Designful Play: Qualities of Youth Engagement with the Creation of an International Social Network

Stacy Marple, Amy Stornaiuolo

Graduate Students

5532 Tolman Hall, UC Berkeley

Berkeley, CA 94720

Amystorn@aol.com

Marple@berkeley.edu

Glynda Hull

Professor, Education

5532 Tolman Hall, UC Berkeley

Berkeley, CA 94720

glynda@berkeley.edu

Mark Evan Nelson, Ph.D.

Assistant Professor, English

Language and Literature

National Institute of Education,

Singapore

mark.nelson@nie.edu.sg

Abstract

In this paper we describe initial findings from our international social networking project, a two-year ethnographic exploration about how youth make meaning across social, cultural, geographic, and linguistic differences via a creative-arts based social network called space2cre8. Specifically, we explore how linguistic, cultural, software, and time zone constraints impacted the creation of digital artifacts, art and exchanges posted on the network. We highlight the tenacious and creative persistence with which youth continue to work around, with, through, and despite such constraints. In doing so this paper reveals the importance of incorporating new media tools and web 2.0 enabled technologies into literacy curricula through its explorations of youth's designful play with digital technologies, their blurring of online/offline interactional spaces for their designs, and their attempts to balance and predict the needs of multiple, sometimes unpredictable, and often participatory audiences.

Keywords
Social Networking, Literacy, Design, Creativity

ACM Classification Keywords
H5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

Introduction
As the tremendous popularity of Web 2.0 technologies like MySpace, Facebook and YouTube attests, youth are increasingly interested and invested in identities, relationships, and knowledge that are negotiated online, presenting exciting opportunities and challenges for education. Educational researchers and computer scientists have made forays of late into the cyber-world of social networking, and research has begun as well on the ways in which youth use social networking environments to further their own social purposes related to communication and music as well as art production and distribution. However, there is much to be learned about what social networking practices may reveal about communication, literacy, and knowledge production in this new media age, and there are many populations who continue to have limited access to these technologies. The Kidnet Project which provides youth with access to the Space2Cre8 site as well as instruction in creative production of digital art and artifacts was designed to simultaneously address a gap in literacy curricula and provide a site for researching into the nature of youth engagement with these technologies.

This three-year project, supported by the Spencer Foundation and the UCLinks project of the University of California, has involved, first, creating a virtual space for the sole use of the participants, the aforementioned Space2Cre8, in which middle school youth from around the world can imagine, negotiate, plan and build a network of multimedia artifacts and projects of various types that integrate and express their individual and collective thoughts, concerns, feelings, and aspirations. Second, we are carrying out a set of research studies investigating the evolution of this network, its impact on personal identity and cultural knowledge development, and the roles that various forms of communication—via language, image, music, video, and multimodal combinations thereof—play in these processes.

Our research questions include the following: (1) What roles do different languages, script systems, images, music, and other forms of communication play in the ongoing development of this network? (2) Which dimensions of personal identity and cultural knowledge develop and are negotiated within the online community and how? (3) In light of the radical diversity and connectivity that characterize new media communication, how is literacy to be defined and practiced? We have used a mixed methods approach. Quantitative data are being collected via a history-tracking system, versioning software, and comprehensive collection of artifacts that captures each participant's interactions with the network. The qualitative data consist of daily observational field notes of students' interactions; weekly video- and audio-tapings of group interactions and conversations related to the use Space2Cre8 and periodic semi-structured interviews.

Background

A primary role of literacy education is to prepare present and future generations for fulfillment in life and work. Internet enabled digital communication is playing an increasingly critical role in augmenting human engagement in work, personal, and recreational environments. Yet grade school instructional practices, typically do not reflect this fundamental shift in communicative practices. While literacy scholars have perceived and begun to address the urgent need to understand the interrelations and pedagogic implications of the social, semiotic, and economic shifts that internet enabled global communication have created, there are still many gaps, particularly in understanding the role of creativity in web 2.0 enabled communications.

A landmark move toward rethinking literacy curricula was made by the New London Group[1], who asserted that "classroom teaching and curriculum have to engage with students' own experiences and discourses, which are increasingly defined by cultural and sub-cultural diversity and the different language backgrounds and practices that come with this diversity" (p.36). The pedagogy they proposed therefore privileges the *designing of meaning* over the dissemination of information, and related notions have been conceptually elaborated by other scholars since, particularly those interested in the incorporation of popular media and digital technologies within education (c.f. [2]) Buckingham, 2003; diSessa, 2000; Dyson, 1997, 2003; Gee, 2003, 2004; Jocson, 2006; Morrell, 2004; Resnick et al, 1998; Sefton-Green, 1999; Vasuvedan, 2006). For example, in a constructionist (cf. Papert, 1980, 1993) vein, Resnick and colleagues (1998) assert that engagement in personally relevant computer-enabled design activities allows users to "make" understandings about technology, themselves and the world around them. As well, Gee [2] has argued that generally schooling neither values nor capitalizes on the complex thinking, problem solving, and collaborative interaction that engagement with popular media, like video games, can stimulate. Another influential, consonant perspective is diSessa's [2] notion of "two-way literacies," which describes the transformative effect on knowledge of associated creative processes consumption and production with virtual environments.

Clearly, the current prevailing attitude among those concerned with literacy education is that literacy, as a construct, needs reformulation, evidenced in part by the formation in 2004 of the Partnership for 21st Century Skills, a national coalition of experts from academia, government, and industry convened to solve the problem of how to equip young people with the 'skills' necessary to successfully navigate the global, digital landscape of today and tomorrow. And while the issues of accommodating cultural and semiotic diversity have thus far been widely examined, we feel that the existing scholarship on new literacies has yet to adequately account for the almost limitless quality of connectivity—across personal, linguistic, cultural, and national boundaries—that many forms of new media communication are coming to exhibit. In particular, social networking represents one of the most powerful new forms of Internet-enabled interaction.

The Pew Internet and American Life Project [3] reports that of nearly one thousand American teens sampled, over fifty percent belong to at least one online social networking community. Of those who belong, more

than half access these communities once per day or more. The recent trend toward building social networking capability into 'standard' display-type websites (e.g., media-sharing Flickr and YouTube) can only serve to intensify this trend. According to industry leaders, as recently reported in the New York Times, social networking sites are set to become "as ubiquitous as regular Web sites".[4] Unsurprisingly, there is emerging, compelling evidence of concomitant, complex patterns of power distribution, virtual population shifts, and ideological clashes, which convey consequential impacts. Boyd[5] has identified a growing demographic gulf between members of MySpace and Facebook respectively; she has observed that MySpace users are increasingly characterized by lower socioeconomic status, while the opposite is true in the case of Facebook. Barnes[6] has examined privacy issues and the exchange of personal information within social networking communities, describing the tensions that accord to a 'privacy paradox': private versus public space. Notwithstanding the work of these and other pioneer researchers, more rigorous scholarly scrutiny must be put to trends like this, to understand the complex interweavings of textual, personal, interpersonal, and cultural aspects of meaning within social networking worlds and, in so doing, to come to understand the new literacies required to navigate these burgeoning communities.

Position

Toward this end, we have begun to develop a new theoretical direction for the New Literacy Studies [7], an orientation that we believe promises to reconcile the two aforementioned central constructs of *designing*

meaning and *connectivity*. This orientation centers not just on the integration of multiple semiotic systems (language, imagery, etc.), a need helpfully identified y the New London Group and others. It takes into account also a holistic view of aesthetic practices and their relation to personal and cultural contexts of production. Admittedly, this is a marked departure from skills-based and functional approaches that have long informed normative notions of literacy and schooling. However, with the confluence of digital technologies, the creation of evermore hybrid and multimodal texts, and the confirmed presence of intertextuality (Kristeva, 1980) as an interpretive habit of the late modern mind, we have strongly concluded that a theory of aesthetics should be at the base of a newly invigorated literacy studies. Below we briefly sketch our current thinking about aesthetics as an organizing principle for the intersection of learning and digital media. While for most of the 20th century, one-size-fits-all approaches and methods for literacy education predominated, these programs and methods have recently been besieged by a radical plurality with regard to the purposes, media, and material of textual meaning making. Simply put, literacy practices at present might be described as a moment-to-moment engagement in communicative *bricolage.* Kress (2005) makes a similar claim:

Instead of competence in relation to stable social frames and stable resources for representation, we need the notion of design, which says: In this social and cultural environment, with these demands for communication of these materials, for that audience, with these resources, and given these interests of

mine, what is the design that best meets these requirements? (p.20)

 If it ever could, literacy can no longer be understood as a simple process of encoding and decoding messages according to a set of notational conventions. Again, literacy is now a necessarily multimodal, multimedial, dynamically changeable enterprise, as a growing number of scholars acknowledge [8]. Accordingly, the primary object of literacy education is not to equip learners with a finite set of competencies, but rather to engender the adaptive, generative capacity to construct coherent meanings out of the multiplex, shifting array of memories, emotions, ideas, and artifacts that are the stuff of everyday life.

Again, "cultural flows" [9] are not just a fact of life at present; they veritably define it. So, it follows that new media literacy in the global world not only requires a facility with coordinating relationships of meaning among pictures, language(s), and others modes, it also demands a sensitivity toward the ideologies, mores, and dispositions that structure the multimodal meanings differentially made and understood by people whose life-worlds may be very unlike one's own. As a simple example, consider that an image of a crescent moon would likely evoke very different kinds of associations for a Norwegian-American girl in Minnesota as for a Pashto-speaking boy in Afghanistan. As such, the aesthetic parameters for integrating or interpreting such an image within a multimedia composition would likely be different as well. Thinking broadly about literacy, then, we see that noticing textual manifestations of difference and imagining points of connection and synthesis beyond these differences are

requisite skills for success in the 21st Century, skills that arts-oriented literacy practices cultivate.

In sum, we maintain that upon close inspection the fluidity and sheer complexity of present-day literacy practices present significant challenges to learners and teachers alike. While new media seem to hold out hope for a future in which citizens of the world community are individually empowered and cooperatively interconnected, the present condition of the world seems to amply demonstrate that these efficacious potentials of new media communication cannot automatically obtain. Many vital questions remain to be answered, and the project outlined below represents and attempt to both frame and address these.

Application

While most social networks connect people who have relationships offline or who share particular affinity spaces or interests[10], we have been attempting to connect international youth of very different backgrounds via this closed social network, space2cre8, who have never met one another face-to-face and have no particular common ground beyond their shared participation in this research project. In this paper, we explore some of the difficulties youth have faced in communicating with one another through this interactional tool, an unadorned social network that youth have input in designing. But despite, or we could argue because of, these communicative constraints, youth have adopted innovative and unexpected creative practices, collaboratively and individually, that call into question some of the existing paradigms about how youth learn, particularly in relation to new media tools.

One formidable constraint for our youth has been access to technology. It may not be surprising that in rural India the girls who participate in our program, girls who often face issues related to poverty, encounter restrictions in accessing digital technology. Before beginning the Kidnet program, they had not used computers or gone on the Internet, and their access continues to be relegated only to Kidnet class time. Similarly, the youth participants in South Africa rarely have a computer in the home (none with Internet), and their access is generally limited to Kidnet class time, despite a state-of-the art computer lab and a national focus on technology integration in the schools. Both the South Africa and India sites also face issues of access related to bandwidth, server problems, and fluctuating connectivity. Somewhat surprisingly, the children in the US also face issues of access, despite the ubiquity of computing in their homes and schools. Some of the restrictions have been externally imposed, by schools and parents who fear predators, kids' exposure to or engagement with inappropriate content, or the wasting of time. But sometimes kids themselves have internalized those fears and restricted their own access by avoiding digital technologies that they perceive as potential trouble. These issues about how kids access online technologies are important to our thinking about kids' engagements with and creation of digital media. Obviously, differential access to resources affects youth's practices—those who have very minimal access outside of structured and limited time frames have far fewer opportunities to explore, take risks, and develop competencies in communicating through the multiple semiotic systems afforded by digital technologies. Layered on top of this are unique challenges to establishing a global dialogue, purportedly one of the the great affordances of modern Internet enabled communication. Even when youth involved with Kidnet are online, they face additional barriers to communication--from the difficulties inherent in communicating in English, to problems in time lags between communications caused by time zone and school calendar differences, to knowledge gaps between youth who do not share popular cultural references and communicative norms.

Youth, however, have engaged with digital media in unexpected and innovative ways despite (or perhaps in response to) the constraints they face to communication on Space2Cre8. In particular, we have found that the youth in India are the social network's most prolific users, despite limited access and a general unfamiliarity with computing only a short time ago. They regularly post blogs, upload photos, and comment on other users' media and profiles. While the network, particularly in its early iterations, constrained communication through a focus on individual profiles, a lack of communal online spaces, and a confusing set of steps for making friends, the girls in India persisted in using those features, acquiring the most friends, searching methodically through the site for new media, and working collaboratively to monitor changes in others' profiles. Furthermore, certain site specific practices, like the girls' shared interest in photography, poetry, and social justice issues, were frequently topics for engagement on the network.

These site specific practices and their subsequent uptake by other members of the network led us to trace the cultural flows that both fostered and hampered cross-site communication. In one example, the India girls' interest in photography led them to create a large communal photo bank. Girls shared their

photos of home, community, school, and nature with one another and then used that communal photo pool to help generate images for their individual digital stories, with many of the same photos used in different stories for different purposes. While the kids in the US engaged in a similar photography activity, they considered using a communal photo bank like the India kids but ultimately decided to upload only certain pictures to their profiles (only a few used the same images, and even those shared images generated some discussion over "whose" pictures they were). These and other images generated a number of cross-cultural conversations that revealed both significant cultural differences in ideologies and practices as well as the semiotic potentials of image as a mode of communication. In one instance, a photo of an alluring Christina Aguilera dressed in a nurse outfit created a bit of a stir as both youth and adults debated what might be appropriate norms for displaying sexuality in such a cross-cultural context as the social network (and expressed concerns about the portrayal of women, especially in advertising). Yet this conversation also revealed that many of the youth seemed to understand that the semiotic power of the photo lay in its capacity to convey the adolescent's desire to be both a nurse and a singer/model, and in that sense the South Africa girl who posted it communicated her intended message effectively in its choice as her profile photo.

In tracing the cultural flows of artifacts that circulated both on and offline, we have focused on digital stories as a trigger for communicative activity. In one telling case, we present the cultural flows of a digital story made by a girl in India and how that has helped us understand youth's symbolic creativity, the impact of powerful artifacts in crossing online/offline boundaries, and the shifting relationship of authors and audiences. It is a story about her life—she narrates movingly about her alcoholic father, her late mother, and her struggles to support her family, all the while remaining hopeful and showing a number of moving and inspiring images of her siblings and friends at school (which she declares her home). Youth who have seen the movie have made repeated reference to it, often leading them to seek out its author on the network to befriend her, and it has served to open dialogue at all program sites. But the movie has had more indirect repercussions as well, influencing youth in South Africa to open their homes to researchers, influencing the kinds of stories kids tell, foregrounding issues of poverty and struggle as topics of discussion, and encouraging adults and youth alike to take an interest in issues related to women in India. But the repercussions also extended to offline spaces, including helpfully challenging dominant gender and generational mores in the local Indian community, but creating as well tensions around the notoriety that accompanied authorship and web-based publication and circulation of local images, personal stories, and mores. Thus, this case reveals the ways in which digital products can acquire an unruly agency of their own, circulating in local and global communities with unanticipated and sometimes unintended consequences (and not always comfortable ones).

These cultural flows exemplified by this digital story also highlight the need to conceptualize spaces more fluidly than as a traditional binary relationship between online and offline spaces. We have found that kids' composing practices are constituted of intertextual and intercontextual linkages between multiple texts (digital, material, discoursal, etc.) and contexts (school, neighborhood, home, afterschool, online, etc.) that

interpenetrate each other. That is, kids see these spaces and texts as mutually constituting one another, and they routinely invoke MySpace, YouTube, school, and home in their "remixed" and recontextualized compositions. The connections and disfluencies between online and offline spaces reveal them as less bifurcated as many theorists would have us imagine, and youth routinely demarcate these spaces differently than making distinctions between on or offline (for example, kids in the US program often distinguish spaces along a safety continuum, with some spaces both online and in the community or home as "safer" than other spaces). Also youth's peers (both on and offline) influence how they use, invoke, create, remix, hybridize, and coopt texts and contexts, and this peer socialization has a significant effect on semiotic and representational choices of adolescent youth. We have found that youth play with identity representations on and offline in their compositions (particularly in their representations of gender), often invoking multiple places in relation to their shifting self-representations. This kind of self-representational *bricolage* from available semiotic resources seems to be a common meaning making practice among youth we have studied, and this observation leads us to call for more attention to youth conceptualizations of space and how those influence their design decisions, collaboratively and individually.

We have also found that the kids struggle to negotiate multiple audiences (e.g., teachers, researchers, school officials, present peers, imagined peers, newly introduced peers) across spaces, and this is revealed in their compositions on and off the social network. The youth have tried to maintain a delicate balance of designing a public face that takes into account multiple audiences and their predictions and assumptions about those audiences. Part of this difficulty is imagining others imagining them and predicting what others might see in looking at their compositions (that is, what others might know, predict, assume, or imagine about them when reading and/or viewing their artifacts). This taking of others' points of view is a difficult task but for our youth an important site of struggle. These struggles are manifested as disruptions in their compositions and in the cultural flows, but these disruptions also represent potential places for growth, especially growth in communicating across difference. We find that this balancing of multiple audiences is a central feature of on/offline communication and requires a reconsideration of what we mean by audience (it seems more participatory, more unpredictable, and more varied than when we consider traditional print texts alone). And we intend to continue to probe these "disfluencies" in youth's compositions for what they might reveal about cross-cultural communication.

Citations

[1]   New London Group. (1996). A pedagogy of multiliteracies: Designing social futures. *Harvard Educational Review* 66, 60-92.

[2]   Buckingham, D. (2003). Media education. Cambridge, UK: Polity.; diSessa, A. (2000). Changing minds: Computers, learning and literacy. Cambridge, MA: MIT Press; Dyson, A.H. (1997). Writing superheroes: Contemporary childhood, popular culture, and classroom literacy. New York: Teacher College Press.; Dyson, A.H. (2003). The brothers and sisters learn to write: Popular literacies in childhood and school cultures. New York: Teachers College Press.; Gee, J.P. (2003). What videogames have to teach us about learning and literacy. New York: Palgrave/Macmillan.; Gee, J.P. (2004). Situated language and learning: A critique of traditional schooling. New York: Routledge.;

Jocson, K. (2006). "Bob Dylan and Hip Hop": Intersecting literacy practices in youth poetry communities. Written Communication 23 (3), 231-259.; Morrell, E. (2004). Linking literacy and popular culture: Finding connections for lifelong learning. Norwood, MA: Christopher-Gordon Publishers.; Resnick, M., N. Rusk & S. Cooke. (1998). The Computer Clubhouse: Technological fluency in the inner city. In D. Schon, B. Sanyal, & W. Mitchell (Eds.), High technology and low-income communities. Cambridge, MA: MIT Press.; Sefton-Green, J. (Ed.). (1999). Young People and New Technologies: the Challenge of Digital Arts. London: Routledge.; Vasudevan, L. (2006). Making known differently; Engaging new modalities as spaces to author new selves. E-Learning 3 (2), 207-216.

[3]   Lenhart, A. & Madden, M. (2007). Teens, privacy and online social networks: How teens manage their online identities and personal information in the age of MySpace. *Pew Internet and Family Life Project*. Retrieved June 10, 2007, from http://www.pewinternet. org/pdfs/PIP_Teens_Privacy _SNS_Report_Final.pdf

[4]   "Social Networking's Next Phase," New York Times, 2007

[5]   Boyd, D. (2007). Viewing American class divisions through Facebook and MySpace . Apophenia Blog Essay. June 24. HTTP://WWW.DANAH.ORG/PAPERS/E

[6] Barnes, S. (2006). A privacy paradox: Social networking in the United States. *First Monday* 11 (9). Retrieved May 1, 2007, from HTTP://FIRSTMONDAY.ORG/ISSUES/ISSUE11_9/ barnes/index.html

[7]   Gee J.P. (1996). Social linguistics and literacies: Ideology and discourses. 2nd Ed. London: Routledge/Taylor and Francis; Street, B. (1993). Cross-cultural approaches to literacy. Cambridge, UK: Cambridge University Press.

[8]   E.g. see: Gee, J.P. (2003). What videogames have to teach us about learning and literacy. New York: Palgrave/Macmillan.; Gee, J.P. (2004). Situated language and learning: A critique of traditional schooling. New York: Routledge.; Harris, R. (2001). Rethinking writing. London: Continuum.; Hull, G. (2003). Youth culture and digital media: New literacies for new times. Research in the Teaching of English 38 (2), 229-233.; Hull, G., & Nelson, M.E. (2005). Locating the semiotic power of multimodality. Written Communication 22 (2), 224-62.; Kress, G. (2003). Literacy in the new media age. London: Routledge.; Kress, G. (2005). Gains and losses: New forms of text, knowledge and learning. Computers and Composition 22, 5-22.; Kress, G. & van Leeuwen, T. (1996). Reading images: The grammar of visual design. London: Routledge.; Lankshear, C. & Knobel, M. (2003). New literacies: Changing knowledge and classroom learning. Berkshire, UK: Open University Press.; Lemke, J. (1997). Multiplying meaning: Visual and verbal semiotics in scientific text. In J. Martin & R. Veel (Eds.), Reading science (pp. 87-113). London: Routledge; Lemke, J. (1998). Metamedia literacy: Transforming meanings and media. In D.Reinking, M. McKenna, L. Labbo, & R. Kieffer (Eds.), Handbook of literacy and technology: Transformations in a post-typographic world (pp. 283-302). Hillsdale, NJ: Lawrence Erlbaum.; New London Group. (1996). A pedagogy of multiliteracies: Designing social futures. Harvard Educational Review 66, 60-92.; Wysocki, A., Johnson-Eiola, J., Selfe, C. & Sirc, G. (2004). Writing new media: Theory and applications for expanding the teaching of composition. Logan, UT: Utah State University Press.

[9]   Appadurai, A. (1996). *Modernity at large*. Minneapolis, MN: University of Minnesota Press.

[10] (Lenhart & Madden, 2007; Ito et al., 2009)