure of predigital technologies has changed radically. This is a technical–structural characteristic.

- Participatory media are social media whose value and power derives from the active participation of many people. Value derives not just from the size of the audience, but from their power to link to each other, to form a public as well as a market. This is a psychological and social characteristic.

- Social networks, when amplified by information and communication networks, enable broader, faster, and lower cost coordination of activities.13 This is an economic and political characteristic.

Like the early days of print, radio, and television, the present structure of the participatory media regime—the political, economic, social and cultural institutions that constrain and empower the way the new medium can be used, and which impose structures on flows of information and capital—is still unsettled. As legislative and regulatory battles, business competition, and social institutions vie to control the new regime, a potentially decisive and presently unknown variable is the degree and kind of public participation. Because the unique power of the new media regime is precisely its participatory potential, the number of people who participate in using it during its formative years, and the skill with which they attempt to take advantage of this potential, is particularly salient. The outcome of contemporary regulatory battles that are obscure to the majority of citizens will likely determine whether future participatory media will be enclosed economically, controlled centrally, and
co-opted politically, or whether participatory media will enable broad cultural production and authentically democratic political influence. Kathryn Montgomery’s chapter in this volume offers a detailed description of the battle over “network neutrality.”

If literacy is an ability to encode as well as decode, with contextual knowledge of how communication can attain desired ends—then “voice,” the part of the process where a young person’s individuality comes into play, might help link self-expression with civic participation.

**Public Voice: The Bridge between Media Production and Civic Engagement**

Making connections between the literacies students pick up simply by being young in the twenty-first century and those best learned through reading and discussing texts is an appropriate role for teachers today. My fundamental assumption for beginning to teach participatory media skills myself, based on my own encounters with students in social cyberspaces and the advice of more experienced educators, is that “voice,” the unique style of personal expression that distinguishes one’s communications from those of others, can be called upon to help connect young people’s energetic involvement in identity-formation with their potential engagement with society as citizens. Moving from a private to a public voice can help students turn their self-expression into a form of public participation. Public voice is learnable, a matter of consciously engaging with an active public rather than broadcasting to a passive audience.

The public voice of individuals, aggregated and in dialogue with the voices of other individuals, is the fundamental particle of “public opinion.” When public opinion has the power and freedom to influence policy and grows from the open, rational, critical debate among peers posited by Jurgen Habermas and others, it can be an essential instrument of democratic self-governance. James Fishkin at Stanford, John Gastil at the University of Washington, Peter Levine at the University of Maryland (see Levine’s chapter in this volume) and others have been investigating whether better deliberative practice can produce better publics. Deliberation, however, is only part of public discourse. Investigation, advocacy, criticism, debate, persuasion, and politicking are all part of the process.

The political philosopher Jürgen Habermas defined the public sphere decades before the Internet became a vehicle for political expression:

By “public sphere,” we mean first of all a domain of our social life in which such a thing as public opinion can be formed. Access to the public sphere is open in principle to all citizens. A portion of the public sphere is constituted in every conversation in which private persons come together to form a public. They are then acting neither as business or professional people conducting their private affairs, nor as legal consociates subject to the legal regulations of a state bureaucracy and obligated to obedience. Citizens act as a public when they deal with matters of general interest without being subject to coercion; thus with the guarantee that they may assemble and unite freely, and express and publicize their opinions freely.

Habermas drew attention to the intimate connection between a web of free, informal personal communications and the foundations of democratic society. Because the public sphere depends on free communication and discussion of ideas, it changes when it scales—as soon as your political entity grows larger than the number of citizens you can fit into a modest town hall, this vital marketplace for political ideas can be influenced by changes in communications technology. Communication media, and the ways the state permits citizens to use them, are essential to the public sphere in a large society. Ask anybody living under an
authoritarian government about the right to talk freely among friends and neighbors, to call a meeting to protest government policy, or to raise certain issues on a blog or in a BBS. Brute totalitarian seizure of communications technology or automation of censorship are not the only ways that political powers can neutralize the ability of citizens to talk freely. Habermas also feared that the public sphere in the mass media era has already been corrupted by paid fake discourse—from the public relations industry to campaign media strategies.18

Although civic engagement encompasses many dimensions, this chapter focuses on participation in the public sphere through direct experience with online publishing, discourse, debate, cocreation of culture, and collective action. By showing students how to use Web-based tools and channels to inform publics, advocate positions, contest claims, and organize action around issues that they truly care about, participatory media education can draw them into positive early experiences with citizenship that could influence their civic behavior throughout their lives. Formal theories of the public sphere could be introduced most productively after, and in the context of, direct experience of exercising a public voice.19

Talking about public opinion making is a richer experience if you’ve tried to do it. In one sense, public voice can be characterized not just as active, but as generative—a public is brought into being in a sense by the act of addressing some text in some medium to it. Michael Warner has argued that any particular public (as distinguished from “the public”) comes into being only when it is addressed by a media text, rather than existing a priori—“it exists by virtue of being addressed.”20 By writing a blog post about an issue, a blogger brings together people whose only common interest is the issue addressed, bringing about “a relation among strangers” that would probably not otherwise exist. Creating a wiki about a local issue has the potential to precipitate a public that can inform itself, stage debates, even organize collective action.

I recognize that precipitating publics and organizing collective action are volatile practices that are often interpreted (and prohibited and punished) as “rebellious” by parents and schools. Stephen Coleman notes in his chapter in this volume that “[t]he policy of ‘targeting’ young people so that they can ‘play their part’ can be read either as a spur to youth activism or an attempt to manage it. Indeed, the very notion of youth e-citizenship seems to be caught between divergent strategies of management and autonomy.... The conflict between the two faces of e-citizenship is between a view of democracy as an established and reasonably just system, with which young people should be encouraged to engage, and democracy as a political as well as cultural aspiration, most likely to be realised through networks in which young people engage with one another.” This tension between parental and teacher authority on one hand and the contentious, even rebellious, processes that are as fundamental to democracy as they are vexing to authority figures is an obvious site of potential conflict.

In particular, Coleman contrasts the adult view of training young people to be part of the existing political system—“good citizens”—and the view that democracy lives precisely within the unruly peer-to-peer relationships, networks, and norms that young people seek to develop for themselves. danah boyd, whose chapter, “Why Youth (Heart) Social Network Sites: The Role of Networked Publics in Teenage Social Life” appears in the Identity volume of the MacArthur Series on Digital Media and Learning, asserts the same case that Coleman argues. The value of the peer-to-peer network is not only essential, boyd argues, but necessarily prior to more orthodox forms of democratic discourse:21 “In order to engage in political life, people have to have access to public life first. Youth need publics—networked or physical—before they can engage in any form of political life. Politics start first with the school, with your
friends . . . then they grow to being about civics. Pushing the other way won’t work. You need to start with the dramas that make sense to you.”

I propose that learning to use blogs, wikis, digital storytelling, podcasts, and video as media of self-expression within a context of “public voice” should be introduced and evaluated in school curricula, after-school programs, and informal learning communities if today’s youth are to become effective citizens in the emerging era of networked publics. In the twenty-first century, participatory media education and civic education are inextricable. For those educators who believe this assertion is worth testing in practice, this chapter and its references, including a public Web site for sharing experiences and knowledge, is offered by the author as a public resource.

From the Blogosphere to the Public Sphere

A blog is a Web page that is updated frequently, with the most recent entry displayed at the top of the page. Given the simplicity of this definition of blog, a wild variety of diaries, news sources, reference repositories, collaboratories, filters, compendia, lab journals, classroom discussions, critical essays, rants, polemics, jokes, guides, advertising pitches, and social and political movements has resulted, with over seventy million blogs tracked worldwide by Technorati by 2006. The term blogosphere to describe the interlinked web of blogs was invented as a joke in September 1999, according to Wikipedia.

The political power of the blogosphere grew visible to the mainstream in 2003. Volunteer investigator-bloggers kept alive the story of Senate Majority Leader Trent Lott’s racist public remarks and unearthed similar incidents in the past, eventually costing him his leadership position. In September 2004, CBS newscaster Dan Rather claimed to have documents that showed presidential candidate George W. Bush to have whitewashed his absences from National Guard duty. Again, amateur fact-checkers organized online and turned up evidence that the documents cited by Rather were forgeries.

Millions of people appear to be expressing their opinions online. Does that add up to a significant revitalization of the public sphere? The answer to that question is still contested. In the days of the pre-Web Internet, Fernback and Thompson argued against such a notion, warning of the danger that people would sit in front of their computers and mistake typing at each other for political action: “Indeed, it seems most likely that the virtual public sphere brought about by CMC will serve a cathartic role, allowing the public to feel involved rather than to advance actual participation.” A decade later, Yochai Benkler, in his 2006 book, The Wealth of Networks, commented:

We are witnessing a fundamental change in how individuals can interact with their democracy and experience their role as citizens. Ideal citizens need not be seen purely as trying to inform themselves about what others have found, so that they can vote intelligently. They need not be limited to reading the opinions of opinion makers and judging them in private conversations. They are no longer constrained to occupy the role of mere readers, viewers, and listeners. They can be, instead, participants in a conversation.

Participants, like literate citizens, aren’t automatically produced by computer ownership: access to the Internet and the capability of publishing a blog by a population is not sufficient to guarantee that blogging will have a significant positive impact on the political public sphere. The way in which that population uses the medium will matter. The literacies that this curriculum seeks to impart could be a crucially influential battle in this struggle over the political impact of blogging. Knowing how to take a tool into one’s hand is no guarantee...
that anyone will do anything productive, but without such knowledge, productive use is less likely—and hegemonic control becomes more likely by those who do know exactly how to exercise the power of the new media.

It is not yet clear whether the blogosphere or any aggregation of online arguments constitute the ideal of constructive debate that public sphere theorists posit, but if Benkler’s assessment is correct—that many-to-many media afford a window of opportunity for populations to exercise democratic power over would-be rulers—it seems possible that education could play a pivotal role by equipping today’s digital natives with historical knowledge, personal experience, rhetorical skills, and a theoretical framework for understanding the connection between their power to publish online, their power to influence the circumstances of their own lives, and the health of democracy.

A Few Examples of Participative Media and Civic Engagement

An exhaustive or even fully representative cross-section of case histories is not possible within the scope of this chapter, but real examples of participative pedagogy should not be ignored either. Pointers to many more examples are available on the chapter’s companion wiki.

Listening to what young people care about is the necessary first step in enlisting their enthusiasm. Youth-initiated applications of media to public issues is the first place I would begin my knowledge gathering. What are young people cooking up on their own accord? How are they appropriating media for public advocacy or contestation?

One illustrative example: While he was a Toronto high school student, Wojciech Gryc started a blog that attracted the attention of other high school students; together, they created an online webzine that turned into an organization dedicated to youth, media, and civic engagement, “Five Minutes to Midnight.” In correspondence with the author, Gryc wrote that his organization “gets youth involved in human rights through media and journalism. We are based in Toronto, Canada, but use the Web to promote our work. We publish a Web magazine, run workshops on Web development, and have even travelled to Chad and Brazil to promote youth involvement through the use of open source software, development of media, and similar projects. The entire organization is run by youth 20 years of age or under (this includes the entire Board of Directors).” Gryc and another young volunteer, Émanuèle Lapierre-Fortin, spent more than three weeks running workshops on open-source software in Chad for Rafgul. “During that time, we made a video commercial for a picnic, taught the group how to work on their newspaper using GIMP, OpenOffice, Inkscape, and got donations of laptops and a digital camera.”

The youth of the “Fantasy Congress Founding Fathers” is clear from the photograph of their Web site, and is reflected in their self-description:

The mission of Fantasy Congress is to involve individuals in the legislative process and the daily goings-on of Congress by means of computer simulation. Fantasy Congress is easy to use, making it simple for anyone to monitor the performance of his or her team, track the contributions of individual senators and representatives to the team, and follow latest news on their team members. Discussion boards make gameplay even more dynamic by enabling players to interact more directly with each other. By inspiring people to care about government as much as they care about sports, Fantasy Congress hopes to encourage government transparency and responsibility while educating the governed.

Fantasy Congress is more than just a totally sweet game. Drawing from the broadest and most up-to-date database of its kind, it ranks sitting members of Congress by legislative efficacy and other criteria.
Fantasy Congress™ founders were four students at Claremont McKenna College. Founder Andrew Lee came up with the idea for the game when he asked whether the enthusiasm his classmates put into fantasy sports could be cast as a game that models the legislative process. He then enlisted three other students.

What have trained adult observers been able to report about youth media production practices and civic engagement? Direct observations of young people’s actual media making and consuming practices is where anthropologist Mizuko Ito has been directing her attention. Ito is codirecting a study, funded by the MacArthur Foundation, titled “Kids’ Informal Learning With Digital Media: An Ethnographic Collaboration,” a joint effort between researchers at the University of California, Berkeley, School of Information and the University of Southern California Annenberg Center for Communication. “The goal of this three-year study is to observe how young people between the ages of 10 and 20 use digital technologies outside the classroom and then determine if these ‘native’ practices can be adapted for use in the classroom as a means to make the educational experience more engaging and effective.”

Led by Peter Lyman, Mimi Ito, and Michael Carter, the Digital Youth project involves multi-institutional, interdisciplinary teams studying different aspects of youth media practices.

Henry Jenkins at MIT also combines theory, empirical study, and pedagogical practice in “preparing students for jobs that don’t yet exist.” Another project supported by the MacArthur Foundation’s Digital Media and Learning program, the New Media Literacies project at MIT is “developing a theoretical framework and hands-on curriculum for K-12 students that integrates new media tools into broader educational, expressive and cultural frameworks. The NML team, led by Dr. Jenkins and based at MIT’s Comparative Media Studies program, is currently exploring K-12 digital literacy, guided by two questions: What do young people need to know in order to become full, active, creative, critical, and ethically responsible participants in a media-rich environment?, and what steps do we need to take to make sure that these skills are available to all?”

After first looking at what young people as individuals and small groups are inventing, I’d ask, “What are the most forward-looking communities of learners doing? Where are the pioneering students, teachers, and schools who have joined participatory media and civic engagement, and what are they doing?” An illustrative example, started in 1988, iEARN is “the world’s largest non-profit global network that enables teachers and young people to use the Internet and other new technologies to collaborate on projects that both enhance learning and make a difference in the world.... All projects in iEARN are initiated and designed by teachers and students, and provide powerful examples of how new and emerging technologies can make a difference in teaching and learning.”

Many of the iEARN projects link classrooms via online dialogue about civic issues, often involving Web publishing, digital photography and video production. The Global Learning Project, for example, deployed online dialogue and digital media while teaching about civil rights.

Kathryn Montgomery cites in her chapter in this volume a number of examples, including The Community Information Corps, of St. Paul, Minnesota, which “enlists teens to do public art”; Tolerance.org, a project of the Southern Poverty Law Center that provides young people with an activist approach to fighting racism; Free the Planet! which “provides resources for activists, and help students win campaigns for environmental protection”; Out Proud for gay, lesbian, bisexual, transsexual youth; and WireTap, “Youth in pursuit of the dirty truth,” a youth journalism effort by the progressive online magazine, Alternet. Montgomery also cites the extensive use of Internet media by MTV’s “Rock the Vote” campaign. Also in this
volume, Kate Raynes-Goldie and Luke Walker detail their experiences with TakingITGlobal, a global community of young activists, to register young voters.

Another collaboration of teachers and students uses video to give Harlem youth a worldwide forum to highlight issues that matter to them. HarlemLIVE blog, “Harlem’s Youth Internet Publication” directly addresses civic issues of interest to Harlem youth and HarlemLIVE video produces and publishes teen-created videos about civic and cultural issues.43 HarlemLIVE “began in early 1996, at the beginning of the internet revolution, with just five students, one laptop, a digital camera, and an advisor.”44

Note how student podcasters in a school in the U.K. don’t make a strong distinction between “argue about issues that matter to us” and “share the music we write”: “Podminions is the podcast of King’s Norton Boys’ School in Birmingham, U.K. Here we will tell stories of the local community, the things we do in and out of school, argue about the issues that matter to us and share with you the music we write.”45

Yet another important avenue of inquiry is opened by asking what universities are doing to study, invent, or practice participatory media applications to civic engagement.

David Brake, doctoral student at the London School of Economics, is engaged, with professor Nick Couldry, in interviewing youth in the U.K. aged sixteen to nineteen “who have produced weblogs that are principally narratives about themselves, examining the influences and constraints on such storytelling. The research will focus primarily on the influence on their practice of these young people’s relationship with their audiences (real and imagined), but will also consider the technological characteristics of the weblogging service that they use, the limits of their own digital and ‘traditional’ literacies and their understanding of emergent expectations of the genre of personal weblogging.”46

In Australia, the Youth Internet Radio Network was established at Queensland University of Technology to engage young people in creative forms of cultural production through online networks. Using a combination of ethnography and action research, the researchers will then observe and analyze how young people participate in these networks, and how they are affected by this kind of interaction and participation. Youth Internet Radio Network has launched a Web site that functions as both a social network and a platform for the creation and distribution of creative content. Queensland researchers Notley and Tacchi wrote: “Mitra and Watts (2002) cite a central theme for communication scholars in the twenty-first century as the ‘resuscitation of voice.’ In redefining the Internet, they envision ‘a discursive space produced by the creative work of people whose spatial locations are ambiguous and provisional.’ They consider that new constructs of ‘voice, agency, discourse and space’ in ‘cyberspace’ may have ‘liberating and empowering characteristics’ (ibid: 486).”47

In addition to the MacArthur Foundation’s Digital Media and Learning program, other foundation-supported efforts include a spinoff from Save The Children Foundation, Youth Noise, a webzine, social network, and online forum for young people concerned with creating social change.48 The Web site, which claims 113,000 registered users from more than 170 countries, provides an interactive space through which young activists can connect to one another and express their views. See the chapter by Kate Raynes-Goldie and Luke Walker in this volume for more detailed discussion of Youth Noise. News 21 involves journalism students among five participating research universities under the Carnegie–Knight Initiative on the Future of Journalism Education.49 News 21 student reporters from Berkeley produced broadcast-quality digital video from Kyrgyzstan in Central Asia, Djibouti in East Africa, South Korea, the Persian Gulf, and the South China Sea to “bring home the world of the American soldier serving abroad.”50
These examples are meant to be illustrative, not exhaustive—to suggest how a broad range of motivations and institutions has begun to awaken to the civic potential in the media that both fascinate, manipulate, and potentially empower digital natives. The remainder of this chapter describes exercises for linking specific media with civic practices. A detailed, open-ended repository of resources, syllabi, and best practices is maintained at http://www.socialtext.net/medialiteracy/. This chapter and the wiki associated with it is an invitation and jump start for an ongoing community.

**Blogging with a Public Voice**

The following suggestions about ways participatory pedagogy might work in a classroom assume broadband access to the Internet by students who are comfortable using the Web and other digital tools, and have some time and permission to explore on their own. It is important to assess the knowledge and tech base of the students before starting; some basic instruction may be needed to bring all students up to the same skill level before embarking on the exercises suggested here. Providing instruction is far less effective without access. Individuals and small groups need time and freedom to experiment and explore alone and together, in addition to the exercises performed during class time. Students should be encouraged to teach one another whenever possible. A short portion of class time and online time could be devoted to peer-to-peer lore sharing.

The following section is phrased in the voice of a teacher directly instructing students on how to undertake exercise of a public voice through blogging. Although I go into some detail about blogging, by way of concrete illustration of the theory I’ve presented, the suggested exercises for other media will be presented here in abbreviated form; more detailed descriptions of these exercises are on the Participatory Media Literacy wiki:

- Assuming that you have set up a blog and know how to create html links and basic formatting and publish a post, the next objective is to go beyond the mechanics of blogging to work with blogging rhetoric—and to connect that rhetoric with your role as a citizen in a democracy.

- First, you will make a post that serves a community of interest by directing attention to a worthwhile resource on the Web via an annotated link, including short, salient quotes, and explaining why your selected resource is worthy of attention from this community.

- Then you will construct a blog post that links to two or more Web sites and explain the overarching idea that connects the sites you select—connective writing.

- Then you engage in online critical public discourse by analyzing the content of a site you link in a blog post, asking probing questions about the assumptions, assertions, and logic of the arguments in the site you link.

- Moving on to the exercise of a public voice, you will construct a post that takes a position on an issue, using links to other relevant Web sites to support your position.

**Blogger as Intelligent Filter: The Annotated Link Post**

Many bloggers serve as “intelligent filters” for their publics by selecting, contextualizing, and presenting links of particular interest for that public. In this context, a “public” differs from an “audience” because you, in your role as a blogger, have in mind when you write a
community of peers who not only read but actively respond to what you write, who might act upon your advice, and who might join you in discussion and collective action. The public you choose to address could be a public in the sense of a political public sphere that undergirds democracy—the communications you engage in with your fellow citizens, with whom you share responsibility for self-governance. The public doesn’t have to be political, however. It could be an engaged community of interest—others who share your profession, avocation, or obsession. When fans begin writing fan fiction or remixing and sharing cultural content, they are acting as a public—a culture-producing public. When bloggers researched discrepancies in Dan Rather’s story about George W. Bush’s National Guard service, they were acting as a public. AIDS patients organized collective action that influenced research funding and the pharmaceutical industry—creating an effective public through their discussions about their mutual interest.

What interests you, the blogger? What issue or idea strongly, even passionately, draws your attention and provokes your opinion? Is there a community that shares your interest? Could you and the others constitute a public? Clearly defining and understanding your public is the necessary first step to developing a public voice—the voice you use when you keep that public, and your potential to act together, clearly in mind as you blog.

Your first exercise:

1. Define to your satisfaction and in your own terms a particular public. Use the resources available to you and your research skills to inform yourself about the focus of that public’s interest (see the Participatory Media Literacy wiki to use blogs and RSS to research the subject). Compose a post addressed to that public, establishing the subject of shared interest you plan to blog about.

2. Keeping that public in mind, post a link in a blog post to any site on the Web—a blog post, a mainstream news item, a Wikipedia entry, an online community or marketplace, audio or video content—that has the potential to enhance that public’s knowledge, incite that public to take action, and provoke that public to respond to you.

Blogging as Connected Writing
Will Richardson began using the term connected writing to refer to a specific kind of critical, disciplined blogging that he described in this way:

What I have been trying to celebrate, however, is what I see as an opportunity for a new type of writing that blogs allow, one that forces those who do it to read carefully and critically, one that demands clarity and cogency in its construction, one that is done for wide audience, and one that links to the sources of the ideas expressed. . . . I’m talking about something uniquely suited to blogs. I’m talking about this post, about our ability to connect ideas in ways that we could not do with paper, to distribute them in ways we could not do with the restrictiveness of html, and to engage in conversations and community in ways we could not do with newsgroups or other online communities before.52

Your second exercise:

1. Present to your public at least two links in the context of a post that makes clear their value to your public and explains the connection between the links.

2. Use search engines and blog indexes like Technorati to find other blogs that represent or address your public or segments of your public, submit your posts to other bloggers. See if you can get your friends to respond. “Priming the pump” of public response sometimes requires marketing and personal persuasion.
3 Elaborate a larger point, using the connection between the links you select to suggest a wider pattern. Explain the connection and suggest a meaning. You don’t have to prove your point in this exercise—just use two links and the connection between them as the context for your own point, which should stand on its own. You can start with your opinion and use the links as support or illustration; or you can start with the links and approach your point inductively, by example.

**Contributing to Critical Public Discourse: The Analytic Post**

Loss of certainty about authority and credibility is one of the prices we pay for the freedom of democratized publishing. We can no longer trust the author to guarantee the veracity of work; today’s media navigators must develop critical skills in order to find their way through the oceans of information, misinformation, and disinformation now available. The ability to analyze, investigate, and argue about what we read, see, and hear is an essential survival skill. Some bloggers can and do spread the most outrageously inaccurate and fallaciously argued information; it is up to the readers and, most significantly, other bloggers to actively question the questionable. Democratizing publishing creates a quality problem, the answer to which is—democratizing criticism. Critical thinking is not something that philosophers do, but a necessary skill in a mediadsphere where anybody can publish and the veracity of what you read can never be assumed.

Your third exercise:

1 Link to a Web site—a blog post, online story from a mainstream media organization, any kind of Web site—and criticize it. If you can provide evidence that the facts presented in the criticized Web site are wrong, then do so, but your criticism doesn’t have to be about factual inaccuracy. Debate the logic or possible bias of the author. Make a counterargument. Point out what the author leaves out. Voice your own opinion in response.

**Exercising Your Public Voice: Making a Case for a Position**

When you speak in a public voice—as a citizen appealing to other citizens as part of the serious business of self-governance—you are undertaking the cocreation of democracy. Your liberty probably depends on how well and how many citizens learn to use many-to-many media to exercise their public voice.

Your fourth exercise:

1 Pick a position about a public issue, any public issue, that you are passionate about: immigration; digital restrictions on music; steroid use by athletes; why the older generation misunderstands the younger generation’s taste in music. Any issue you care about strongly enough to argue for or against.

2 Inform yourself. Search for information, and check the sources of authority of that information—what do others say about the author of the information, what sources does the author cite? Who has the freshest, most credible information about the issue you care about, and what are they saying? Track several sources through Web searches and blog feeds (see the Participatory Media Literacy wiki for instructions on RSS, blog feeds, and search feeds). Use your ability to gather and track information online as a means of knowing what you are talking about before you start saying anything in a public voice.
3 Make a case for something—a position, an action, a policy—related to this public issue. You don’t have to prove your case, but you have to state it. You don’t have to always present an original position, but you always need to go beyond simply quoting the positions of others. Again, you need to provide your public with the context you can see, but which is absent from the quote or link alone. Provide an answer to your public’s question: “What does the author of this blog post want me to know, believe, think, or do? What point is the author making with this link?”

4 Use links to back up or add persuasiveness to your case. Use links to build your argument. Use factual sources, statements by others that corroborate your assertions, and instances that illustrate the point you want to make.

Contributing to Public Discourse: Commenting
Your fifth exercise:

1 Add a constructive comment to the blog posts of three other students in your class. Build on a point they make, offer evidence in support or in opposition to a position they take or claim they make, post a link to a resource that can illuminate or extend the post. If the blogger whose post you comment then posts a reply to your comment, see if you can extend the dialogue, invite others to participate and contribute.

2 Try to solicit comments in a post on your blog. Ask for opinion, examples, evidence. End your post in a question that invites comment.

3 For an advanced exercise, use a blog post or series of blog posts and invited comments to organize collective action—a meeting, a petition, a boycott, letters to the editor.

Using Wikis for Civic Engagement

A wiki is a Web site or digital document that anyone can edit, using simple markup language and hyperlinking to create visually consistent, interconnected pages of information. Most wikis are collaborative Web sites that can be edited by any user, though some require registration or a password. Wikis allow for collaborative communities that can share knowledge and ideas with minimal technical know-how, so that any user can be a writer, editor, and content creator and groups can harness collective intelligence to coauthor documents. In this case, “voice” is not an individual, but a collective expression, which involves structured debate and discussion about the form a group’s wiki takes.

Wikis were invented about ten years ago by Ward Cunningham, who also created the name, appropriating the word wiki, which comes from a Hawaiian word for “quick.” Wikis became the collaboration tool of choice for knowledge-building communities because they are simple and flexible to create and edit, because every version is saved and easily findable, because it is easy to learn the syntax of any wiki by inspecting it via the “edit this page” link that all wikis have, and because mistakes or damage can be repaired with a single click. A wiki is the essence of participatory media—a community, not an individual, is the author of many wiki documents. Such communities can work together to become knowledge communities and create public goods—Wikipedia (http://en.wikipedia.org/wiki/Main_Page), a volunteer-created encyclopedia that anybody can edit, is the most well-known example of such a community-created public good. This chapter touches on exercises that enlist the group
communication and deliberation process inherent in wiki building for the purpose of civic decision making.

A Civic Engagement Exercise for High School Students

This issue-based self-government and problem-solving exercise requires students to write free-form on their user pages in a wiki, invite comment, and then discuss and refactor for use in actual public wiki pages. First, the class suggests and discusses, then the teacher selects a topic that appears to be engaging to them. The students then go into a wiki and, on their individual user pages, write what they think about it (this can be imported or refactored content from their blogs, or their other past work, if it is relevant and useable). Students are then asked to rationally and civilly discuss and debate the pros and cons of each other's individual work on these user pages, borrowing rules and social norms from existing wiki communities, when applicable. It is preferable that students actually choose themselves the rules that they will be governed by. The teacher encourages students to turn parts of their work into actual pages about the different facets of the subject, and to grow these pages. Each student is required to create at least two new pages from the note pages he or she has written in his or her initial work. Each student is also required to add a comment to at least two other nonuser pages, and instructed on how to refactor his or her comments and discussion into content on the page itself. All of the student wiki participants are then tasked with creating one or more joint resolution/proposals about how they think they should be governed regarding this issue. This wiki exercise could become an integral part of ongoing student involvement in all student issues (sports, fundraisers, activities, educational programs, etc.).

A civic engagement exercise for cocreating a meeting agenda in a wiki, cocreating meeting notes, and postmeeting codiscussion: Running a meeting is an everyday form of civic engagement—discussing and arguing with peers, making decisions, authoring group summaries is also what Congress does. The public sphere is not constituted only in high-minded discourse about public policy by powerful elites, but in a broad culture of civil discourse, in which meetings serve as socially structured discourse, often with a decision-making component. A wiki page can become a centralized forum in which to cocreate an agenda for any type of meeting. This exercise will teach students to build plans from the ground up as a group, to refine those plans, and to use wiki plan building to supplement and support face-to-face meeting and discussion. In this instance, the wiki serves as both an agenda cocreation tool and a group knowledge commons about meeting content, and an organically growing coauthored notebook to capture thoughts before, during, and after the meeting. Using a wiki to organize face-to-face meetings joins online collaboration skills of participatory media literacy with the offline requirements for a healthy public sphere—rational, critical debate about issues of mutual concern.

An example exercise: Students are given two weeks or more to cocreate and then vote on a meeting agenda and rules on a wiki page. Students then hold a face-to-face meeting based on this agenda; they are encouraged to post notes about the meeting to the wiki. Students should then continue asynchronous discussion online after the meeting for at least one week, within the wiki and on their blogs. Students should make wiki pages for concepts that emerge from this discussion. The skills learned through this exercise can be reapplied to many civic engagement uses. Almost any meeting could be potentially supplemented both by using a wiki for agenda and rule creation and discussion and by incorporating other forms of participatory media.
Citizen Journalism/Digital Storytelling

Although not all young people are interested, those who do express an interest in using participatory media to do journalism have unprecedented access to both the tools of production and the means of distribution: digital audio and video production via laptop computer today is equivalent to expensive professional equipment of only a few years ago, and while Internet publishing does not guarantee that a worldwide audience will pay attention, it does provide inexpensive access to it on a scale never before possible.

Several recent incidents have moved citizen digital journalism closer to the center of world attention: The first images of the disastrous Asian tsunami of 2005 were published on the Internet, many of them from camera phones.53 The news photo of the year in 2005 was the shot of the London tube immediately after the terrorist bombing of July 7, sent directly from a cameraphone to the Internet.54 The Korean citizen-journalism webzine, OhMyNews, now with more than 40,000 citizen reporters, is widely credited with having helped tip the Korean presidential election in favor of the underdog and eventual winner, now President Roh Moo-Hyun.55 In terms of youth-led citizen journalism, a News 21 team at Northwestern University uncovered information about surveillance of students and other citizens.56

Citizen journalism, still in its infancy, is a general term that covers different kinds of activities:

1. **Reporting news** (e.g., cameraphone pictures from Asia tsunami and London attacks),
2. **Investigative blogging** (e.g., Trent Lott and Dan Rather incidents),
3. **Hyperlocal journalism** (e.g., reporting on local meetings and sporting events), and
4. **Digital storytelling** (e.g., narrated oral history and audio-video interviews edited with scanned still images).

Opportunities for eyewitnesses to introduce their stories, and especially their pictures, into mainstream media abound. The famous London bombing cameraphone picture was sent directly to a free Internet photo-sharing service, Flickr (http://www.flickr.com). OhMyNews accepts international reports and services such as NowPublic (http://www.nowpublic.com) enable citizen-reporters to sell their journalism. Since Kevin Sites started “backpack journalism” blogging from the war in Iraq, freelance war reporting has become a more likely option for daring independents (http://www.kevinsites.net/). Although it is unlikely that purely citizen-created journalism will replace mainstream journalism, it is already clear that a niche exists.

In the pre-Internet age of multimedia publishing, pioneer digital storytelling enthusiasts showed people how to digitize the old photos in their family albums, interview their relatives and digitize the interviews, then arrange the audiovisual elements into a narrative, often with a voiceover narration. While this technique can be applied to personal genealogy and history or pure entertainment, digital storytelling, when used to construct a narrative presentation of true historical events, personages, and geographical locations, is one way of introducing students to participatory media, to the communication basics of compelling narrative production, and to local civic affairs. Journalism doesn’t have to be global. Hyper-local journalism that delves more deeply into local events than mass media does can also serve as a springboard for civic engagement. See Peter Levine’s chapter in this volume for more about local community involvement.
Susan Johnston at Tam Valley public school in Tamalpais Valley, California, sends elementary school students to record interviews with the people who own and work in neighborhood stores, as part of a local history of nearby Mill Valley.\(^5^7\) Students take digital photographs, scan old photos from City Hall and the newspaper, then put them together as hotspots on a clickable map of Mill Valley. Digital storytelling about your immigrant grandparents, the woman in your community who worked as a maid and sent her children through college, about the hotly contested development of a local historical site, are all issues in which the fun of putting interviews, found images, photographs, and artwork together into an entertaining narrative can be combined with serious discussion of public issues.

Learning opportunities can be unlocked by questions that present themselves: In which part of the digital storytelling process does “public voice” enter into it? In what way do the decisions about questions to ask, who to interview, and how to edit the interviews represent a deliberate point of view, a kind of public voice on an issue, represented perhaps in words other than those of the author, but representing the perspective the author intends to present? Identifying and discussing the specific narration, captions, choice of subject matter, juxtaposition, and editing decisions that present the storyteller’s point of view is a way of connecting media production practices with a public voice.

**Podcasting: From Personal to Public Voice**

Audio programs that are recorded and distributed digitally are known as “podcasts,” because they allow listeners to subscribe online and automatically download each episode to their computers or portable MP3 players (named for the popular iPod from Apple). Podcasts are ordinary MP3 files, like most digital music files which are compressed so they don’t take up too much space on listener’s computer drives. You don’t have to own an MP3 player to listen to podcasts—you can listen to them on your computer, by downloading them or by streaming the content directly from the podcast’s Web site.

Podcasts are also easy to create and span the range from professionally recorded radio shows to homegrown audio blogs, music showcases, and social or political commentary. As such, they are a way for young journalists and advocates to produce and distribute radio programs inexpensively. The following exercises are intended to introduce a personal voice and provide pathways for shifting into a public voice via narrative and documentary audio production.

Before you start, look at what is already out there: http://www.bbc.co.uk/yourstories has a number of examples; the chapter’s companion wiki lists other sources and detailed versions of the following suggested exercises.

**First Exercise: Writing a Personal Story**

Identify an interesting or poignant story from your own experience (not necessarily about yourself). Look for something character-based, with conflict and resolution. Narrate this story as a series of anecdotes, and the story under five minutes long. Pause and reflect on the significance of each part of the story—what’s your larger point? It doesn’t have to be profound. “People love their pets” and “First dates are awkward” are examples of such larger points. Try to tie the anecdotes together by highlighting the overall relevance of each portion, and making sure they point to a broader meaning or point. Make notes as you go, and write a transcript you can read from later. See the Participatory Media wiki for instructions on how
Second Exercise: Interviewing
Find a friend who’s done something that interests you—maybe an art project or political activism or an adventure—and ask to interview them (on tape!). Come up with two or three main topics you want them to address about their project in your interview. Prepare yourself with some basic notes outlining the structure of the interview. During the interview, ask questions to get at the main points you want your interviewee to discuss. Probe to get the details. As you go, encourage them to be descriptive so your audience can visualize their story more clearly. As they narrate, raise broader questions to get them to reflect on the meaning of their work, and how it all ties together. Listen to your recording, log key moments, and then edit it down to half its unedited length. Encode and upload.

Third Exercise: Move to a Public Voice
Now that you have experience, repeat the first four exercises, but choose stories, characters, and issues that relate to some public or civic topic that you care about. Is there no place for young people to hang out in your town? Talk to young people, local police, local city council people. Would a skateboard park be a solution? Is there local opposition to a chain store moving in? Ask about issues that most interest you. Interview people on both sides. A local election coming up? Is there a candidate or a ballot measure that you care about? Look up the advocates for both sides and interview them, tell the story of the issue. Be neutral and journalistic, or advocate a position.

Publish your final production as a podcast. Find local bloggers, local news media, or national bloggers or news media who might find your podcast worthy of note in their publication, use the suggestion forms on their sites or send them e-mails describing your podcast in the context of their public, along with the URL.

Where to Go from Here
Media technologies and practices are moving too quickly for us to wait for empirical understanding of changed learning and teaching styles before engaging young people with the civic potential of participatory media: it is important for the future of the public sphere and the future of the young people who will constitute it that today’s young people should be included—should demand inclusion—in the discussion of how they are to be educated as citizens. Stephen Coleman states this point eloquently in his chapter in this volume:

Technologies of e-citizenship turn cyberspace into a locus for the contestation of claims about citizenship. Because entry into the virtual public sphere is cheaper and less burdensome than making one’s presence felt in the conventional public sphere, it is particularly attractive to young people whose experiences and aspirations might otherwise be marginalized or forgotten. The inclusion of these voices and traditions in the development of e-citizenship is of the utmost importance, if there is a genuine commitment to cultivate a democratic culture of participation.

Although I advocate an activist approach, I know that we need empirical study of the fundamental hypotheses underlying the approach I advocate—that active use of networked media, collaboration in social cyberspaces, and peer production of digital cultural products
has changed the way young people learn and that their natural attraction to participatory media could be used to draw youth into civic engagement. Are these hypotheses borne out by observation? And what might they mean for the future of learning?

Jonathan Fanton, president of the MacArthur Foundation, succinctly stated the questions the Digital Media and Learning program is aimed at answering, which strike me as the proper frame for empirical studies of participatory media:

This is the first generation to grow up digital—coming of age in a world where computers, the internet, videogames, and cell phones are common, and where expressing themselves through these tools is the norm. Given how present these technologies are in their lives, do young people act, think and learn differently today? And what are the implications for education and for society?58

Both research and practice will be required before the pedagogical strategy advocated in this chapter can be fully evaluated for eventual abandonment or wider adoption. The wiki that accompanies the chapter is a vehicle for accomplishing that evaluation and for increasing the value of resources found there. If you know about recent research that adds to what we know about the effectiveness of participatory media in increasing youthful civic engagement, share it on the wiki. If you have tried the exercises suggested here and find that they work well or not at all, share what you know on the wiki. If you know additional exercises, additional resources, additional pedagogical issues, share them on the wiki. Invest a small amount of value, harvest a much larger amount, the way Wikipedians do. That’s how a cornucopia of the commons can work.

Notes


3. Any discussion of youth and civic engagement must necessarily generalize; however, the author wishes to acknowledge data that indicates significant racial, socioeconomic, and gender differences in opportunity and engagement. It appears that multiple “digital divides” have to be taken into account, as well. Moreover, the definition of youth is contentious, socially constructed, and changing. See Brandi L. Bell, Children, Youth, and Civic (dis)Engagement: Digital Technology and Citizenship (CRACIN working paper no. 5; Toronto: Canadian Research Alliance for Community Innovation and Networking Alliance, 2005); and Eszter Hargittai, Just a Pretty Face(book)? What College Students Actually Do Online, in Beyond Broadcast (2006), http://results.webuse.org/uic06/, for research on skill differences among college students. The author’s intention is not to discount these issues, but to specifically address the needs of those young people who are indeed demonstrating enthusiasm for digital media. Perhaps the resources provided in this chapter and the supporting Web site can be adopted for use in multiple social environments. Questions of which issues young people care about, the social assumptions and skill sets that they bring to media practices, and equality of opportunity and access will differ from group to group, but perhaps the core skills of media production and distribution can be useful (or adapted to be more useful) in many contexts.

4. See also Marina Bers in this volume in regard to the connection between cultural production and civic engagement skills.


12. Jenkins et al.


18. Habermas.


22. E-mail correspondence with author, October 31, 2006.
23. Jenkins et al.


33. E-mail correspondence with author, July 2006.


35. E-mail correspondence with author, July 2006. See also http://www.a13i.org/report.pdf for a report on Chad project.


44. HarlemLIVE, on *Newjou*, http://gort.ucsd.edu/newjour/h/msg02485.html (retrieved November 9, 2006). Archived at http://www.webcitation.org/5KPQ0bGmZ.


54. Owen.


57. Interview with author, 2006.