How to integrate digital media into a drop-in for homeless young people for deepening relationships between youth and adults

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ABSTRACT

This paper reports on a curriculum called *New Tech for Youth Sessions*, designed for homeless young people, aged 13–25. Motivated by the ordinariness of digital media and its importance in communicating with society's institutions, the primary goal of the curriculum was to develop students' life skills for information technology and digital media. A crucial secondary goal was to position students to recognize their self-worth, through meeting challenges, positive communication with adults, and reciprocal peer support. The paper describes how these goals were addressed by incorporating a community technology center into a multi-purpose drop-in for homeless young people and by a curriculum that guides students through an integrated series of activities related to finding employment. The paper discusses the principles underlying the curriculum, the class processes, and the social structure that supports the learning environment. A far-reaching result, based on offering 13 classes to over 75 youth over 16 months, is the hypothesis that instruction in digital media can create visceral, life-affirming experiences of challenges overcome, which can help strengthen relationships between the youth and the drop-in staff. The paper concludes with a discussion of lessons learned for incorporating digital media into drop-ins for enabling access and for improving life skills.

1. Introduction

Drop-ins for homeless young people, aged 13–25, have been characterized as community-based organizations that provide critical services for enabling young people to survive and escape homelessness (Barry, Ensign, & Lippek, 2002; Ensign & Bell, 2004; Slesnick et al., 2008; Wingert, Higgitt, & Ristock, 2005). Drop-ins are knowledgeable of, and somewhat accepting of, street life but oriented toward giving young people the skills, relationships, and knowledge for escaping homelessness; they are, in short, hybridized gateways for entering the mainstream, leaving a marginalized, often stigmatized way of life for a dominant one (Spradley, 1970). In addition to the provision of basic needs, including food, shelter, health care, and safe refuge from the streets, drop-ins can offer educationally oriented programs for developing life skills, including healthy eating and cooking, effective interpersonal communication, searching for employment and keeping jobs, and so forth. Critically, through the efforts of the paid staff and volunteers, drop-ins provide places where young people can develop feelings of self-worth for a meaningful life, recognition of skills and abilities, and trusting relationships with adults, which are critical

steps for leaving the street (Garrett et al., 2008; Patterson & Tweed, 2009). In addition, comprehensive interventions that target a variety of needs may be more beneficial than services that focus on a single need (Coward Bucher, 2008; Slesnick, Dashora, Letcher, Erdem, & Serovich, 2009).

In a different vein, over the last two decades in U.S. society, information and communication technology has diffused beyond the workplace and commercial settings into domestic, educational, civic, and political settings (Shneiderman, 2003). So thorough has been its penetration that access to personal digital technology and digital media is arguably now a basic need in U.S. society. Indeed, it can be essential for communicating with family and friends, with prospective employers, and in general with society's institutions.

In contemporary U.S. society, information systems such as MySpace, Facebook, and similar social networking sites are extremely popular with young people (boyd, 2007; boyd & Ellison, 2007). They can be used to create and maintain supportive networks, useful for discovering employment opportunities, for finding and assessing information, for exploring different forms of identity presentation, and for generating social capital (Steinfield, Ellison, & Lampe, 2008). In addition, for adolescents and emerging adults, social networking sites may be particularly useful for psychosocial development, in particular, for maintaining close communication with friends, and not simply an excuse for idleness (Subrahmanyam & Greenfield, 2008). Similarly, social networking can also be used by homeless young

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people for instrumentally positive purposes; for example, to create or sustain constructive, protective relationships such as with a caring high-school teacher and other similar ones identified by Patterson and Tweed (2009). Seeking to reach young people in their preferred communication mediums, at least some service agencies have created profiles on Facebook and MySpace (Woelfer & Hendry, 2010). Unfortunately, alongside these benefits, social networking sites can also become tools for further ensconcing youth into street life because they offer additional means for strengthening relationships amongst peers on the street and for exercising autonomy in ways that are unacceptable to mainstream society or ultimately harmful to youth (Garrett et al., 2008; Karabanow & Naylor, 2010). We have seen a MySpace profile, for example, that has been used simultaneously to advertise sexual services and to communicate with drop-in staff. In general, because digital media simultaneously can be used for good or ill by homeless young people and because of its importance in today's society, in the coming years, a key question for drop-ins is how to bring information and communications technology into their programs. In this paper we address this question by reporting on the development of a community technology center and associated curriculum, *New Tech for Youth Sessions*, for homeless young people.

1.1. The drop-in: Street Youth Ministries

Street Youth Ministries is a non-profit, faith-based organization, located in urban Seattle, Washington in an area known as the University District, an eight-block neighborhood near a large public university (Street Youth Ministries, 2010; University District, 2010). Since 1993, it has offered services to homeless young people and at-risk youth, and those transitioning out of homelessness, including a drop-in center; case management, advocacy and referral services; life-skills practice; a one-on-one counseling and mentorship program; a chores program for earning bus tickets and other items; and getaways where young people interact with caring adults off the street in natural environments while hiking, rocking climbing, snowboarding, or similar stimulating outdoor activities. Street Youth Ministries takes a non-judgmental, patient approach where all youth are treated with respect and compassion, regardless of appearance and demeanor or if it is their first or hundredth visit. Every year hundreds, not thousands, of young people participate in its programs. Street Youth Ministries is well-known and its staff is respected by the street youth.

Street Youth Ministries offers homeless young people resources, including paper brochures and fliers, with information germane to their welfare, including government services, harm-reduction programs, employment opportunities, and so on (Woelfer & Hendry, 2009). Since 2005 the drop-in facility has provided a single computer workstation with Internet access, specifically purchased to provide young people with health-related information. Young people are encouraged to use the workstation for staying in touch with family, for searching and applying for jobs, and for pursuing educationally oriented activities. As with many families (Horst, 2010), using the workstation for gaming, socializing and goofing around is frowned upon. To protect the workstation against damage, it is enclosed behind a metal case with a clear plastic shield. This protective case suggests a valuable, scarce resource, subject to possible abuse, and perhaps theft, and also surveillance, and is quite unlike the other media resources found in the drop-in. Books from a small library, for example, are readily available, as are board games. Outside of the drop-in, while access to the Internet through commercial and public wireless networks via laptop computers and other small personal devices is pervasive on the streets and in the cafés of the University District, homeless young people typically do not have such ready access. Furthermore, even with a laptop or other personal digital device and the knowledge to use it, a young person might be unable to sit in a café, simply for the lack of money to purchase a drink. Instead, access must generally be planned; for example, to ensure access,

computer time at libraries must typically be scheduled in advance, because public demand often exceeds supply. In addition, computer access is typically subject to time restrictions and certain kinds of surveillance. Young people, moreover, also often experience barriers to accessing libraries because of library fines for failing to return borrowed items or violations of the rules governing computer use.

To address this scarcity of access, in 2008 Street Youth Ministries decided to bring personal digital technology into the drop-in with a twofold objective: 1) To make access to digital media readily available and ordinary, as it is for over 70% of families in the U.S. (Horrigan, 2009); and 2) To develop life skills classes, based on the use of technology and digital media, especially for instrumental purposes such as finding employment, investigating government services, and so forth. In contrast to the single computer, protected against theft but stigmatized, we envisioned enhancing the drop-in to include abundant access to computers and educational resources for learning about digital media. At the same time, we wanted to avoid turning the drop-in into a computer lab; instead, we sought to retain its multi-purpose character and especially its focus on the development of trusting relationships between young people and drop-in staff and volunteers.

The diversity of homeless youth is well-known (Coward Bucher, 2008; Martijn & Sharpe, 2006; Nesmith, 2006) and is clearly in evidence at Street Youth Ministries. Approximately, two-thirds of clients are young men and one-third are young women, with many ethnicities represented, many youth self-identifying as LGBTQ[1], and many youth having criminal records, from minor convictions to felonies. Mental illness, especially depression and syndromes related to trauma, are also very common, as are the interrelated causes and effects of homelessness: poverty, lack of familial support, developmental delay, and struggles with chemical dependencies, especially alcohol. Many youth, furthermore, were formerly involved in foster care. Educational obtainment varies from middle-school drop-outs to seniors in college. Many youth sleep mostly outside or in overnight shelters. Some youth "couch surf," that is, sleep regularly at different friends' dwellings. Many live in transitional housing programs and a relatively small proportion of youth pay rent on their own apartments. Young people vary in terms of employment history, from having no paid job or volunteer experience, to having undocumented work and a large number of short-duration jobs, to cases where young people have been able to hold jobs for significant periods of time. Finally, youth attendance in programs at Street Youth Ministries varies in complex patterns, from regular or sporadic participation over a period of months or years, to one-time visits. In addition, youth may enter into transitional housing and keep away from the drop-in or visit occasionally for a period of time, "age out" of its programs, move away from Seattle, and so on.

1.2. Community technology centers

The term "digital divide" emerged in the 1990s to describe the disparity that had arisen regarding access to information and communication technologies, especially amongst households with annual incomes above and below $75,000 (Clinton, 1999; United States Department of Congress: National Telecommunications and Information Administration, 1999). The divide subsequently came to be characterized as the difference between technology "haves" and "have nots." In the United States, the rhetoric for digital inclusion and closing the digital divide, which emphasized the provision of computers and Internet access, originated at the Federal level. Yet, interestingly, the implementation of solutions occurred, and

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[1] LGBTQ stands for Lesbian-Gay-Bisexual-Transgender-Queer/Questioning. For an introduction to these and related terms for signaling certain kinds of identity see "Terminology and acronyms in this issue of Child Welfare," *Child Welfare* (2006), *LXXXV* (2), 109-113.

continues to occur, locally at non-profit grassroots agencies. These community technology centers arose either as separate entities or within the boundaries of previously-existing grassroots service agencies (Crandall & Fisher, 2009; Hersberger, 2002; Servon, 2002).

However, despite the proliferation of community technology centers, providing access to computers without training in technology skills and digital literacy is not enough to close the digital divide (Clark, 2003; Kvasny & Keil, 2006; Moser, 2009). Along with access, the development of skills for desktop and web applications is also necessary. For homeless young people, who often lack interpersonal communication skills and regard many adults and institutions with suspicion, the challenge is greater. It is nothing less than "bridging the gap between what users know and what they need to know" (Shneiderman, 2000, p. 86), a key challenge of universal usability (Lazar, 2007). With knowledge for the street and with expertise for helping young people escape homeless, drop-ins are ideally positioned to introduce digital media to young people and to develop curriculum for bridging the gap.

1.3. Development of the community technology center

Funded by a grant from Washington State, Street Youth Ministries purchased an assortment of computer hardware, which was then incorporated into its drop-in facility. Located in the basement of a church building, the drop-in consists of a multi-purpose space, shaped by the root metaphor of a "public living room", with some spots more or less belonging to some youth on repeated visits. In one corner is a rack of used clothes and shoes, hygiene items, and other items that fill basic needs, all freely available to young people. In another corner is an entertainment center, which is opened at certain times for watching movies and for playing video games. In a third corner is a large sofa and chairs for talking, reading, playing board games, making crafts, or enjoying a moment of quiet. The drop-in has a small library of books, moveable tables and chairs, a restroom, and a small office, with storage areas, a refrigerator, storage containers, a table for food preparation, and a sitting area. Showers and laundry facilities are also available.

Computer hardware for the community technology center consists of eight laptop computers, two workstations, a fileserver, a printer, and a wireless network for accessing the Internet. In addition, several digital cameras and video recorders are available for projects. When not in use, the laptops are stored in a locked charging cart in a storage area at the back of the basement. A "tech space", consisting of a wooden counter along one wall of the basement was created to hold the two computer workstations and a printer. This equipment is available to young people who have completed the introductory class, *New Tech for Youth Sessions*. When teaching classes, several rolling tables are placed together, a projector is set up on the table, a screen is pulled own, and the laptops are taken out. The table is large enough that 6–8 people can sit around it but small enough that the video cable for the projector can be easily shared, allowing anyone to display their work to the whole group (see Fig. 1), supporting turn-passing and discussion.

1.4. Summary

With this introduction to the community technology center complete, in the next section we report on how we have used it, describing the curriculum, *New Tech for Youth Sessions*. Specifically, we describe the educational aims of the curriculum, the major class principles and processes, the instructor roles and supporting social structure, and the specific learning objectives, class activities, and discussion topics. In Section 3, we discuss our experiences and reflect upon the merits of the community technology center, based on instructing over 75 young people in 13 different class offerings, held between January 2009 and April 2010.
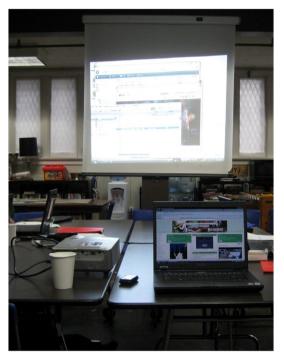

Fig. 1. This picture portrays the physical space of the community technology center, set-up for a *New Tech for Youth Sessions* class, with personal items on the seminar table, with one laptop being projected for all to see, and so on.

2. Curriculum: New Tech for Youth Sessions

2.1. Educational aims

The major aim of the curriculum is twofold. The first is to invite young people to enter into conversations with the staff and volunteers at the drop-in so that young people can develop trust in adults and so that staff and volunteers can get to know the young people, their personalities and specific situations. The second is to position young people to develop life skills for information technology, including: 1) the use of media for expressing goals and envisioning the future; 2) the formation and management of online identity; 3) the use of appropriate and civil language in written communication; and 4) finding and providing information useful for achieving goals. The curriculum, summarized in Table 1, addresses these goals by inviting young people to move through a process of finding and applying for a job.

Specifically, the curriculum consists of eight classes, covering these topics: 1) envisioning an appropriate job; 2) creating a resume; 3) creating a cover letter; 4) considering online identity and managing identity through the presentation and control of information; 5) using search engines, directories, and other tools to find job opportunities and understanding how and why these differ; 6) completing online applications; 7) using the "data cloud" for personal information management; and 8) connecting an iPod to iTunes, purchasing music and so on. This final topic is both an incentive for completing the class and a vehicle for developing skills. In each of the 90 min classes young people complete a number of activities, as shown in Table 1. Young people often help each other, and also receive one-on-one coaching from the drop-in staff and volunteers, including the authors of this paper.

2.2. Class processes and principles

Students are recruited primarily by word of mouth. Outreach workers, staff, and volunteers inform young people of the classes during drop-in or on the street and seek out interested students.

Table 1
Summary of the curriculum for the *New Tech for Youth Sessions*, ordered by the eight individual sessions that make up the class.

Learning objectives	Activities	Pedagogical notes
Class 1. Introduction and greetings i. Develop trust in the instructors, activities, and class setting. ii. Become familiar with the laptop computer. iii. Engage in an activity related to goal setting. iv. Practice talking about goals and self, asking questions, and honest communication.	i. *Dream job*. Students are prompted to produce a 200-word story describing a job they would like to hold within two years. ii. *Dream job poster*. Students are prompted to turn their stories into posters by adding one or more images and using colors, fonts, and other typographic features. iii. *Presentation*. Students present their posters in class and discuss them.	i. The outcome of the *Dream Job* activity is diagnostic in that it reveals much about students' familiarity with basic computer tasks, word processing, web search, working with images, general level of literacy, and interpersonal communication abilities. ii. Instructors ask questions and give affirmations, such as: a) Why is X important to you; b) How did you do X; c) I like X – can you say more about that; and d) Is there anything else that you would like to add or change in your poster? The object of this dialog is to show respect and interest and to model positive communication.
Class 2. "Pimp" your resume i. Describe how resumes are used by employers. ii. Describe the major components of a resume. iii. With the assistance of a tutor, create a resume which is clear, concise and dignified.	i. *Employer needs discussion*. Students are prompted to consider the employer's point of view and discuss how employers use resumes. ii. *Resume inspection*. Students inspect several resumes and discuss likes/dislikes, and are prompted to attend to such details as layout and format, how objectives are written, and so on. iii. *Preparing your resume*. Students work with a tutor to prepare a working resume.	i. Students are asked to bring a copy of a resume, if they have one, or notes about employment history, education, and so forth. ii. Tutors give students one-on-one feedback and advice on preparing the resume, addressing the unique circumstances of each student. iii. To help support tutors a "frequently asked questions" document has been prepared that provides guidance on how to address problematic job histories. iv. Instructors give affirmations: Preparing a resume is difficult, no matter your background. Feeling anxious is common and okay.
Class 3. Conquer the cover letter i. Describe the purpose of a cover letter, how they are related to resumes, and how employers use cover letters to select employees. ii. Describe the major components of a cover letter. iii. With the assistance of a tutor, create a cover letter.	i. *Employer needs discussion*. Students consider the employer's point of view and discuss how employers use cover letters. ii. *Cover letter inspection*. Students inspect several cover letters and discuss likes/dislikes. iii. *Prepare your cover letter*. Students work with a tutor to prepare a working cover letter.	i. Students are prompted to envision a specific job opening for which they are applying. ii. Students learn to focus on employers' expectations and that cover letters are introductions which must be situationally appropriate. iii. As with the resume, one-on-one feedback and advice has been found to be essential because of varying skills and backgrounds, and to support tutors a "frequently asked questions" document on writing effective cover letters is available.
Class 4. Online identity i. Describe what an identity is, sources of information that create identities, and how identities can influence interpersonal communication. ii. Describe online sources of information that create identities. iii. Describe approaches for protecting privacy at social networking sites.	i. *Real-world identity discussion*. Students discuss how "identity" can be defined, how it is produced, how it can be controlled, and so on. ii. *Digital identity discussion*. Students discuss the sources of digital information that shape online identity. iii. *Show and tell*. Students are prompted to show their pages from social networking sites.	i. This topic is fraught with tensions; for example, how to be true to one's self while appropriate to institutions. It is important, therefore, to affirm the challenge and give youth problem-solving approaches. ii. Example discussion questions for real-world identity are: a) Is a document such as a Driver's License an identity; b) Can you have multiple identities; and c) How do your friends influence your identity? iii. Discussion questions for digital identities are: a) How does an email address convey identity; b) What purposes do your pages at social networking sites serve; c) How do your linked "friends" shape your identity; and d) Do you want employers to see your pages? iv. Discuss the use of multiple digital identities and privacy settings to control access to personal information at social networking sites.
Class 5. Finding a job i. Describe several different options for finding a job, including online search engines, word of mouth, company websites, etc. ii. Describe several key search criteria, including travel distance, kind of work, company values, job fit with background, etc. iii. Demonstrate the ability to find employment openings with a search engine, job directory, or employer-specific website.	i. *Search strategies discussion*. Students list and discuss different methods for finding a job and the key search criteria. ii. *Search practice*. Prompt students to find a job opening, suitable for submitting an application. iii. *Search experience discussion*. Prompt students to discuss their search experiences, especially their likes and dislikes.	i. During the discussion of search strategies, highlight the weaknesses and strengths of different approaches, stressing that no strategy is perfect. ii. Give each student a different job-specific search engine or directory so that the class is exposed to a range of different options. iii. The use of search engines can be extraordinarily frustrating. Affirm that it is hard for everyone. Model persistence, patience, and optimism when assisting with searches.
Class 6. The Application Process i. Describe the merits of several different methods for applying for jobs, including in-person and online.	i. *Application questions*. Students examine and discuss application forms and the kinds of questions that employers ask.	i. For quirky questions such as "If you could be an animal what would you be" or "what was the last book you read? Did you like it?" give students strategies for demonstrating independent thinking, creativity and personality by tactfully redirecting a question, to, for example, a movie instead of a book or to a comic hero instead of an animal).

Table 1 (*continued*)

Learning objectives	Activities	Pedagogical notes
Class 6. The Application Process		
ii. Describe approaches for answering "tricky" questions.	ii. *Practice*. Prompt students to complete an online application.	ii. Instruct students to use a word processor to check spelling and to copy and paste responses into forms. Keep responses for reuse in future applications. iii. Affirm that completing long, complex applications is challenging for everyone. Aim for honesty, completeness and consistency. Neither reveal too much information nor too little. Ask for advice on responding to difficult questions. Share experiences with friends.
Class 7. Further Exploration		
i. Describe the "data cloud" for storing personal data, documents, images, and so on. ii. Describe the advantages and disadvantages of storing personal data in the data cloud. iii. Describe various online applications for working with documents, including word processing, calendars, personal pages, and photo storage.	i. *Google exploration*. Prompt students to create an account at Google and to then explore one of Google's applications. ii. *Discuss the "data cloud."* Discuss how Google's applications can be used to keep track of personal information and to help with the process of searching for a job.	i. Prompt students to consider the tensions between convenience and privacy when storing personal data in the cloud. ii. Prompt students to envision how Google Docs could be used in the job application process, especially to keep track of information at a single, relatively enduring place. iii. Prompt students to consider the evolving nature of tools for managing personal information online (email, resumes, cover letters, contact lists, calendars, medical records, and so on).
Class 8. End Game		
i. Setup an iPod device and connect it to a computer. ii. Connect to iTunes and download music using a gift card.	i. *iPod exploration*. Students receive a packaged iPod and are prompted to set it up and get it working.	i. Prior to receiving an iPod students must submit a resume, cover letter, and demonstrate that they have applied for a job. Often, students need extra help, which is made available outside of class, to satisfy these requirements. ii. While students are highly motivated, setting up the iPod and successfully using iTunes can be extremely frustrating for many students. Often, students need one-on-one help.

Posters in the drop-in also advertise the class and referrals from other service providers are important. A drop-in staff member and an outreach worker maintain a roster of interested young people and a sign-up sheet for each class. Reaching youth often requires face-to-face interaction, often facilitated by word of mouth, because young people often do not have reliable phones or block incoming calls to save money. Because of sporadic use, communication by email can present similar obstacles. Emphasizing the importance of one-on-one interactions, the class size is restricted to six students, with a drop-in staff member, an outreach worker, and two volunteers leading the class and assisting young people with the class activities.

All classes follow a common rhythm. Prior to each class, the outreach worker sets out the laptop computers and portfolios, containing paper handouts and a pen. At the first class each student receives his or her own portfolio and is assigned a laptop, to use for the eight classes. In addition, the outreach worker sets out a projector and pulls down a projection screen. Each class begins with about 15 min of open time in which students settle and ready themselves for class. During this time, students typically have a light snack, chat with each other, play music, check their email, and so forth. Students, quite often, arrive early to finish activities begun in previous classes. At the same time, students often come to class late; thus, the first 15 min of class is a transition time so that students can readily join in and get ready. When students arrive 15 min or more after class begins they are not allowed to attend, are asked to schedule a make-up class, and are encouraged to come to the next class.

Class officially begins with a fun, warm-up activity, which is either "Typing Skills" or "Tech Check." For the Typing Skills activity, students work on their keyboard skills by completing exercises at an online site intended to teach and improve typing skills. Here, the general aim is to make the point that typing is a crucial skill, which can be learned through practice and that one can see improvement with even a little practice. A second aim is to make the broader case that the Internet is a resource for learning how to do almost anything. The Tech Check activity, on the other hand, prompts young people to talk about recent experiences with technology, either positive or negative. Here, the general aim is to prompt young people to practice their interpersonal communication skills, to lead conversations, and to bring their own ideas into the class setting. Often students demonstrate their use of digital media in the activity, allowing other students and the instructors to make comments and ask questions. Secondarily, this activity also serves to teach the staff and volunteers about young people's experiences with digital media, providing examples of technology use that can be drawn upon in subsequent classes. Next, after this warm-up activity, each class turns to an integrated sequence of two or more activities in which students are typically prompted to complete some work in a 15–20 min period of time, followed by a discussion of their work. (Table 1 presents the activities and discussion topics for each of the eight classes.)

These cycles of work and discussion provide students with an opportunity to both develop specific skills and to practice talking about themselves and asking and answering questions. Each class ends with an affirmation of the hard work just completed, a brief reminder of what was covered, and a brief overview of what to expect in the next class.

At the first class, the principles for the *New Tech for Youth Sessions* are introduced. These principles, which follow, underlie the curriculum and shape the pedagogical setting. The first principle is *Stay Focused,* meaning that since class is together for only a short time it is important to put aside outside communications and distractive media and stay engaged with the material and each other. The second is *Have Good Conversations*, conveying the importance of being involved, building upon each others' ideas and skills, and helping each other learn. The third, *Be Respectful of Others*, reminds students, staff, and volunteers that everyone learns differently and that "different" does not equate with wrong or inadequate. Finally, students are asked *Don't Abuse the Computers*, by keeping food and drink away and by asking before downloading software, and keeping content appropriate. Throughout the eight sessions, staff and volunteers seek to model these principles and remind students of them.

2.3. Class incentives

Students receive three incentives as they progress through the eight sessions. In the first session, students receive a thumb drive, for storing electronic documents. In the third session, students receive media time at the workstations during drop-ins. Finally, in the last session, students receive an iPod music player, valued at approximately $150.00, which they keep, and a $15.00 gift card for purchasing music. The iPod is a coveted personal device, symbolic in several dimensions. For this group of young people it is a luxury, fulfilling something more than a basic need but, nevertheless, of great importance to youth — listening to music. It represents the mainstream and gives youth access to an ordinary experience, namely walking down the street, adorned with a fashionable device or "zoning out" and taking a break. Moreover, earning something new and fashionable instills a sense of self-worth for young people who normally receive second hand clothes and shoes, hotel toiletries, and inexpensive backpacks. Finally, it signifies that the young person is valued and honored as an individual. In addition, the iPod prompts young people to learn how to use it, to take on responsibility for its upkeep, and to consider the ethical aspects of music downloading and sharing. The iPod, in this significant sense, is just as much a responsibility as it is a reward, and while it creates interest in and motivation to complete the class, it also introduces a number of opportunities for learning about and discussing technology.

2.4. Instructor roles

A critical component of the New Tech for Youth Sessions is the four instructor roles: Outreach Worker, Volunteer Tutors, Life-Skills Coordinator and Case Manager. The Outreach Worker is a person who is very familiar with the street and with the young people living in the neighborhood of the drop-in. In the 18 months that classes have been held, beginning in January 2009, two outreach workers, both former drop-in clients, have worked in the classes. The Outreach Workers do essential work. They get the word out about the classes, recruit youth through one-on-one contacts, and keep a roster of youth that are interested in participating. In addition, the Outreach Workers setup and breakdown the class's equipment and keep it in good operating condition. Finally, the Outreach Workers also lead many of the activities during class and facilitate class discussions. At the drop-in, the Life-Skills Coordinator is responsible for creating and running programs that improve life skills for young people or that lead to positive relationships between young people and adults. Specifically, the Life-Skills Coordinator is responsible for the curriculum for the New Tech for Youth Sessions and for overseeing the Outreach Worker and Volunteer Tutors. As do the Outreach Worker and the Life-Skills Coordinator, the Volunteer Tutors provide one-on-one assistance to young people and facilitate discussion and provide technical expertise. Unlike the Outreach Worker and the Life-Skills Coordinator, the Volunteer Tutors are outsiders; that is, they do not interact with young people outside of class. Finally, Case Managers provide leadership and specific advice and often come by, shortly before or after class, demonstrating to young people their general involvement in the class and picking up information about how the students are doing.

3. Discussion

In the following two sections we discuss the lessons learned in developing and working with the NTYS curriculum. In addition, we discuss the limitations of this work, suggesting areas for future work. It is important to note that this discussion is based on our practical experience, not a formal empirical assessment.

3.1. Lessons learned

The Getaways program, in which young people travel to natural settings and participate in physical activities such as hiking, rock climbing, rafting, snowboarding, surfing, and so forth, is a major therapeutic tool for Street Youth Ministries. Developed and run by the Life-Skills Coordinator, Getaways take youth off the street and position them to engage in highly stimulating, healthy activities. Based on almost ten years of experience with running such activities, we have come to see them as instrumental for creating lasting relationships between case managers and young people. Success in these activities, and becoming a member of a community with specialized skills (e.g., the climbing community), helps young people recognize their self-worth and their ability to set goals, if relatively small ones, and to overcome obstacles. Feelings of self-worth and the ability to set goals are facilitators for escaping homelessness (Patterson & Tweed, 2009). Through such activities, stories are created, which in their retelling remind young people of shared experiences and challenges met. This bond between service providers and young people contributes to the development of personal, trusting relationships which, in turn, once a young person is ready, can be parlayed into specific steps for getting off the street — rehabilitation from substance abuse, addressing mental health issues, obtaining housing, entering job-training programs, landing a job, family reconciliation, and so forth.

Like the Getaways, the New Tech for Youth Sessions appear to create visceral experiences and stories. Like Getaways, the class presents young people with individual challenges which can be overcome by working together with peers and knowledgeable instructors. We have found, for example, that youth, drawing on their particular experiences, often provide strategies for presenting complex employment histories in a dignified, honest, and persuasive manner. Like Getaways, young people can contribute their own ideas, within limits, for what to do and how to do it. Often, for example, the ideas that young people introduce through the Tech Check activity are taken on and used as examples or counterexamples during class discussions (e.g., images of the University District neighborhood taken by Google Maps Street View, first introduced by a student, have been used to prompt discussion about privacy in the digital age). Like Getaways, students can share in the successes and disappointments of each other. Young people, for example, often see the instructors struggle with technology, which also provides an opportunity for the instructors to model persistence (e.g., "we need to keep at this until it works — that's technology for you"), humility (e.g., "I'm stuck — can someone help me with this thingamajig?"), and appreciation (e.g., "Thanks for explaining that — I had no idea"). In these conversations and joint problem solving situations, often the instructors become students and a young person becomes a teacher. In turn, he or she is given the opportunity to see their knowledge as relevant and meaningful, which may lead to feelings of self-worth and confidence. In summary, the New Tech for Youth Sessions creates success stories, often small ones, which can be drawn upon to take larger steps out of homelessness.

We believe that the evident similarity between physical activities outdoors and the intellectual activities associated with developing skills for seeking employment is due, in large part, to the principles that underlie the class. These principles acknowledge that young people have points of view and specific experiences that are germane to the goals of the class. Unlike drop-in, in which young people are relatively free to pursue their own interests or needs, the New Tech for Youth Sessions require young people to work together. They are prompted to enter into conversation, that is, to reflect upon their work and to support each other by giving advice and help. These principles, in fact, originate in methods for teaching undergraduate and graduate university students where learning to design takes place through a process of taking action and then reflecting upon progress within a pedagogically appropriate environment, with experts to model and learn from (Hendry & Friedman, 2008; Kelley, 2001; Schön, 1991).

The principles may in fact be particularly appropriate for homeless young people who, with "street smarts," are expert at adapting to their difficult and, often, dangerous environments (Kidd & Davidson, 2007) and for whom freedom, resilience, and self-reliance are important values (Garrett et al., 2008).

Unlike the Getaways, the *New Tech for Youth Sessions* can be emotionally demanding, requiring students to envision a future, to document their history in a resume format, and to consider their identity, especially with respect to institutions and people in the mainstream. For many young people, these are very difficult steps. To engage them constructively, requires that the instructors listen to students' ideas non-judgmentally, to affirm that these topics are difficult, and to offer small, positive steps for approaching them. See the pedagogical notes in Table 1 for specific suggestions.

Another important element of the class is the seminar setting. Subtle, but we think essential, this setting is created in a familiar, comfortable, and respected place – the drop-in facility – by arranging tables, getting out the laptops, and sitting around a shared projector. The location makes the class inviting, while rearranging the space signifies that it is not drop-in; rather, it is a time for engaging activities. This physical configuration also allows students and instructors to readily share their screens for showing work and for facilitating discussion. In a different vein, the availability of the laptops has unexpectedly given drop-in staff increased access to information, useful to interacting with young people. As needs arise, staff will spontaneously search for information or prompt young people to use a computer for themselves. Thus, immediate access to digital media allows staff to model effective problem solving, to demonstrate how to communicate with institutions, and to help young people find information that addresses their questions and needs.

An additional essential element is the small class size and one-on-one instruction, needed to accommodate students' extraordinarily diverse backgrounds. Unlike other educational experiences, where young people may have been tolerated, ignored, or worse, we seek to accommodate the diversity of backgrounds, skills, and goals through one-on-one engagement so that young people feel totally respected. To achieve this objective, to date, we have run the classes with four instructors and a maximum of six students. Small classes also by nature ask students for greater participation.

Along with this level of engagement, we believe that another critical factor is the instructor roles of Outreach Worker, Volunteer Tutors, the Life-Skills Coordinator, and Case Managers. Together these roles create a social structure that supports students. Outreach Workers are positioned to be leaders of the class, setting up the class equipment and fixing it when something breaks, keeping a sign-up list, introducing class activities and leading discussion, conducting make-up classes, and so forth. Young people, in particular, respect Outreach Workers, knowing that they were once on the street too. In addition, we hope that students also come to see Outreach Workers as a success model. At the same time, Outreach Workers play an extremely difficult role. They are in transition off the street and students of the class may be or have been their peers. This history can be a source of respect but it can also be used to undermine their leadership; for example, we have seen students challenge the authority of an Outreach Worker by making comments about his street identity and previous activities. The Life-Skills Coordinator, on the other hand, provides leadership in setting the tone and makes the calls on reprimanding youth when, for example, a person's behavior violates the class principles. Unlike the Volunteer Tutors, the Life-Skills Coordinator, in most cases, knows a fair amount about the personalities and particular issues that are faced by students and is able to decide when a young person's behavior calls for flexibility and when it calls for immediate corrective action. The Volunteer Tutors offer technical expertise and a caring, respectful presence but may know relatively little about the specific difficulties, dangers, and rules

of the street. They provide, in short, opportunities for young people to engage with caring adults. Finally, the Case Managers, who provide traditional case management services, can come immediately before or after class to interact with young people, as well as with the instructors, in an ad hoc or spontaneous fashion, demonstrating concern for young people and keeping in touch with them. Again, working closely with the Life-Skills Coordinator, referrals easily go both ways.

For successfully completing the class, young people earn an iPod and a $15.00 gift card. Thus, on the street, the class is sometimes known as the "iPod class." In some cases, accordingly, young people come to the first class solely for the iPod, and we know that some young people have sold their iPods for basic needs and for other purposes (e.g., rent). Furthermore, some young people are of the view that they "swindle" Street Youth Ministries out of an iPod just by completing the classes. We take a different view. For this population of young people showing up for eight sessions over four weeks, being engaged in the material, being in the presence of caring adults for twelve hours, and having civil conversations are very significant steps. For many young people in this community such experiences are rare, as is the opportunity to learn specific skills in technology and digital media that are useful for finding employment. But more, the classes have enabled the Life-Skills Coordinator to get to know young people better, which in turn, has lead to specific kinds of assistance. In addition, the iPod gives young people an object to take responsibility for and for exercising autonomy over. In summary, while some young people come to class focused on the iPod, we believe that most students quickly shift their focus to the course material in large part because of the curriculum processes and principles already described.

In summary, the following are the major lessons learned:

1 Build on the familiarity and respect of an existing drop-in; seek a simple, flexible approach for integrating technology so that it is readily available but does not come to dominate;
2 When developing curriculum, create opportunities for young people to bring their own experiences into class, to create artifacts, and to present and discuss them;
3 Develop principles that guide instructional processes that focus on shared challenges, reciprocal support, and purposeful communication;
4 Develop instructor roles and a social structure that is consistent with the drop-in program and which enables both technical skills to be important and dialog to take place; and
5 Offer incentives that are coupled with the learning objectives of the curriculum and which give students an opportunity to take responsibility and to learn.

3.2. Limitations

This work bears several noteworthy limitations. First, the curriculum has not been taken up outside of Street Youth Ministries; therefore, we do not have any evidence on its usefulness at other drop-ins. As we have stressed, Street Youth Ministries emphasizes the development of one-on-one relationships between young people and case managers and the curriculum has been developed to support that goal while positioning young people to accomplish specific learning objectives. This perspective, however, may not be in keeping with other drop-ins. That said, we know of no literature describing comprehensive efforts to integrate digital media into drop-ins for homeless youth. Yet, the need to engage youth through digital media is clear. Second, the curriculum focuses on developing specific life skills for finding jobs. We know, however, that homeless young people, like most young people everywhere (Ito, 2010; Steinfeld et al., 2008; Woelfer & Hendry, 2010), are interested in using digital media for personal expression and communication — making videos, writing blogs, creating websites, contributing to gaming communities,

mixing music and so on. Thus, we see a strong need to take the lessons learned in the *New Tech for Youth Sessions* and apply them for a different purpose, perhaps for creating information systems useful for civic-based activities. The model of the Computer Clubhouse may be particularly relevant (Resnick & Rusk, 1996; Computer Clubhouse, n. d.). Third, a key goal has been to create a "responsibility trajectory" so that students who complete the class have an opportunity to take on instructional or information technology roles, formally instructing other students, maintaining the hardware and software, or the like. The Outreach Worker role is illustrative but we would like to pursue other approaches for involving "graduates" in running the *New Tech for Youth Sessions*. Fourth, while the program has been in operation for 18 months, we have a limited experience with its sustainability. We are aware of various sustainability issues. Within 3–5 years, we can expect the computer hardware to begin to fail and need replacing. Similarly, the cost of purchasing the iPods may become prohibitive. Technology, too, has advanced since we began the class and we expect in the future to give more emphasis to the "data cloud" for the creation, storage, and sharing of documents. Google Docs and other manifestations of the data cloud offer much convenience to young people with sporadic, limited access to computer hardware, but also may erode privacy, illustrating the importance of revising and iterating the curriculum to respond to both information technology fashions, along with enduring, systemic trends (Nathan, Friedman, Klasjna, Kane, & Miller, 2008). Fifth, as we have described, the instructor roles that enable the classes to take place are essential and developing a pool of people for taking on these roles is important for the sustainability of the class. These and similar limitations, in summary, will need to be addressed to ensure the long-term sustainability of this work. Finally, the major claim of this work lacks scientific evidence, namely that the classes definitively provide a site for the expression and development of self-worth and that the development of such feelings, internal to a person, can be parlayed into steps that lead out of homeless. Nevertheless, based on extensive professional experience we are cautiously optimistic: We do believe that instruction in information technology and digital media can be used to position young people to experience feelings of self-worth.

4. Conclusion

In U.S. society over 90% of young people are online (Purcell, 2010). Beyond this indicator, arguably, access to information technology and digital media is now a basic need. The U.S. government's position is: "We stand for a single internet where all of humanity has equal access to knowledge and ideas. And we recognize that the world's information infrastructure will become what we and others make of it" (Clinton, 2010). If so, then drop-ins for homeless young people need to consider how computer technology can be incorporated into their programs, for supporting ordinary communication, personal development, education, and access to information and services held by institutions. Drop-ins are hybrid places, accepting elements of the street so as to reach young people, while being oriented toward positioning young people to take the steps necessary for entering the mainstream. This setting and the individual trajectories of young people are complex, replete with quagmires, obstacles, and circuitous paths.

At the same time, access to information is fast becoming ubiquitous in urban environments, with the potential for both benefits and harms to young people. For example, young people may need to trespass or be publicly visible in order to gain access to electricity or wireless connectivity. Thus, it is important to investigate how digital infrastructure can be deployed and used in ways that are advantageous rather than stigmatizing (Woelfer & Hendry, 2009; Woelfer & Hendry, in press).

This work has shown how the *New Tech for Youth Sessions* can be brought into a drop-in, such as the place we described in this paper,

and used as a tool for helping young people improve their lives. The focus has been on developing specific skills for finding employment while also developing the capacity to envision goals, to talk about one's self, and to reciprocally support others. We believe that the class demonstrates how information technology and digital media can be used to create a stimulating, engaging setting for learning skills but also for building relationships, useful for escaping homelessness.

Acknowledgement

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