Learning at the Border: How Young People Use New Media for Community Action and Personal Growth

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ABSTRACT

"Learning at the border" refers to learning that occurs in the border settings between the highly-structured realm of schools and the more diffuse realms of life in neighborhoods, such as after-school programs, boys and girls clubs, libraries, museums, and community centers. A second meaning relates to participants who learn through their interactions with those of different languages, cultural background, race, or social class. This paper describes projects in which university students and faculty work with community members to create spaces in which young people learn about new technologies and develop academic potential through self expression. In the projects, young people learn through modules such as operating systems, networking, multimedia and podcasting, GIS/GPS, and video game design. A common thread is that they learn how to use ICTs for community building, thus becoming active sustainers of their own communities.

KEYWORDS: Border learning, Community, Collaboration, Cultural diversity, Social justice, Partnerships, Pragmatism, Inquiry, Multimedia, GIS, GPS, Community technology center

INTRODUCTION

Young people today are immersed in new media, experiencing the world through mobile phones, texting, downloads, online social networks, web searching, video games, and other information and communication technologies (ICTs) unknown to previous generations. Many adults worry about this, and raise concerns regarding issues as diverse as cyber-bullying, plagiarism, lack of physical exercise, and uncritical thinking. At times the question seems framed as idle entertainment versus the many risks, with highly-structured classroom learning as the only alternative.

However, new ICTs offer more than support for learning in structured settings such as schools or idle entertainment found outside of schooling. This paper discusses three projects in which university students and faculty work with community members to create spaces in which young people learn about new technologies and develop academic potential through self expression. The results show that young people can use new media in diverse ways to support both community building and personal growth.

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BACKGROUND

Dewey (1906, 1956) argues that learning cannot divorce the intellectual from the experiential. Thus, there are alternative ways of knowing and the learner's social context is crucial (Horton & Freire, 1990). If students are not only to obtain and create new knowledge, but also to use it effectively, they need to engage in all aspects of an *Inquiry Cycle* (Bruce & Bishop, 2003; Bishop, et al., 2004). They need to formulate their own questions, to learn through multiple media and sources, to create through action in the world, to share their ideas to others, and to reflect on their experiences.

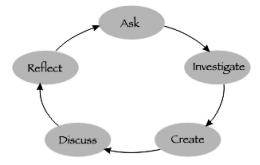


Figure 1: Inquiry cycle.

In his studies of science learning, Hawkins (1974/1965) describes this melding of creativity, curiosity, and imagination. He discovered that in order to learn, students need ample time to "mess about." As they do so, they began to generate the very questions standard curricula are intended to address, but in a way that is more engaged and connected to their direct experience. Using computers for learning also requires messing about, including:

open-ended projects that foster students' involvement with a variety of materials; ... activities in which students use computers to solve real problems; ... [connection of] the work done on the computer with what goes on during the rest of the school day, and also with the students' interests outside of school; ... integration of the computer with aspects of the students' physical environment. (Franz & Papert, 1988)

Learning through inquiry highlights the value of *border learning*, which occurs in settings between the highly-structured realm of schools and the more diffuse realms of life in neighborhoods and on the streets. These settings include afterschool programs, boys and girls clubs, libraries, museums, and community centers. Learning across the border also entails learning from others over the border, as when adults and children work together as partners; schools work with clubs, libraries with residents and their children; and college students with faculty work for the youth on the streets. This means re-conceiving university learning so that students and faculty learn through participation in the communities around them

(Bensen, Harkavy, & Puckett, 2007; Fischer, Rohde, & Wulf, 2007). The border learning idea is developed further by Card, et al. (2008).

In the projects described here, young people learn about and through ICT in modules such as Computer Basics, Storage and Memory, Operating Systems, Local Area Networking, Wide Area Networking, the Internet, Multimedia and Podcasting, GIS/GPS, Video Game Design, Library Science, and Ethics, Equity & Policy. A common thread is that they use ICTs for community building, thus becoming active sustainers of their own communities.

The projects are developed through *participatory action research*, in which stakeholders actively examine current action in order to change and improve it. In this way, inquiry is a means for both action and understanding, especially across borders (Giroux, 2005; Greenwood & Levin, 1998; Reardon, 1998). Border learners engage in problem-solving in the context of specific community challenges, rather than to draw only upon textbook knowledge. By drawing upon community *funds of knowledge* (Moll, et al., 1992; Hammond, 2001), students' linguistic and cultural experiences become a foundation for their learning.

DIGITAL STORYTELLING

Digital storytelling has become a widely used new media activity. It can take many forms, including comic or graphic art, stop action animation, clay animation (claymation), photo stories, and video (Ohler, 2008). Stories offer a way to integrate the experiences of youth with new activities and are thus one good mechanism to support border learning. In a middle school (ages 11-13) project, young people created audiovisual podcasts on topics of their choice. Most of the youth are considered low-income and either immigrated to the United States or have parents who immigrated to the United States from Mexico. They had low academic achievement and limited computer experience.

The young people used technologies to compose and publish stories important in their lives. These stories embodied their own "Ask" and subsequent "Investigate-Create-Discuss-Reflect." Students met in afterschool and Saturday sessions. Their messing about with technology was crucial as they explored, experimented, and became comfortable with the technologies. During the sessions they created original podcasts by selecting images from the web, scanning family photos, creating graphics, finding and downloading music, creating audio files, editing audio using Audacity, and producing presentations. Podcasting supports communicating ideas in dual languages and nonverbal forms. It is an accessible means to have fun, to learn to use new technologies, and to produce an original work of communicative art. Students learned about copyright and citing sources, as well as about design and story-telling. More importantly, they used the podcasts as a way to connect with their families and their lives outside of school.

The project aims to develop a more socially-engaged intelligence, a critical understanding of ICTs, and self exploration with regard to culture and identity. It includes instruction in storyboarding; PowerPoint, Audacity, and iMovie for image

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and sound combination and manipulation; storytelling through symbols; critical media and information literacy; internet safety; and intellectual property. For these students, formal schooling often deprecates the language and cultural resources that could make school meaningful and relevant (Lee, 2003). Using their home language gives them more reason to feel the new technologies can belong to them.

Using technology as a means of communication encouraged the students to find their voices, representing themselves as active learners and cultural producers. English and Spanish language use are both welcome, and most students chose to narrate their podcasts in both languages. A teacher showed the students how Latino artists (e.g., Frida Kahlo) have expressed themselves through their art, and how cultural artifacts can be used as symbols to communicate ideas. Incorporating these resources fostered the teacher-student relationship and developed the students' own cultural awareness. The students participated in rich discussion while viewing these works of art and began incorporating visual and audio symbols of their ethnic heritage in their podcasts.

The podcasts became a source of pride for the students, their family and friends, and for the program and school staff. The students were encouraged to choose their own topics based on their personal interests; seven students created podcasts describing themselves, their families and friends, their likes and dislikes, and their cultural/national heritage, while another developed a presentation on Roman numerals, complete with a quiz for the audience.

For the adult staff, also, the podcast program has been a rich experience in reflective learning. As one graduate student reports:

Working with students in the Urbana Middle School after school program was an inspiring journey for me to appreciate Hispanic culture and revisit my own cultural identity...I tried to put myself in these students' shoes, imagining how difficult may be for these immigrant young people to live and study in a new country...I came to understand that I was telling my own story to these students as a self-exploration journey...the students and I were interchangeably engaging multiple forms of communication, including visual, gesture, and verbal modes.

BARRIO ARTS, CULTURE, AND COMMUNICATION ACADEMY

The neighborhood around Humboldt Park in Chicago has a rich and varied history. Once it was a home for Jewish immigrants, later Polish Catholics, and today it is home to Asian-, Mexican-, African-, and European-Americans. It is best known for Paseo Boricua, a half-mile stretch of Division Street, demarcated by two 59-foot-tall steel Puerto Rican flags. In a context of urban poverty and discrimination, Paseo Boricua has taken action to build a strong community by building upon community funds of knowledge and active transformation of the lived environment. This is evident in the farmers' market, an alternative high school, a community library, a museum, an economic development center, and many other organizations and activities, all developed by community residents. The activities all promote

concrete social action, but are also conceived as sites for learning for community members of all ages and visitors.

Many of these activities are designed and run by young people in the community (Noguera, Ginwright, & Camarota, 2006). Among the many projects is the Barrio Arts, Culture, and Communication Academy (BACCA). Bacca activities include *La Voz de Paseo Boricua*, a community newspaper, which is produced in both a paper and an online version, and contributes to the Participatory Democracy Project. There is also a little theater, e.g., *The Spark/La Chispa*, about the 1966 Division St. Riots, community radio, a sound studio, podcasts of oral histories, Café Teatro Batey Urbano, a club/study center for young people and a venue for social action, where they present poetry with a purpose, hip hop, and other cultural expressions, and a community technology center, developed and maintained by young people in Paseo Boricua.

As an example of the many projects developed through BACCA, young people have written and presented spoken word poetry, songs, and oral history in the Batey Urbano. These compositions relate the history of the community, address oppression, talk of solidarity between Puerto Rican and Mexican people, and discuss issues of identity and commitment. One piece, *Cyberwashed* (Bruce & Bishop, 2008), shows an understanding of broadcast and web media as well as a critique of its effects on young people. For example, it questions whether the social networking *MiGente* website truly represents Latino/a communities. Students recorded and edited their works in the BACCA sound studio, then produced CD's. They sold enough of one CD to finance a trip for 33 young people to the World Congress of Youth in Venezuela. The production of one CD was done with Mexican-American youth from Zocalo Urbano, a similar organization for innercity youth in Chicago.

AFTERSCHOOL LIBRARY

The B. T. Washington Afterschool Library Program (BTW) is an initiative that provides innovative learning experiences for at-risk children and their families. Community residents called for the program because they were concerned about the future of their children and there were no options for academic support. Participants include mostly Latino and African-American children, chosen by their teachers as needing academic help. A major goal has been to get the parents actively involved, which means addressing issues of economic hardship, language barriers, immigration issues, beliefs about the education system, and experiences of prejudice.

Enrichment activities in BTW focus on the intersection of digital literacy, family strengths, and family stories. "Messing about with computers," such as reading jokes on a children's website or writing letters to their mothers, made reading and writing activities more appealing. Children used the iLab content management software (Bishop, et al., 2004) to produce their own Inquiry Units. These were based on the Inquiry Cycle, with sections labeled Ask, Investigate, Create, Discuss,

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and Reflect. Their webpages contained material they found on the web, such as about wrestling or soccer, or stories and poems they had written. They wrote what they had not expressed orally ('my name is Michael and I am a good person') or had not written before (such as a jump rope rhyme).

Participants also read stories that featured family members helping each other or triumphing over adversity. Afterwards, students created their own expressions of family strengths in pictures, poems, and stories. These works were presented as a public exhibit entitled *Fuerza de Familia (Family Strengths)*. Several older children created PowerPoint posters. Some of the younger children used computers to produce exhibit invitations. Later, BTW students produced a presentation about the program, which was delivered at several community meetings. Students blended PowerPoint presentations with offline activities, such as the poetry reading.

In the *Story Studio*, children and parents used construction paper, yarn and markers to produce their own story books, which they read while being filmed against a green screen. An intern used the words and pictures in their books to create animated digital images for the backgrounds of the computerized stories. One of the BTW students produced a story about the funds of knowledge in his family. He described his own skills in drawing cars and playing soccer, as well as the strengths of his parents, including both physical skills (keeping the house clean, fixing things) and the provision of emotional support. A CD produced for each participant included all of the digital stories; some were posted on YouTube. The digital technology became an effective means to enlist parent participation.

In What We Know Could Fill a Book, participants interviewed each other, then wrote a bio as well as a description of things they knew about, were good at, and could make or do. They then created digital versions, accompanied by photos. Community Treasures was a means to build relationships with students' families and introduce digital stories as a family activity. Families talked about important strengths and stories as well as how they might like to capture and share these. They suggested a variety of formats (e.g., digital family photo gallery, home video about family gardening, digital story about a child's visit to her hometown in Mexico), and expressed desires to share their stories with others, both the wider family circle, and with the community at large, such as by publishing their stories in the local community newspaper.

CONCLUSION

My colleagues and I have used the term, *community inquiry* (Bruce & Bishop, 2008), to denote our contemporary application of *pragmatism* in a set of activities including education and community building. Drawing from the work of John Dewey (1956, 1966; Menand, 2001), community inquiry is based on the premise that individuals need to understand and create solutions for problems in complex systems in order to participate fully in a democratic society.

The personal insights and enrichments derived by participants in these programs have made it an enriching foray into learning across borders. Students and

parents say that the projects create a new space for student self-expression and bonding with family and friends. The approach holds promise as a means for transforming public spaces so that marginalized youth have meaningful access and become active participants in creating a more just world.

The development of critical, socially-engaged citizens today requires fluency with ICTs and digital information. Yet differences in motivational, material, skills, and usage access to informational technology can cause a "narrower base for economical growth, innovation and competition" and "unequal participation in...politics, education, culture, social relationships and communities" (van Dijk, 2005, p. 7). These differences are linked with marginalization by ethnicity and social class. In the projects described here, there were challenges related to existing community practices and values, physical facilities, legal concerns, and meaningful access. Equitable participation and full two-way learning is not easy to achieve (Card, et al., 2008).

Nevertheless, there is evidence that participants were engaging in significant community inquiry. They addressed issues *of* the community – perceived problems in health care, economic development, education, social order, participatory democracy. Their inquiry was *by* the community – community members set the agenda, determined methods, and evaluated progress. And the aim was *for* the community – concrete action to effect change and foster community building. In so doing, the community became the curriculum. As members of the Paseo Boricua community say, the goal is to learn about the world in a connected way, to learn how to act responsibly in the world, and to learn how to transform the world – to give back to the community.

REFERENCES

- Bensen, L., Harkavy, I., & Puckett, J. (2007). *Dewey's dream: Universities and democracies in an age of education reform*. Philadelphia: Temple U. Press.
- Bishop, A. P., Bruce, B. C., Lunsford, K. J., Jones, M. C., Nazarova, M., Linderman, D., Won, M., Heidorn, P. B., Ramprakash, R., & Brock, A. (2004). Supporting community inquiry with digital resources. *Journal of Digital Information*, *5*(3), Article No. 308.
- Bruce, B. C., & Bishop, A. P. (2003). Using the Web to Support Inquiry-Based Literacy Development. In Bruce, B. C. (Ed.). *Literacy in the Information Age*, 209-221. Newark, DE: International Reading Association.
- Bruce, B. C., & Bishop, A. P. (2008). New literacies and community inquiry. In J. Coiro, M. Knobel, C. Lankshear, & D. Leu, (eds.), *The handbook of research in new literacies* (pp. 703-746). Hillsdale, NJ: Erlbaum.
- Card-Gretencord, T., Jeong, S., Mendoza, K., Lin, C., Serbanuta, C., Cruz-Santiago, M., Lowe, L., Bishop, A. P., & Bruce, B. C. (2008, February). Learning at the border: How young people in informal settings use new media for community action and personal growth. In L. Stillman (ed.), *Community*

- *Informatics-Prospects for Communities and Action.* Prato, Italy: Monash University, Centre for Community Networking Research.
- Dewey, J. (1906). Culture and industry in education. In J. A. Boydston (ed.), *The Collected Works of John Dewey, 1882-1953; The Middle Works of John Dewey, 1899-1924; Vol. 3:1903-1906, Essays.* Carbondale: Southern Illinois University Press.
- Dewey, J. (1956). *The child and the curriculum and the school and society*. Chicago, University of Chicago Press.
- Dewey, J. (1966). Democracy and education. New York, Macmillan.
- Fischer, G., Rohde, M., & Wulf, V. (2007). Community-based learning: The core competency of residential, research-based universities. *International Journal of Computer-Supported Collaborative Learning*, 2(1), 9-40.
- Franz, G., and S. Papert (1988). Computer as material: Messing about with time. *Teachers College Record*, 89(3), 408-417.
- Giroux, H. (2005). *Border crossings: Cultural workers and the politics of education*. Oxford, UK:, Routledge.
- Greenwood, D. J., & M. Levin (1998). *Introduction to action research: Social research for social change*. Thousand Oaks, CA: Sage.
- Hammond, L. (2001). An anthropological approach to urban science education for language minority families. *Journal of Research in Science Teaching*, 38(9), 983-999.
- Hawkins, D. (1974). Messing about in science. In *The informed vision: Essays on learning and human nature*. New York: Agathon. Orig. pub. in 1965 in *Science and Children*, 2(5), 5-9.
- Horton, M., & P. Freire (1990). We make the road by walking: Conversations on education and social change. Philadelphia, Temple University Press.
- Lee, O. (2003). Equity for culturally and linguistically diverse students in science education: Recommendations for a research agenda. *Teachers College Record*, 105(3), 465-489.
- Menand, L. (2001). The metaphysical club. New York, Farrar, Straus and Giroux.
- Moll, L. C., Amanti, C., Neff, D., & Gonzalez, N. (1992). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. *Theory into Practice*, 31(2), 132-141.
- Noguera, P., Ginwright, S., & Camarota, J. (Eds.). (2006). *Beyond resistance!: Youth activism and community change*. New York: Routledge.
- Ohler, J. B. (2008). Digital storytelling in the classroom: New media pathways to literacy, learning, and creativity. Thousand Oaks, CA: Corwin.
- Reardon, K. M. (1998). Participatory action research as service learning. *New Directions for Teaching and Learning*, 73, 57-64.
- van Dijk, A. G. M. (2005). *The deepening divide: Inequality in the information society.* Thousand Oaks, CA, Sage.