BEHIND THE SCREENS

Digital Storytelling as a Tool for Reflective Practice

by

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ABSTRACT

Too often, learners in constructionist learning environments stop too early in their design process. They imagine what is possible and then realize their vision, but they don't reflect on the results—that is, they don't take a step back from their work to get a deeper understanding of how and why they do what they do. Without reflection learners miss out on many important opportunities to improve their creations, discover new things, and share their ideas with others. In this thesis I describe and discuss Behind the Screens, a workshop which I developed to foster the practice of reflection among young people engaged in a constructionist learning environment. Over three months, twenty teenagers aged 12 to 18 at two Computer Clubhouse afterschool centers constructed digital videos about themselves or their "learning stories." I describe the set of tools, activities, and contexts used, and I examine the successes and challenges the workshops presented. Through analysis of the resulting stories, individual interviews, and transcripts of workshop discussions, I propose strategies for spreading the use of digital storytelling for reflective practice to other constructionist environments, especially among adolescents. More broadly, I also consider the role of mentoring and its relationship to the activities of the Clubhouse. I conclude with design suggestions for new software tools, activities, and contexts for creating, editing, and sharing digital video stories. These support the development of a culture of reflection among constructionist learners by promoting the creation of short digital video pieces produced by and for these youth.
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INTRODUCTION

WHAT ROLES CAN STORYTELLING and reflection play in a learner’s design process and a designer’s learning process? This study examines how storytelling and reflection help designers share not just their projects, but also their thinking about their projects, with one another. In particular, it introduces and discusses a workshop, Behind the Screens. In it, young people made *digital stories* (short digital video pieces) in which they explained—verbally, visually, and musically—why and how they do what they do.

In creating stories, people articulate their thoughts to make them more compelling and inviting to others. Juan, a 14-year-old at the Clayton Boys & Girls Club, labored over his task: he had a few narrative threads to follow, and he wanted to find some way to bring them all together. How could he bridge his love of Puerto Rico with his interest in working with kids? What images and music would best convey his meaning?

Although Juan participated in all the software workshops he could and

*Stills from Juan's digital story included a number of images of Puerto Rico (1–5), an airplane to indicate his move to the United States (6), Children's Hospital—where his brother was treated (7), and two girls from the Club who are in his charge (8).*

Note: The name of the two Clubhouse sites and all participants in the study, including staff, have been changed. Here, for example, both “Juan” and “Clayton” are pseudonyms.
often spent his free time making flyers for Club events, he felt that his most important work was his interaction with the younger members of the Club. When he made a digital story, he focused on his love of younger kids, and he tried to link this aspect of himself with his strong sense of ethnic pride. He began by collecting images and music, and then he developed a story script that could connect these two themes.

My name is Juan Pedro. I was born in Rio Piedras, Puerto Rico. Where I come from the music that is part of our cultural heritage is "La Plena". But, the most listened to by adults is "salsa". By the younger generation is "Spanish Reggae" which is what I listen to.

I happen to be a very proud person of my country, I represent my country at all times no matter what people think, do, or say. One of my saddest times in life was when my family and I had to leave my country to help my little brother who was just a baby. I have always looked after my little brother, helping him with anything and everything he needed.

After a while, I developed this "need" to help little kids with what they need. But, overall I help them have fun and not feel left out. This is how I ended up here, at the Clayton Boys & Girls Club. I've spent almost seven years at the Club and I have always tried to make every single member that was younger than I feel that they belong where they are which is something I did not feel when I was little.

In taking a step back from his day-to-day work and his lived experience, Juan engaged in reflective practice. Through reflective practice—that is, making a habit of taking a close look at their own work and their motivation and relationship to it—people clarify their ideas and come to better understand what they have learned (Schön, 1983). Reflection allows people to assimilate tacit knowledge and tackle future challenges (Raelin, 2001). It also enhances an individual's learning experience and fosters communication and collaboration within communities of learners. Students learn flexibly, make sense of the unexpected, adapt knowledge, and realize where understanding fails. Learners become "active and intentional" in examining their own thinking and work, and thus make learning visible (Lin et al, 1999; Rinaldi and Gardner, 2001).

In too many design settings, reflective activity has been an artificial part of the design process, external to the actual work of a learner: for example, pop-up questions or consultation with experts (Lin et al, 2001). This
thesis discusses the Behind the Screens workshop, which introduced an approach to reflective practice that “fits” in a constructionist learning community—where learners create projects based on their own interests. Appropriately, learners built stories about how and why they do what they do in the Behind the Screens workshop.

The youth who participated constructed digital stories of, by, and for themselves. Their stories could combine music, a voiceover, and images, and participants were encouraged to combine these elements to make a short video piece in which they reflected on their work. By reflecting on their work, they then would benefit from being able to articulate more clearly about it. Behind the Screens draws upon the work of MIT's Center for Reflective Community Practice. CRCP uses digital storytelling in its outreach to community practitioners, making the natural connection between story construction and reflection.

Reflection as a part of constructionism is certainly not new: the theory fully supports having learners reflect on their work. Constructionists suggest we build things in part to externalize our thinking to have an “object to think with” (Papert, 1980). Fostering a rich culture of reflection—or reflective practice—may allow constructionism to more fully live up to its potential.

Behind the Screens adapted its workshop form to a particular informal learning environment: the Computer Clubhouse. The Clubhouse is an international network of after-school centers offering youth from underserved communities access both to technology and to adult mentors who support the pursuit of creative projects based on the members’ own interests (see Chapter 3, The Clubhouse; Resnick, Rusk, & Cooke, 1998).
Three related, compatible traditions of research influenced this exploratory study, which lies between theory, practice, design, and empirical study.

<table>
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—Collins (1999)

**Design Experiments.** Design experiments engineer innovations in educational practice, using theory as a guide. The researchers goal is improved learning for the students, rather than empirically proving the advantage of an innovation by comparing a control group to an “intervention.” Instead, they recognize that in complex settings, like informal learning environments (such as the Computer Clubhouse) and other educational sites, dozens of variables interact. Isolating the effects of an “intervention” can be difficult, if not impossible. (Brown, 1992) Acknowledging the interdependence of these variables, design experiments note both how the intended design changed and how it failed, as this methodology “assumes continuous refinement” and multiple iterations (Collins, Joseph, and Bielaczyc, in press, p26)

**Clinical Interviews.** The study employs a clinical methodology as defined by David N. Berg and Kenwyn Smith, in which the researcher

- is directly involved with the subjects
- commits to “self-scrutiny” in the midst of research
- willingly shifts theory or method while the research is happening, if necessary
- describes social systems densely and thickly and “favors depth over breadth”
- participates in the system being studied

(Berg & Smith, 1985, p25)

Berg and Smith’s brand of clinical research seeks mutual benefits for all involved. In analyzing the data, clinical researchers seek to clarify underlying motives: Where does that come from? What does that come from?
**Ethnography.** The “data” collected in this study is a cultural analysis constructed within two frames. In the first frame, as with any ethnographic research, I interpret the environment and behavior that I observe. Even if this is done systematically there are limits to what can be generalized, and so I “generalize within cases, not across them.” (p26, Geertz, 1993) Ethnographic descriptions portray at least a sliver of the complex circumstances specific to the time and place studied.

The digital storytellers in Behind the Screens participated in producing the ethnographic data, as well, and this provided a second frame of construction. In this manner, digital storytelling is what might be called a *participatory ethnography*: the creators of digital stories join the research effort “to rescue the ‘said’ from its perishing occasions and fix it in perusable terms.” (Geertz, 1993, p20) “Digital ethnographer” Ricki Goldman-Segall found herself increasingly sharing her video camera with her students; similarly, the participants in Behind the Screens create “artifacts to represent themselves and their culture.” (1996, p27)
CHAPTER OVERVIEW

Chapter 1, this Introduction, has described the motivations for the work, the methodologies used, and the content of chapters to come.

Chapter 2 provides a Background on the history and form of digital storytelling and previous work that draws upon storytelling, narrative construction, and video production for reflection, understanding, and definition of identity.

Chapter 3, The Clubhouse, gives a “thick” description of the Computer Clubhouse Network and the two sites where I implemented the workshop.

Chapter 4, The Workshop Design, details the design experiment and workshop, including the original plan, goals for interviews and interactions, and a description of the participants.

In Chapter 5, Learning Stories, two case studies from each site are described through detailed narratives.

If you are in a hurry to read this thesis, start with Chapter 5.

Chapter 6, Discussion, reviews how the youth in the study reacted to and learned from the activity of the Behind the Screens workshop.

Chapter 7, Rethinking Workshops, examines some of the lessons learned as a mentor attempting to run a workshop in the Clubhouse.

Chapter 8, Rethinking Tools, suggests software design features, primarily in digital video editing, which might support reflection.

Chapter 9, Looking Ahead, ponders the potential for digital storytelling in the future.

The Appendixes include handouts given to workshop participants, a list of digital storytelling sites online, selected story scripts written by the youth, and prompting questions used for story starters.
BACKGROUND

STORYTELLING GETS A LOT OF good press—and it should. People have always used narrative to entertain, to educate, to communicate, to understand, and to inform. This thesis aims to add one more item to storytelling’s list of functions: to reflect. How does the act of constructing stories encourage young people to reflect on the creative work they do?

In this chapter, I define digital stories. Then, I connect the Behind the Screens workshops to previous work in storytelling, narrative construction, and video production. It lies at the intersection of reflection, education, anthropology, adolescent psychology, documentation, and video production.

DIGITAL STORYTELLING, DEFINED

Digital storytelling can be an ambiguous term. The Center for Digital Storytelling (CDS) in Berkeley, California, defined the particular form used in Behind the Screens. In CDS’s definition, digital storytelling integrates existing photographs, music, home video, and a voiceover into brief (2–5 minute) video pieces produced on the computer by individuals. Stories are identified, refined, revised, produced, and reviewed, usually in intensive three-day workshops. Facilitators encourage the budding digital storytellers to mine their own experiences and emphasize their own perspectives, and so digital stories often reveal personal struggles, liberations, and triumphs (Lambert & Mullen, 2002; Lambert, 2002; Freidus, 2002).

But digital storytelling refers a movement as well as a medium. Worldwide, groups of people gather together to come up with a story that they can tell, and to help their peers refine their digital stories [see Appendix B]. In November 2002, a community of 150 digital storytellers...
In their workshops, the Center for Reflective Community Practice and the Center for Digital Storytelling emphasize a set of elements they feel all successful digital stories should include. These elements differ only slightly.

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(Freidus, 2002) (Lambert, 2002)

founded the Digital Storytelling Association to coordinate and strengthen efforts already at play in 25 American states and eight countries (DSA, 2003). Digital storytelling serves as a tool for “self-discovery and reflection, community building and education, organizing, and advocacy” (Freidus, 2002).

My introduction to this approach came through a class taught by MIT’s Center for Reflective Community Practice (CRCP), which included graduate students and one professor from MIT and Harvard. Coming from the fields of architecture, urban planning, and media arts & sciences we were all involved with some kind of community work. We gathered weekly to develop scripts and storyboards and share our motivations in doing our work. At the end of the term, we screened all seven stories publicly. CRCP runs similar workshops in community centers in Boston and Springfield, Massachusetts, working with community advocates and building up capacity in neighborhoods to use technology for social good. In these workshops, participants answer not just “What do I do?” but also “Why do I do what I do?” (Freidus & Hlubinka, 2002)
REFLECTIVE PRACTICE

Asking questions like “What do I do?” and “Why do I do what I do?” help us reflect on choices that we make in practice everyday. By probing our decisions and behavior with conscious questioning, we articulate embedded tacit knowledge. “Tacit knowledge” refers to anything done almost as if it is second nature, any unconscious, in-the-moment choices. Donald Schöén studied how practitioners in their respective fields—such as doctors, teachers, architects, and musicians—develop their capacity for “knowing-in-action” and “reflection-in-action”: decision-making that plays out through their behavior, whose options they do not evaluate deliberately.

Schöén took great interest in how tacit knowledge could be made explicit and thereby become the object of reflection, a process he called reflective practice. In reflective practice, people “step back” from their work to consider what plans, observations, and achievements may have been overlooked, and what impact these might have on themselves, their colleagues and clients, and their future actions. (Raelin, 2001) For example, in Educating the Reflective Practitioner, Schöén observed architects in training to see how they learn the particular vocabulary of their profession, how they identify consequences of changes to their designs, how they discover and follow threads of implications as they arise, and how they change their “stance toward the situation” as they work with their material. (Schöén, 1987, p58)

Storytelling is a natural avenue to reflective practice. Telling stories about our work, our choices, or our process externalizes our lived experience so that we can make sense of it or “even catch a level of meaning that we only partially grasped while living through something.” (Mattingly, 1991, p235) Digital storytelling, in particular, fits well into the tradition of reflective practice. The construction of a narrative in visual, verbal, and musical form results in an artifact, and the process of creating it engages the digital storyteller in a conversation. This makes concrete what Schöén described design as “a reflective conversation with the materials of a situation”, as in this passage:
Each person carries out his own evolving role in the collective performance, "listens" to the surprises—or "back talk"—that result from earlier moves, and responds through on-line production of new moves that give new meanings and directions to the development of the artifact." (Schön, 1987, p31)

This metaphorical conversation, an internal one between creator and created, augments the conversation that storytellers might have in a workshop (with members of a story circle) as people tell their stories to one another.

DIGITAL STORYTELLING AND POPULAR EDUCATION

Reflection on our actions in the world—asking "Why do I do what I do?"—forms the core of what Paulo Freire called praxis. Freire engaged people in what he called dialogical action; this has two dimensions, reflection and action. Three possible combinations of these two basic dimensions were posed by Freire:

1. action without reflection leads to “activism”
   (doing without thinking)
2. reflection without action leads to “verbalism”
   (talking without doing)
3. action and reflection together lead to personal and societal transformation through real work
   (theory and practice in dialogue with one another)
   “Action + Reflection = word = work = praxis”
   (p68, Pedagogy of the Oppressed)

Freire—or the tradition of “popular education” that grew out of his work with illiterate adults in Brazil—heavily influences the digital storytelling movement today. In the 1960s and 1970s, following Freire’s lead, tens of thousands of “culture circles” of peasant farmers gathered to acquire the skills of reading and writing through provocative, critical dialogue grounded in the students’ reality. The program emphasized that facilitators should research the local dialect, including regional vocabulary and common sayings. Facilitators also created “codifications” of local circumstances—images of real-world situations intended to generate dialogue that had relevance to the students’ lives. In this way, the cul-
ture circles valued what the gathered students already knew, and built from that knowledge with students as agents of their own learning, in the service of achieving what he called conscientização, which is roughly translated from the Portuguese as “critical consciousness.” The learning was contextualized and meaningful:

Acquiring literacy does not involve memorizing sentences, words, or syllables—lifeless objects unconnected to an existential universe—but rather an attitude of creation and re-creation, a self-transformation producing a stance of intervention in one’s context. (Freire, 1970, p48)

This Freireian approach to literacy—an act of “creation and re-creation” and “self-transformation”—closely parallels the structure of digital storytelling workshops. By starting with experiences, then finding personally meaningful and relevant images, text, and music, and then putting these into story form through careful construction of a single digital story, participants acquire a different kind of literacy—perhaps this is media literacy, perhaps another kind of literacy. The exercise honors pre-existing knowledge participants bring to story circles at the same time that it may challenge their notions of who has the right and privilege of expression and communication.

DIGITAL STORYTELLING AS BRICOLAGE

By stitching together diverse elements in a software environment, creators of digital stories engage in a form of narrative bricolage—that is, they “construct theories by arranging and rearranging, by negotiating and renegotiating with a set of well-known materials” (Turkle & Papert, 1990). Such bricolage is a fluid experience in the computational medium of digital video editing.

This use of the notion of bricolage originated with anthropologist Claude Lévi-Strauss. He described the behavior of a bricoleur (someone who collects unwanted items that may be of later usefulness) as he begins his work:

His first practical step is retrospective. He has to turn back to an already existent set made up of tools and materials, to consider or reconsider what it contains and, finally above all, to engage in a
sort of dialogue with it and, before choosing between them, to index the possible answers which the whole set can offer to his problem. He interrogates all the heterogenous objects of which his treasury is composed to discover what of each of them could 'signify'... (Levi-Strauss, 1966, p18)

Lévi-Strauss further described how the bricoleur “speaks’ not only with things... but also through the medium of things: giving an account of his personality and life by the choices he makes between the limited possibilities” (1966, p21). Such negotiation with collections of concrete symbols happens constantly as digital storytellers weave their various media elements into a narrative. That constructed narrative then serves as a personal mythology—true though the facts may be—that, as Lévi-Strauss put it, “giv(es) an account of his personality and life by the choices he makes between the limited possibilities” (1966, p21). This account helps them understand themselves and represent themselves to others.

In the case of digital storytelling, storytellers consider such aspects as voice, point of view, and narrative arc as they place media objects in the video editing environment, and this complex negotiation is a form of theory-building and meaning-making.

**DOCUMENTING TO REFLECT**

At a very basic level, digital storytelling is a form of documentation, in that we make a record of who we are, what we are thinking, and how we relate to our experiences. The Reggio Emilia schools for toddlers in northern Italy privilege the documentation of the creative process, and they inspire other educators around the world with their devotion to documenting their young students’ learning stories. The resulting rich record invites observers to experience learning as the children have experienced it. It also emphasizes the high value placed on community, memory, and narration. (Rinaldi & Gardner, 2001) Reggio Emilia’s Carla Rinaldi wrote,

In representing our theories, we ‘re-know’ or ‘re-cognize’ them, making it possible for our images and intuitions to take shape and evolve through action, emotion, expressiveness, and iconic and symbolic representations (the ‘hundred languages’) (Rinaldi & Gardner, 2001, p81)
She called documentation, “visible listening,” and she linked “the construction of traces” to the formation of relationships; those relationships in turn build knowledge (p83). In physical form, documentation becomes the object of discussion and the focus of reflection (Rinaldi & Gardner, 2001).

The Reggio Emilia schools work with very young children, and therefore much of the responsibility for documentation resides with an adult, known as an atelierista, who oversees the “multiplicity of languages” children may choose to employ in their work (Giacopini, 2001).

In Behind the Screens, adolescents would take the role of atelierista, documenting their own work themselves and thereby sharing the role of researcher. Youth were not merely “subjects” in a study, but participated meaningfully in the investigation. Involving participants in the work of research resembles the approach taken by a researcher in reflective practice, who thought that “(t)hose studied must come to see something at stake in examining their own practice, they must be willing to risk a certain exposure to themselves and to colleagues, they must even be willing to chance the possibility of changing and taking new actions.” (Mattingly, 1991, p255) Such involvement runs the risk of revealing sensitive material. In the workplace, sensitive material might be “actions, accidents, alliances, and enemies.” (Mattingly, 1991, p256) With adolescents, day-to-day life has its own complexity and risk. Giving youth the responsibility for “telling themselves” and choosing what is revealed and what is hidden involves them as collaborators in ethnographic research.

**VIDEO PRODUCTION WITH ADOLESCENTS**

Dozens of youth organizations and media production companies have engaged youth in directing, shooting, and editing video. Two examples in the Boston area introduce video production to teenagers, and use that activity as the basis for reflection.

For over a decade, teenagers have produced video through the Mirror Project, a program based out of Somerville, Massachusetts. Six teens at
a time learn to operate video equipment, compose shots, and attend to lighting and sound through experiential workshops lasting four months. Adults help them edit the vast recorded footage into personal, moving documentaries of 10 to 30 minutes. The “aim is to help individuals to discover and show what they themselves know rather than projecting preconceptions on them” by “mentor(ing) students through a process of self-discovery and self-representation.” (Mirror Project website, 2003) Although there is some planning and post-production work, much of the editing happens in-camera.

The Video Intervention/Prevention Assessment (VIA) project at Children’s Hospital Boston provides adolescents facing chronic illness (such as asthma) with video cameras. The teenagers document their lives to help clinicians understand what enduring those health conditions feels like to them. The VIA researchers encourage teens to record “anything and everything they feel reveals their lives, their dreams, their successes, and their frustrations.” Some of the teens address the cameras daily, recording a kind of video journal. (VIA Project website, 2003) The project takes its cues from the field of visual anthropology, which analyzes cultures through the images those cultures produce (anything from petroglyphs to websites). The camera enters the adolescents’ lives as what VIA researchers consider an “objective” eye, documenting all that the lens might capture without selectivity (although the youth do choose what to film and when). This gives the clinicians a richer picture of circumstances that may contribute to the illness, and provides an opportunity for collaborative investigation. That is, responsibilities for data gathering are shared by the patient and the health worker. The teens participate in the data collection by producing these “multidimensional, complex, and real portrayal(s)” (Rich, Lamola, Gordon, & Chalfen, 2000, p164) The resulting videotapes are logged by multiple observers so that the collected data might later be processed by other researchers studying, for example, the relationship between home environment and illness.
THE MEANING OF "BEHIND THE SCREENS"

Like VIA and the Mirror Project, Behind the Screens invited teenagers at Computer Clubhouses [see Chapter 3, The Clubhouse] to share information about themselves that might not be superficially obvious. In Behind the Screens, there were at least two modes of reflection. While making the story, participants reflected on their work. They also reflected on the process of making their digital stories, especially when completed—the finished product served as an artifact and an object of reflection.

Often, we view examples of creative work produced by Clubhouse members in their final form. In "Behind the Screens," the youth were asked not just to share their final work, but also to share their motivations in their work or to reveal how they went about making it. Just like the "behind-the-scenes" documentaries the youth might see in the popular media, divulging the secrets of their favorite media stars, their digital
stories presented an opportunity to share things people might not know about them and their work. In short, the culturally-relevant term “behind-the-scenes” became an accessible way to talk about “reflective practice.”

The name “Behind the Screens” also recognized that the final digital story may not capture the nuances of the experience of constructing the digital story. Much happens in-process as a “reflective conversation with the materials of a situation” (Schön, 1987, p31). The name “Behind the Screens” acknowledged the deeper significance of any creative process that even the dynamic form of digital storytelling might fail to capture. Yet, it does a better job than, say, a written essay, at portraying the reflective conversation in a form that might be understood by others. This study is enriched by hours of interviews with youth talking about their interactions with the activity of digital storytelling.

The form of digital storytelling offered a particularly well-suited medium for Clubhouse members to construct personal reflections; by building the stories, the process of reflection in this constructionist learning community was itself constructionist. As in the VIA and Mirror Projects, the finished stories serve as “objects to think with” (Papert, 1980; Kelliher, 2002), artifacts that offer an opportunity to externalize tacit knowledge or lived experience and reflect on it. Sharing it with others through the final digital story invited others into the experience, as with the documentation at the Reggio Emilia schools. By adopting the approach of reflective practice, the workshop encouraged the teens to step outside of their creative process, examine their understanding and process, and develop it further.

Digital stories may also mediate relationships with others in the community of learners. In the next chapter, I focus on two communities of learners that invited Behind the Screens into their daily lives: two sites of the Computer Clubhouse Network.
GROUPS LIKE THE CENTER for Digital Storytelling in Berkeley, California, and the Center for Reflective Community Practice at MIT have long used digital storytelling as a tool for community advocacy and empowerment. The Behind the Screens project explored how the workshop format used by both CDs and CRCP might be adapted for use within an informal learning community, specifically the Computer Clubhouse Network. I implemented the workshop at two sites in the Boston area: the Beacon Computer Clubhouse at a large museum and the Computer Clubhouse at the Clayton Boys & Girls Club. This chapter describes the Computer Clubhouse model generally, then focuses particularly on the Beacon and Clayton locations by describing the similarities and differences between the two sites in terms of population, operation, activity, and setup.

THE SEEDS OF AN IDEA

Now a thriving network of more than 70 sites around the world, the Computer Clubhouse began a decade ago in response to a genuine desire among a handful of curious teenagers for a place like it. During spring vacation week 1992, Natalie Rusk, the education director of what was then The Computer Museum in Boston, organized activities in which visitors to the museum's exhibit halls could build and program kinetic sculptures and simple robotic creatures using a programmable construction kit called LEGO/Logo. Some of the kids who took part in these activities came back the following week asking, “Where’s the LEGO/Logo?” Rusk later learned about their return, and she further discovered that the young people had been sneaking into the museum because they were unable to pay the entry fees. While museum security could have perceived this as a problem, Rusk wisely recognized it as an opportunity. These kids, who weren’t doing well in school, were motivated to come tinker with mechanisms and programming.
Rusk told Mitchel Resnick, a researcher at the MIT Media Lab and co-developer of LEGO/Logo, about the experience. Rusk and Resnick realized this request—"Where's the LEGO/Logo?"—could not go unanswered. Over the next year and a half, they and exhibit developer Stina Cooke gathered support at the museum for an ongoing initiative that could accommodate this intrinsic interest among youth for a place to use technology creatively. In the autumn of 1993, the first Clubhouse opened its doors on Museum Wharf, below The Computer Museum, to provide youth ages 10 to 16 from urban communities with access to digital technologies and the support of volunteer mentors.

THE FOUR GUIDING PRINCIPLES

The design that founders Rusk, Resnick, and Cooke conceived was presaged by a passage in the book _Mindstorms_ written a dozen years prior to the Clubhouse's founding, in which author Seymour Papert describes "samba schools for computation" where people of all ages and levels of expertise might use computers to explore mathematical concepts. He anticipates such an effort as a "manifestation of people interested in personal computation, interested in their own children, and interested in education." (1980, p182) In fact, the theory of constructionism that Papert posits in _Mindstorms_ forms the core of the Computer Clubhouse model: learners should build their knowledge by building things. At the Clubhouse, this type of constructionist building ranges from rendering collaged self-portraits, to architecting complex interactive websites, to engineering the new generation of programmable-brick sculptures. Each site offers an array of several dozen software applications, just like those used by professionals in the fields of design, engineering, and media production.

Such _learning by designing_ is one of the four "Guiding Principles" (Resnick, Rusk, & Cooke, 1998) that define the Computer Clubhouse model as it has been adopted from Albuquerque to Haifa, from Manila to Sao Paulo. Every site adopts the model in ways appropriate to the culture of the community-based organization hosting the Clubhouse and the people and neighborhoods it serves.
The second guiding principle, following your own interests, means that no pre-set classes or curriculum plans define what members learn. Occasional workshops may spark project initiatives or encourage the use of particular software titles, but more often members come in with an idea of what they want to do, and they seek out the help they need to get it done. Members explore the tools of the Clubhouse freely, and they rarely consult the shelves of manuals, handbooks, and tutorials.

Instead, members turn to others nearby who may be able to guide them in their task. The Clubhouse places high value on supporting community connections, the third guiding principle. Within the Clubhouse, a “community of learners” emerges, where people learn from one another (Rogoff, 1994; Lave & Wenger, 1991; Brown, Collins, & Duguid, 1989). Even adult mentors take on their own creative challenges and tackle new software, so members also see adults in the process of figuring something out for themselves. The Clubhouses take seriously their connections with communities outside the Clubhouse as well, and the Network staff carefully screens the community-based organizations that apply to host Clubhouses to make sure they have deep roots in the surrounding neighborhoods. Members at some sites have begun using the technological tools available at the Clubhouse to improve their neighborhoods (Burd, 2002, 2003).

Clubhouses function like large families. Members take shelter in the safe environment of the Clubhouse, one characterized by respect and trust, the fourth guiding principle. As in any family, everyone shares responsibility for the Clubhouse’s well-being and harmony. Critique happens informally with members and mentors offering feedback in a generous and constructive spirit. Everyone at the Clubhouse wants to be there and has intentionally chosen to come—without coercion. Members find refuge from the stresses of their day-to-day lives, including the pressure from school and at home. They are free to create, independent of unduly harsh judgment by their peers or the adults with whom they interact.
Physically, Clubhouses all over the world have a similar feel. Upon entering any Clubhouse, a visitor might first notice the images papering the walls—printouts of members’ projects, sometimes signed by the artists, dominate wall surfaces often painted in muted shades of blue and purple. A large gathering table sits near the center of the room, and frequently it is painted a bright apple green color, as an homage to the table at the very first Clubhouse. This “Green Table” (as it is affectionately if descriptively called) has no computers on it, and it has instead come to serve as a kind of “village green” where members and mentors may gather to discuss issues relevant to the Clubhouse community (Children’s Partnership, 1998). It also provides more ample space for drawing and building than is otherwise available in the areas adjacent to the desktop monitors. Arts and crafts supplies also figure prominently in the room, with a bowlful of markers readily accessible for impromptu sketches.

Between 10 to 20 computers fringe the room, usually arranged on tables which form bays or pods of workspaces more intimate than the mundane rows that are typical in “computer centers.” Digital cameras, a video camera, monitor-mounted web cams, an Intel Play Microscope, a color printer and a black-and-white printer, and scanners are also available. Rolling chairs allow people to scoot easily from one computer to another across the carpet, if a neighbor were to invite them to come check out an innovation onscreen or to help debug a problem. One computer near the door serves as a sign-in kiosk from which Clubhouse coordinators compile usage data and correlate them with demographic profiles in their annual reports.

Clubhouse members save their project files to a shared central server. To exhibit their projects outside the local Clubhouse, members may create online portfolios or post their final, web-ready file formats to the Computer Clubhouse Village, a password-protected intranet available online to all Clubhouse sites. While it suffered some fall-off in popularity recently because of its slow performance, the Village continues to be used for announcements, discussions, and exchanging project ideas in the community of coordinators.
Such a visual description loses one of the main characteristics of the Clubhouse: the sound. It is alive with music, and frequently five different songs will play off five different machines simultaneously, in a cacophonous Clubhouse remix. Recent favorites in the Boston area include a fast reggae beat by Sean Paul called “Get Busy” and the hip-hop track “In the Club” by 50 Cent. Hardly a day can go by without hearing their respective refrains, “shake that thing” and “it’s your birthday,” on a seemingly endless loop. Original music production by members happens in a sound-proofed music booth with a synthesizer, high-quality microphone, other sound equipment, and a networked computer.

Clubhouse sites around the world. From top left: A Green Table meeting in Costa Rica; the music studio at Sao Paulo; a construction workshop in Delhi; a coordinators’ regional gathering in Amsterdam; art displayed at Chelsea; an urban mural inside Hayward; an impromptu photo studio in East Palo Alto; before opening Ayala-Intel Computer Clubhouse at Mater Dolorosa Parish in the Philippines; a wall of mentor profiles in South San Francisco.
THE PEOPLE

The mentoring model of the Clubhouse subtly distinguishes it from other technology education initiatives. Mentors come from nearby offices and academic institutions and commit to at least four months of volunteering a minimum of two hours weekly. Members consult mentors as knowledgeable resources for technical help, or just to associate with them as older friends, in the spirit of mentoring programs like Big Brothers/Big Sisters. Unlike that program, however, where youth and adults are paired one-to-one, the Clubhouse has a pool of mentors who circulate in the room. Relationships between members and mentors emerge over time. Certain pairs end up working together really well, but these pairs are not “assigned.”

The Coordinators who oversee the day-to-day operations of the Clubhouse may have backgrounds in some combination of art, media production, technology, youth advocacy, and community organizing. A few Clubhouses, including Beacon, are run by alumni of the program.

Members generally come from neighborhoods of a low to lower-middle socio-economic status. For the urban locations in the United States, members tend to belong to families that immigrated within the past generation or two, and so on any given day there might be several languages spoken among members of the Clubhouse and many ethnicities represented. Whether members come as part of a larger program or they heard about the Clubhouse through word of mouth and arrive independently largely depends on the community-based organization which sponsors the Clubhouse.

In this respect, the two sites in which I piloted the Behind the Screens project could not have been more different. I now describe the Beacon and Clayton Clubhouses in greater detail. It should be noted that the description of Beacon benefits from a much longer observation of the space: in addition to spending an additional month there with the Behind the Screens workshop, I have served as a mentor there for over seven years, since November 1995.
BEACON: AN OLDER, INDEPENDENT CROWD

The Beacon Computer Clubhouse is one of the oldest sites in the Network. Three years ago, Beacon relocated to its current location: a remote wing at the end of a long hallway to the parking lot of a large museum. Because of its proximity to Network staff offices and the MIT Media Lab, Beacon sees a constant flow of visitors interested in the Clubhouse. These visitors include new coordinators from around the world who receive much of their introductory training at Beacon.

One of four spaces in an area dubbed the Technology Learning Center, the Clubhouse represents a stark contrast to the three classrooms adjacent to it, where rows of PCs face forward to a projection screen. Clubhouse members must type in a special code to enter the Technology Learning Center, or if they forget it or are coming for the first time, they call the Clubhouse and hope nobody is making a lengthy phone call, as often happens.

Few sites in the network are hosted by museums, and the Beacon's links with the surrounding community are understandably rather weak. The museum has major streets on three sides and a large body of water on the fourth. The nearest residences are two high-rises of luxury apartments. Many of the kids come to Beacon from two distant neighborhoods at least thirty minutes of travel via two subway lines. A few older members come from Fitchburg and Randolph.

Beacon is not easy to get to for anybody. Members in particular must be highly self-motivated to come. Groups of friends don't intermingle too often. Some come in families. In one case, five brothers, ranging in age from 10 to 20, often hang out at the Clubhouse at the same time—the youngest two come together, but the older three invariably arrive inde-
pendently of one another. Except for Monday, Girls Day, when boys are not allowed to come, Beacon rarely has more than a few girls in a room full of young men. Because Beacon is an older site and is not in a real neighborhood, the average age tends to be higher than other Clubhouses—most members are in high school.

For some privacy and a little bit of peace, members take breaks in a sterile hallway and foyer area with hard benches just outside the Clubhouse. A major teen magnet beckons just a ten-minute walk away: one of the few malls in the Boston area accessible by public transportation. Many members will take a break from the Clubhouse with a visit to get snacks from the food court in the mall.

In the middle of the Clubhouse space, the Green Table serves as the gathering place for mentors and the most artistic members, with a different mix depending on the day of the week. Mentors congregate to chat, catching up with one another and with members who might be sitting nearby or wandering past the Green Table. On certain Saturdays, there can be a dozen adults present at Beacon. They very occasionally outnumber the youth. This figure is even larger when including what I call mentors—those members who are older than 18 years old and continue to come to the Clubhouse, often after a long day of work. Of these devoted Clubhouse family members, founder Stina Cooke often says, “Once a member, always a member.”

Having been open for ten years now, and because the sponsoring organization, the museum, does not serve youth only, Beacon has many more of these older members continuing to spend time at the Clubhouse than one might see at other sites. (In contrast, an 18-year-old at a Boys & Girls Club-based Clubhouse would age out of the program because the Boys & Girls Clubs serve only a well-defined age range.) Nelson, Beacon’s coordinator, approaches members to become mentors after they turn 18. (Nelson himself began as a member, then became a mentor, then an assistant manager, before becoming Beacon’s coordinator over five years ago.)
But mentors' friends continue to be members, so the distinction is fuzzy, and the transition is ill-defined. And yet the notion of "mentor" is an interesting one that merits further examination. Some mentors clearly come to act as mentors, helping younger members hone their skills, but others do not. There is a cohort of twenty-somethings who come every Saturday when Nelson and the assistant manager relax the rules against playing video games. They plug in their PlayStation and play loudly, even as the younger members consumed with constructing animations in Flash shout their questions to other mentors over the loud sound effects. More often than the younger members, these mentors will break a rule against chatting online or surfing www.blackplanet.com and www.migente.com looking for young women to flirt with.

A hybrid role for these mentors is emerging at Beacon, but it has not yet been well articulated. Mentors might lead workshops related to their particular interests. Ricardo, for instance, introduced his "Fighters" project around the Green Table, inviting "even the ladies" to sketch characters for an ambitious video game project that will bring together the artwork of as many members as volunteer to participate. He demonstrated fine leadership skills as he coordinated this meeting.

Of course, a fuzzy distinction between members and mentors is not necessarily bad: mentors should behave like members, and vice versa. As described earlier, mentors work on their own projects so that members can see how their curiosity guides their creative process, and how adults go about discovering something new. In this way, the Clubhouse generally is a "community of learners" (Rogoff, 1994) where everyone gains from what others may show them.

Many of the members who come to Beacon excel in art. They gather at the Green Table to engage in "drawing contests": one of the participants shouts out a challenge, such as "fat man" or "evil robot", and then four or five people spend the next half hour or more laboring over a detailed character sketch. Nelson (a respected artist among the youth) and other adults also frequently join the contest. Once their drawings are complete, the "contestants" gather at one end of the Green Table and dis-
Miles competing in a drawing contest at Beacon

cuss the virtues of each drawing, including some biting criticism that frequently gets personal—the artists, after all, also consider themselves close friends and socialize after hours. There is no prize besides the esteem gained from the fellow drawing contest participants.

Members often move the furniture in the middle of the room for another popular activity: breakdancing. They pull up a playlist of MP3s and step from side to side then dive to the floor, easily and gracefully posing in some acrobatic stances which defy the laws of gravity operating on the rest of humankind. A square space ten feet on a side provides enough room for the few “b-boys” in the room to stand on their heads and swing their legs around in a wide radius, although there are some near misses. Occasionally, when the breakdancing slips into ninja moves inspired by Asian action films, a pair of members may crash into a nearby chair and slide into a table with a bit of rough-and-tumble fanfare. Nobody is hurt, and everybody gets up laughing.

Verbal jousts replace physical ones in another off-the-computer activity centered around music: freestyling. The members pop in a CD full of a variety of simple, repetitive beat loops, and two to four members circle in front of the computer and prepare to “battle.” After a few measures of hand gestures thrown to the rhythm, with some “yeah”s and “listen up, yo”s, the battle begins. The two members hurl completely improvised
invectives that push the boundary of the Clubhouse tradition of respect and trust. In this random example I recorded, one member insults the other, accusing him of using lyrics he had written down earlier. The two make reference, also, to the small blue device I am holding, my digital audio recorder, which they integrate into their lyrics without missing a beat:

I'm about to go home, and I can't hit the booth,
I'm telling the truth
I come clean. I shoot your king.
I shoot your boys. I take your guns. I only use them as toys.
I'm choosers and users, real metal, I'm real peril.
I write more rhymes than *The Boston Herald*.
I'm here to battle you
Oh my she got a cell phone from two thousand n four [glance to me]
I open the door, you coming tomorrow?

*[the second battler interrupts]*
You wanna borrow the hat?
Kinda whacked! Not black!
I'm Puerto Rican, not leakin',
My body start flowing out like blood.
You don't want to "eff" with this.
I was blinded, I stand reminded —
You got this shit recorded? [glance to me again, everyone laughs]
And you're gonna report it....

*[the first battler jumps in]*
Yo yo yo , listen up brother, you better quit.
Listen up brother, you better quit
Your ring's all right but whassup with your freestyle shit?
C'mon dawg, I know some shit you said was fuckin' written,
Everything you did was, what, not workin'
I got it all shootin' off right from the head
Right from the brain!
The shit you're doin' here is actually kind of lame
What's your first name?

*[the music stops for a moment, and everyone listening laughs]*
The two rattle off these rhymes while circled spectators nod their heads with the beat, listening for an ingenious turn of phrase that they reward with a smile, a laugh, or verbal response. Battles between the most skilled freestylers occasionally captivate the attention of up to a dozen people in the Clubhouse, particularly the mentors who stand dumbfounded by the verbal agility the kids demonstrate. Nelson keeps half an ear on the language the kids use to make sure that they keep it clean, and if he has to remind them more than a few times "no swears," he shuts down the battle.
A few of these freestylers belong to Clubhouse-based record labels that operate a small cottage industry in producing CDs. At Beacon, these labels—really just groups of members who collaborate on their music projects—can do it all: compose their lyrics in a word processing program, record the songs in the music booth, mix the tracks using music software in the booth or in the Atoi from hiodng main room, design cover art and labels, print the booklets for the case, burn multiple copies of the CD once all the tracks have been arranged, design web pages promoting their CDs and release parties, and finally market the CDs to a willing consumer base of Clubhouse family. A large proportion of the members who come regularly devote their energy primarily to this effort. The 90-minute slots for the music booth fill up as soon as they are posted each Wednesday. As a result, only when someone misses their slot is the booth available for spontaneous use—or on Girls Day, when the boys who constitute the labels cannot come.

The only time restrictions at Beacon are the slots for the music booth and the overall hours. Otherwise, members generally drift in and out of activities and projects at will, and Nelson usually doesn’t get everyone out the door for at least an extra half hour after closing. Beacon is open six days a week after school (from 2PM). It closes at 5:30PM Tuesday through Thursday and at 8PM on Friday. On Saturday, it is open 10 am to 4PM, although the assistant manager has kept the space open until 9PM at least once on the weekend. On Mondays, Beacon is open for girls only until 7PM.
During the course of the Behind the Screens project, the members also faced another kind of time restriction: a deadline for submitting pieces to the Boston CyberArts Festival in time to be mounted and hung in time for the exhibit in late April. To prepare for this, a dozen new mentors, mostly from a local design school, worked with the youth to organize their portfolios. Celebratory events like CyberArts, the anniversary party, regional and Network-wide gatherings inspire the members to focus on creative “products” they can exhibit.

Nelson plays an important role in setting the tone for Beacon. He is an overworked man who gives himself fully to the Clubhouse. He demonstrates how to provide help and advice without being overbearing. He communicates in terms that respect where the youth are coming from, and he is always kind and patient and never judgmental. He rarely sits for more than a few minutes, and he circulates continuously in the room to address technical and creative challenges. He also pulls members aside to advise them about some of the personal issues they may be confronting. In this way, he sees parallels between his current role as a youth advocate and his adolescent interest in becoming a priest. He knows that he serves as a father figure for many of the young men who come to the Clubhouse, who come from rough backgrounds and may not have other men in their lives whom they respect. Happily, he takes that role very seriously.

The Boston CyberArts festival showcases international artists who use technology in their work. See http://www.bostoncyberarts.org
CLAYTON: A COMMUNITY WITHIN A COMMUNITY

The Clayton Computer Clubhouse sits on the other side of town, near the heart of Dagny Circle—a vibrant public transportation hub with busy, small local businesses interspersed with boarded-up storefronts. The buildings bear fine architectural detail that indicate a more graceful history in decades long past. I’d heard about redevelopment initiatives in Dagny Circle for years before I first visited this Clubhouse as I began the project. I instantly liked the neighborhood—this Clubhouse is in a neighborhood: in the Boys & Girls Club, with sub shops across the street, a police precinct, health center, and public library next door, and residential areas very close in the other direction.

The Clayton Computer Clubhouse is integrated into the general operations of the Boys & Girls Club. For better or for worse, it enjoys no distinct identity of its own. To my surprise, the kids don’t think of the Clayton Computer Clubhouse as much more than the Boys & Girls Club’s “Technology Center.” Any reference to the Computer Clubhouse as “the Clubhouse” confuses them. In this case, the community-based organization hosting the Clubhouse is known as the “Club(house)”—and while the kids use “Club” and “Clubhouse” interchangeably when referring to the whole building, I use “Club” to refer to the host organization and “Clubhouse” to refer to the room where the workshop took place. All Club members are Clubhouse members, so I use the term “members” to refer to any kid who could be in the room.

Activities during Social Rec at Clayton
The members consider the Clayton Computer Clubhouse just another one of the many offerings of the Club. A scratchy, nearly unintelligible public address system directs them to shift from one activity to another on the hour. This rotation schedule includes:

*Arts & Technology.* A large table covered with brown craft paper seats a dozen members and two arts & crafts teachers; those who want to go to the Clubhouse go here first and elect to leave when the assistant manager visits the room a few minutes past the hour.

*Social Recreation.* A large room with pool tables, a few board games, jump ropes, and a TV set up for playing video games, plus lots of space to just hang out and talk.

*Gym and Swimming Pool.*

*Teen Center.* A smaller room, similar to Social Rec, but with a TV and five computers that have Internet access, shoot-em-up games and SimCity, but no software for creative expression.

Many other activities at the Club keep certain members busy—with the Keystone Club (a leadership and service council), Young Women's Group, Young Men's Group, swim practice, basketball practice, and the Book Club. Several also work at the Club supervising younger members. There's always a lot happening.

An eight-foot-long banner reading “Homework First” was the first thing I noticed in the Club's lobby. Signs reading “Did you do your homework?”, posted all over the building, remind all members that they are expected to finish school assignments before doing anything else. Several tutors inhabit the library to help kids who are struggling. The library has four computers for kids to use for word processing and Internet research, and any overflow gets sent to the Clubhouse to use any available computers there.
Members of the Women's Group gathered informally in the Teen Center (right) and, later, to sell hot dogs and what they advertised as "cheap candy" in the lobby of the Club (below).

The Club closes at 6PM every weeknight. Teens may stay later, until 8PM, and they may use any part of the Club (including the Clubhouse) freely. Despite the wide age range of the Club (6–18), it made the most sense for Behind the Screens to work with the teens, because they potentially had more freedom in their schedule to work for more than an hour at a time, at least after 6PM.

This conflict between the rotation schedule and the Clubhouse model's need for open-ended, flexible scheduling represents a major challenge for Clubhouse coordinators at Boys & Girls Club-sponsored Clubhouse sites nationwide. How can these sites give kids the time and space for pursuing their own interests when 55 minutes does not suffice for making meaningful progress on typical Clubhouse projects? While the Boys & Girls Club staff certainly is open to pulling kids out of other rotations to work on their projects, this requires additional planning, like knowing who may show up to work on a project each day and reserving some computers to accommodate them.

The Intel Computer Clubhouse Network is one of several sponsors for the space of the Technology Center, and each funder has a slightly different agenda. In the end, the Boys & Girls Club's educational mission directs its activity. Merrill, the Clayton coordinator, describes this as "more structured, more rotation-driven, more educational software,
online tutoring, things like that.” He connects with the Clubhouse network “as a resource—(for) trainings, professional development opportunities, conferences, meetings, and sharing information.”

Five years old, the Clayton Computer Clubhouse is a more mature site within the Network—one of the first local extensions when the Clubhouse grew from being just one site at The Computer Museum to a small Boston-area network. It departs somewhat from the typical model of the Clubhouses that have been established more recently. (There is no music studio, for example, although plans to install one soon are in the works.)

The room is bright and colorful. Natural light streams through a skylight and large windows along one side, dampening the harshness of the institutional fluorescent lamps. The propped-open windows alleviate some of winter’s extremely overheated radiators. Chairs sliding across the painted concrete floors produce a constant, unpleasant background din. Several members point to the floor with great pride, as they helped create the mural on it. The central table usually holds stray equipment, binders of curricula, and potted plants, but members rarely work at it. With the Boys & Girls Club’s arts and crafts room down the hall, few creative supplies live in the Clubhouse itself. Finding a blank piece of paper and a marker to use for a sketch was difficult.

Time in the Clubhouse runs in parallel with Art, so members volunteer to be pulled away from sculpting clay and sketching still lifes to use Mr. Merrill’s computers. (Club members address all staff formally: I was called Miss Michelle.) The concurrency with Art makes sense when the kids use the Clubhouse for creative projects. However, the overwhelming majority spend their time completing homework assignments or surfing online—usually listening to music via www.launch.com or playing non-violent games. A few weeks into the project, Club members were could no longer access www.migente.com and www.blackplanet.com. While this reduced the time they spent reading about those websites’ members, it also eliminated one creative endeavor I witnessed in the Clubhouse that was guided by the teens’ own interests: building multiple personal web pages to post on those websites.
Merrill has an easy, hearty, almost operatic laugh and a warm manner with the kids. They come to him as he works in the back corner of the room to ask for advice, to chat, or for technical help. They genuinely care for him as they do the other staff at the Club. Merrill's assistant coordinator, Tyra, runs the room for the most part. This allows Merrill to fulfill other administrative duties—such as the design of flyers and brochures for the Club—that limit the time he can spend with the kids. When I had asked him to pass along a message months into the project, Merrill did not recognize the names of at least two workshop participants who I thought regularly attend the Club.

Although many kids come to the Club every day, not all of them do; in fact, some kids rarely visit the Clubhouse. Clayton staff from throughout the Club are a close-knit group. They would allude to kids' legacies of behavioral problems, which were not obvious to me in practice, after the kids had left for the day: "It's so nice to see (so-and-so) focusing on your project. He's usually so hard to get through to. He has trouble focusing." This was particularly true in a couple of cases with kids who had been working very hard. I noticed that I couldn't forget that I had heard this, and that the information altered, even slightly, my relationships with them.

Clayton suffers for a lack of adult mentors. Some teen staff step into mentoring roles, helping younger kids. Members within the same age cohort ask questions of one another. But since most of the activity is word processing, game-playing, and homework, questions rarely arise. Without consistent mentors to give a helping hand, neither Tyra nor Merrill have the time or space to support members' creative projects on a day-to-day basis. Instead, they encourage such work through themes of the month (like "video editing") which get posted on the bulletin board. Focused workshops also catalyze creative work; during spring vacation week, for example, Merrill invited another local organization, WiredWoods, to run a web design workshop.

On some days, the Clayton Clubhouse features Internet scavenger hunts, where kids seek out prescribed facts off of websites, such as "What is the mission statement of the Boston Boys & Girls Club?" The
youngest Club members, ages 6 and 7, are especially ravenous consumers of the video game Magic School Bus and of the websites of Nickelodeon and Cartoon Network. Tyra announces when the members may shift from one website to the other, at the half-hour.

Tyra, who seems older than her 20 years, demands order and civility. If the members run into the Clubhouse room too boisterously, Tyra directs the whole group back into the hall to form a single file and return more quietly. Any misbehavior results in getting sent out of the Clubhouse and back to the art room. In the sometimes chaotic environment, innocent bystanders may get blamed for incidents they did not cause nor fuel.

Some rules were posted prominently on the wall:

- No coming and going once in the computer room.
- Respect each other and this space: no name calling, swearing, foul language, or ethnic jokes.
- NO PLAYING IN THE CHAIRS!
- No running or horsing around please be responsible.
- Please keep CD music down low so everyone can think.
- Please keep your voices down so others can concentrate.
- Do not play with your disks as your documents will be ruined.
- Check the calendar at the door for scheduled assignments, opportunities, and other agenda.
- Hang up coats and put book bags on coat rack tray.

Members “wrote” their own rules, too. With at least four different kinds of chairs of varying comfort, and not enough seats to go around, empty chairs could rarely be considered available chairs, and the kids shared an unspoken code about chair territory rights. Several members insisted on using only the computers with good audio and access to www.launch.com, and even the most devout participants in the Behind the Screens workshop couldn’t proceed on their digital stories before queuing a few tracks. Sometimes a few members would gather around a single computer and sing along to a popular song together (indicating the need for the anticipated installation of Clayton’s music studio.) Like many Clubhouses, the volume of the Clayton Clubhouse became overwhelming at times, and one of the staff would shout to turn down the music at least once an hour.
A shared internal server exists, but many of the members I worked with did not know how to log into it and rarely saved their files there. Members tended to save their files on individual computers and later insist that they get access to the same computer again, thus raising unnecessary conflict. Likewise, accessing the scanner meant displacing Merrill, who ordinarily sits at the machine attached to it. A slow, color ink-jet printer also runs through Merrill's computer. Printouts must be pre-arranged—members can only print two pages per day. And while there are 18 computers altogether, a third of the room's machines remain off and generally unused except for overflow from the homework room; these PCs are older, and they run Windows 2000 rather than Windows XP.

A few of these details may sound like obstacles, but I began the workshop at Clayton quite optimistically. Having spent a few frustrating weeks at Beacon not knowing when participants would come to work on the project, I felt that an environment where the same kids came nearly every day could be more conducive to getting the digital stories done. By walking around the Club after arriving each afternoon, I could usually find at least two or three of the kids who signed up somewhere in the building. I began to call myself a professional wrangler.

**LEARNING FROM THE TWO SITES**

The Beacon and Clayton Clubhouses offered different opportunities and challenges that gave a taste of the wide array of community organizations that support sites across the Clubhouse Network. Although I worked with the same age range at both sites, the all-ages context of Clayton—where kindergarteners would hang off the arms of some of the older teens—contrasted well with Beacon, where the members were generally much older. Would a spirit of independence or discipline be more conducive to running a workshop?
THE WORKSHOP DESIGN

IN THIS CHAPTER I DESCRIBE my design experiment. Before detailing what actually happened, I share the original plan of the workshop as a design (that is, as it was proposed.) Next, I briefly introduce the tools used. Then, I list the kinds of questions and themes the interviews followed. Finally, I describe all those who signed up for or participated in the workshop.

THE PLANNED ACTIVITY

In my original plan, I proposed to work with 8 to 12 youth for two to three weeks on at least three afternoons per week. Youth (aged 10–18) would construct a short video documentary or “digital story” in which they explained their creative process and motivations in the things they make or do. They would focus on at least one project they created at the Computer Clubhouse or their entire body of work. In leading the youth in this effort, I would follow a fairly typical Clubhouse mentorship model of working one-on-one. I also planned to lead discussions with two to six youth at once, including a screening for all the participants. Within the larger group, I hoped to identify three participants who would commit to share their stories with one another three times during development, as I was particularly interested in examining the impact of sharing digital stories within a community of learners.

Members would utilize existing video editing software available within the Computer Clubhouse Network to produce their digital stories. They could post their work to the Clubhouse intranet, “The Village.”

We would begin with an “info meeting” gathered around the central Green Table. After we warmed up by telling quick stories about the origins of our names, we would discuss the project and the commitment we were making to each other in broad terms. I would also screen digital stories (using a digital projector, which captured a great deal of attention...
among Clubhouse members). We would then discuss the digital stories, focusing on what elements these stories shared in common.

I planned to gather the group a few times over the next few weeks to check in as a group, to talk about how the stories were developing, and to read them aloud or play them onscreen for the group to see. I hoped to discover how a community of learners and audience feedback would affect story development. Then, in a final group screening, the participants would give feedback to one another and critique one another’s films.

In concept, the Behind the Screens workshop fits very well with the culture of the Clubhouse. We can see how the workshop design measured up to the Clubhouses’ four Guiding Principles:

Learning through designing. Participants would use powerful and flexible video-editing environments to construct dynamic, richly textured self-portraits.

Following their own interests. Digital storytelling traditionally emphasizes hearing the creator’s voice strongly in the finished piece. The stories would be about the youth and what they do, and how and why they do it.

Supporting community connections. Shared narratives define groups of people. Story circles would permit youth to learn more about one another and find parallels in their way of working or being.

Respect and trust. The workshop would offer a safe environment where personal narrative could be produced and consumed without censure. Participants would also help one another, sharing tips on how to create their digital stories.

As this workshop plan was brought into the real environment of the Clubhouse, a few elements played out as intended. Roughly 20 kids showed interest in the project and attended the introductory sessions. We met informally a few times. Group discussions and critiques for generating feedback sometimes worked well, depending on who happened to be there. But more often, many things changed as I learned how the youth responded to different aspects of the design and as I understood the environments better. I discuss these shifts further in the case narratives (Chapter 5) and the analysis (Chapters 6 and 7).
THE TOOLS

Because I was not interested in designing a tool for the youth to use before seeing what aspects of commercially available tools helped and hindered them develop their digital stories, I turned to two popular pieces of video editing software. Determining whether one kind of video editing tool was more effective than another was not a goal, but the different interfaces and features happily offered a range of experiences to observe. I describe each piece of software, Adobe Premiere 6 and Windows Movie Maker 2, briefly in this section. Some of the more interesting attributes will also be reviewed in Chapter 8, Rethinking Tools, where I detail my suggestions for video editing software.

Adobe Premiere [see screenshot, next page] has enjoyed wide use in previous digital storytelling workshops. Originally released in 1991, it is one of the oldest popular video editing packages, and it is used by professionals who demand a wide range of functionality. This translates into a steep learning curve for novices.

Essentially, media items (such as digital photographs, sound files, and video clips) are imported into a project's bin, then these are dragged to a track in a timeline. Effects and transitions are selected from free-floating palettes. Transitions run between visual elements on tracks Video 1A and 1B, and some parameters of these transitions may be set numerically. To see these transitions and effects as they appear in the final piece, the project must be rendered first, and any tampering with the timeline will eliminate preview files, requiring constant re-rendering.

Some of Premiere's interface metaphors were adopted from pre-digital editing techniques. Other aspects of the software live happily within the Adobe family; Premiere's video effects, for example, have analogous filters in Photoshop, and several key-commands are identical. Premiere
The Interface for Adobe Premiere 6.

supports multiple layers of audio and video, so that several tracks can be overlaid. Premiere allows keyframing of audio and video effects, so that particular values can be specified at particular points in time. Effects may also be combined in parallel. Vast portions of the Adobe Premiere go unused in most digital stories.

Windows Movie Maker 2, available as a free download for users of the Windows XP operating system, has a much shallower learning curve but also much less functionality. Like Premiere, elements must be imported to a collection and then dragged to a timeline. Movie Maker also allows a storyboard view, seen in the screenshot [opposite page]. By clicking on a separate tab, the user hides the collection of imported items to call up a palette of transitions and video effects, which are applied by dragging them to the storyboard or timeline. Users have little control over video effects; to “Ease In” (zoom) very close to an image, the effect can be dragged onto the image up to six times. The more “Ease In’s” there are, the closer it zooms. In this way, the interface design sacrifices user control for qualitative, intuitive accessibility. Transitions and video effects become effective immediately upon choosing them, requiring no rendering before they can be exhibited in the playback window. A small
button (in the bottom left corner of the large black playback area) projects the movie preview full-screen.

Unlike Premiere, the Movie Maker software is simple, and it is likely a user may access every available menu item and feature over the course of making a digital story. Movie Maker supports only one video track (which may include audio) and one pure audio track. For still images which have no sound, then, projects must be rendered with either a voiceover or a soundtrack. (Then, to add the other audio track, the file may be saved as a movie and re-imported into a new project. The first audio track will appear as a "video-audio" track.) Although it was not ideally suited for digital storytelling because of this deficiency, Movie Maker was much easier to use with the Clayton kids, who had much less familiarity with Photoshop.

Within the workshop, other tools were used as needed: for web research, word processing, sound editing, image editing, illustration, and animation, for example.

The storyboard view of the Windows Movie Maker 2 interface. The small icons between the stills along the bottom indicate transitions.
THE INTERVIEWS

At Beacon, I interviewed five participants for 35 to 70 minutes each before introducing the workshop. At Clayton, I interviewed four participants for approximately 30 minutes each, after the workshop began. I interviewed the youth one-on-one, keeping in mind some guiding questions but allowing the conversation to flow naturally. These pre-interviews were captured on video tape. In some cases, we accessed a networked computer so that the members could show me their Clubhouse work as we talked. As we began the interview, I assured them that they should think of it as a casual conversation, so that we could get to know one another better. I followed leads that seemed interesting or fruitful, hitting on a few key questions over the course of the conversation, including:

- How long have you been coming to the Clubhouse? Why did you start coming? What kinds of related interests did you have before you first came here?
- What kinds of things do you make here? Why do you make them? What goes through your head while you are making them? Whom do you make them for? What do you think of your work? Do you share it with other people?
- Do you keep a sketchbook? A diary? A portfolio? How do you use it?
- Do you look back at the things you've made? at your sketchbook, diary, journal, portfolio (if applicable)?
- What are the themes in your work? Are there any connections between the things you choose to make?
- Do you like to tell stories? Are you good at telling stories? Is it hard to tell one? What makes a good story?
- When did you last have to make up or tell a story? What was it about?
- What kinds of TV, movies, books, comics do you like? What do you like about them?
- What would you like to do when you leave the Clubhouse? (college, job, etc...)
Later, the youth began their projects, and I took notes as we worked together, audio-taped and later transcribed our interactions and some group discussions, and collected any project work as it developed. As participants completed their films, I interviewed them a second time. This conversation lasted approximately 30 minutes and covered some of the same ground as the pre-interview but also asked specific questions about their project and the software tools. This pre- and post-interview cycle, I hypothesized, would allow me to discover:

(i) Members’ changing perceptions of self, their work, and the nature of storytelling:
- their own willingness to articulate their ideas and draw thematic connections between pieces in their body of creative work
- inherent worth of their work and personal pride in sharing it with other members
- how their work demonstrates technical or artistic prowess
- difficulty of constructing narrative and producing digital video

(ii) What aspects of our tools and environments support digital storytelling and reflection:
- individuals’ understanding and utilization of features of video editing software for narrative composition
- what new understandings about their work emerged as they produced the stories

(iii) How stories and reflective activity enhance community:
- effects of other members’ stories on the individual’s final pieces
- perception of other stories and tendency to establish connections between stories
- desire to share digital story with other members of individual’s Clubhouse and with the Network.

I expected that my analysis of the interviews would reveal what aspects of the environment and activities best facilitated digital storytelling and, of those, which supported deeper reflection. This, I hoped, would help me to gain a better understanding of what tools and resources adolescents choose to utilize in documenting their creative process, how revisiting projects and molding them into story form promotes reflection, what obstacles prevent such reflection in the culture of an informal learning community, and how these obstacles might be more easily overcome through tools we design.
I worked with two groups in two Computer Clubhouse sites, the Beacon Clubhouse and the Technology Center at the Clayton Boys & Girls Club. The workshops lasted from mid-January to mid-April. For seven weeks in February and March, I spent six afternoons each week for two to seven hours (on average three hours) at one of the two Clubhouses. Each site is described in greater detail in Chapter 2.

Participants ranged in age from 12 to 18, with a brief appearance by a 10-year-old. At Beacon, I had three loyal participants; five others expressed serious interest, and another four flirted with the possibility of joining the workshop. At Clayton, I had seven serious participants, of whom three finished their stories. Another seven began projects, but did not participate more than four times, and eventually dropped out before finishing (or even getting started, in a few cases.) Even dropouts took part in the group discussions in meaningful ways.

In this brief list of participants and their ages, I also attempt to summarize their story concepts in my own words.

All names have been changed.

The case narratives of Isaiah and Coretta (from Beacon) and Ethan and Yadira (from Clayton) will be detailed more completely in the Chapter 5, Learning Stories.
BEACON STORYTELLERS

Isaiah, 18: his 3D design work and how nature inspires him
Coretta, 16: how color transforms her artwork from black-and-white sketch to finished piece
Miles, 16: a playful, beat-driven romp through his sketchbook, and clips of his breakdancing
Tina, 16: stalking her favorite band by building elaborate fan websites
Olutoyin, 15: a tour of his website, a long list of favorite links
Antoine, 16: his motivations as CEO of his label to put Boston on the map of rap
Ryan, 16: the obstacles he has overcome through his music
Carlos, 18: his graffiti art

CLAYTON STORYTELLERS

Ethan, 12: basketball, knives, and poetry, and how these keep him sane
Yadira, 16: the importance of keeping her journal
Juan, 14: his love of Puerto Rico and why he enjoys working with kids
Alana, 14: how a career in fashion or pop music will lead her to marry Omarion, a member of boy band B2K
Melanie, 13: the boys in her life, and the fantasy families she has with each
Marty, 14: his aspirations to be a chef, and growing up without a father figure
Pablo, 13: his late father, who was a boxing champion in Puerto Rico
Peggy, 14: discovering a secret door that lets her see inside people’s thoughts
Zuzu, 15: how friends helped her recover from the trauma of her mother’s stabbing
Nisma, 14: her future as an actor, singer, dancer, or, failing that, a doctor
Veronica, 14: how her friendship with Yadira began in enmity
David, 10: a DragonballZ slide show
Ashley, 15: the courage of her grandmother in the face of cancer
Diego, 16: skateboarding
LEARNING STORIES

At its most basic level, a learning story is about learning. But learning stories are also so much more: they are love stories, adventure stories, and stories of exploration.

— Seymour Papert (1996)

The four learning stories you're about to read will share the "love" and "adventure" four youth—and I—felt as we built their digital stories and learned together. Like Papert, I feel these communicate the lessons learned from Behind the Screens better than any "jargon"-filled description could.

These case narratives highlight some of the core themes which emerged in the Behind the Screens workshop. Because these participants completed, or came close to completing, their projects, they offer a fuller picture of what the entire experience was like. In this chapter and the next, I will also reference the stories of the other 18 participants and explore why their interest in the project waned and what can be learned from their dropping out.

These four youth also tended to express themselves more when they engaged in the project and as I spoke with them about their decisions, and they sustained their interest more consistently and almost without prompting. Here, I offer two cases—by chance, one boy and one girl—from each of the two sites.
Beacon Case Narrative 1: Highly motivated to finish, thoughtful about how the project changed his understanding of narrative, and helpful to other members, Isaiah worked quickly and methodically. He was also the oldest participant, turning 19 a month after beginning his digital story.

Beacon Case Narrative 2: Coretta constructed a private world in which she played with imagery she had created in the past and made her portfolio come to life. We had to “meet halfway” on the project, since it took a long time to find an approach that would pique her interest. That motivation evaporated when technical difficulties interrupted her momentum.

Clayton Case Narrative 1: Ethan was the youngest participant, and several threads emerge from his story. He began energetically, and produced two revealing and moving poems. Then he struggled to communicate his meaning. The affect and effect of these grew increasingly attenuated as we continued to work together, either because of his exhaustion or his desire to de-personalize the voice of his narrative. Cues (perhaps from me) that he misinterpreted led him to make his digital story bland enough to be acceptable to anyone, but less interesting than where he started.

Clayton Case Narrative 2: Yadira synthesized several important themes into a single reflection on reflection (without knowing this was a particular interest of the study!). She, like many other girls at Clayton, chose to represent herself through her favorite icon from pop culture—in her case, Tigger from Disney’s *Winnie the Pooh*.

These four cases sketch out four unique journeys through constructing a digital story, as individuals and in the context of others. The cases hint at some of the narrative genres that adolescents choose in order to “tell themselves,” genres which may challenge our notion of what stories are.
When I first noticed him, Isaiah came into the Beacon Clubhouse with a shiny Vaio laptop, so I wasn't sure if he was a member or a mentor, as members rarely brought their own equipment. The way he carried himself and his sharp dress added to my confusion. He arrived straight from his job at Massachusetts General Hospital, never earlier than about 4:40, less than an hour before closing. An ambitious and confident self-promoter (though never a braggart nor self-aggrandizing), he was consistently and even-handedly respectful of everyone in the room and seemed unaffected by the teasing of the family of comedian-artists who usually occupied the Green Table in the center of the Clubhouse. One of these people was Balu, who originally invited him to the Clubhouse about six months before we met. They met while sparring in martial arts.

While Isaiah held strong religious opinions and shared his eschatological views readily, he would just as easily engage in conversations about hovercrafts, industrial design, martial arts—always with a quiet intensity lightened by a generosity of spirit. Isaiah was born in Dominica and moved to the United States over five years ago, when he was 13. He explained that with no vacuum cleaners in Dominica, he had made one himself out of cardboard, a dynamo, and a small motor. He once offered this to his mother as a surprise when she accidentally overturned a flowerpot.

The expense of shipping freight forced his family to leave behind bags full of sketchbooks of Isaiah's early inventions in his home in the Caribbean. He likened his need to record his observations to the habits of three heroes: Aristotle, Newton, and Tesla. Recording his passing thoughts, observations, and designs remained a habit into adolescence, and he also continued to build and prototype in his home. He shared his inventions with a mentor schoolteacher he met in junior high, Mr. Ness, whom he trusted deeply. Together, they were in the middle of pursuing Isaiah's first patent. He had also been trying to create a fireball like the one he has seen in the popular animated series DragonballZ. He offered me a hair-raising, terrifying tale of how, in search of greater and greater
Why did I design this thing

The Sensor
Activated Fan or S.A.F
(Sensor Activated Fan)

In the summer day of 2002 I went out to East Boston with my aunt and her friend. She was pregnant and we were going to see her baby. The baby and I were both in the back seat enjoying the ride with a car window down. When we came to a stop at a gas station I glanced at the baby to my left. She was sweating because of the heat. My aunt had no AC at the time so I asked the mother: how would you like if the baby had her own cooling unit? She approved and I was happy. I needed to figure out a way to design a unit that would be able to affectively create a suitable environment for the baby at the same time ensuring no harm to the baby due to Freon like that of the air conditioners. So I decided to design a sensor-activated fan that activates when a sensor detects an unhealthy temperature for an infant. It did not have to be air conditioning, it just had to sense the temperature and react accordingly. Did I ever lose work? Of course, he told me with a pained laugh. But he had no choice.

He offered an anecdote about how he came up with his design. He saw a mother cooling off her infant son on a hot day, and he quizzed her about what she was doing. He thought technology could help with their problem. He began his work designing a fan that would activate when a sensor detected an unhealthy temperature for an...
infant. I asked if I could see his PowerPoint presentation, and with his typical pride he agreed to share it with me. There were 55 slides. The first two slides had a single image and wall-to-wall text: solid, intimidating paragraphs. The next eight slides had shorter paragraphs of 15 to 20 words explaining various aspects of his design. Then, the cavalcade began: three dozen views of his invention. I could not distinguish more than four or five of the views. He ended with a photograph of himself superimposed on a simple, hand-drawn schematic. Arrows connected small images from his sketchbook to points on the design. The presentation, intended to be a stand-alone kiosk during the Boston CyberArts Festival, struck me as fairly intimidating and incomprehensible, but I did not offer this critique. Instead, I invited him to participate in the digital storytelling project, and he readily agreed.

But Isaiah had a job, and he spent a great deal of time at his church—this left little time for the Clubhouse. We met in the final hour of the day once or twice a week, and I showed him a few new tools to try in the software each time. For me this felt like the familiar, comfortable territory of being a Clubhouse mentor. We also occasionally communicated by email and phone outside Clubhouse hours, something I had rarely done with members in my previous seven years of mentoring. Although I’d shown him a couple of digital stories in person, what finally energized him was looking at others’ stories online (made in other digital storytelling workshops led by the Center for Digital Storytelling, the Center for Reflective Community Practice, and Creative Narrations) [see Appendix B]. A couple of weeks into the project, he wrote:

Hello Michelle, How r u, I hope fine. I was just looking at these narrations and WOW! they are amazing, I mean WOW! While I was listening and looking at the pictures it just captivated me. I believe I have a clear understanding now of what you would like me to do. Thanks for the link

At the end of the project he told me that he had the impression that these (likewise novice) digital storytellers seemed “like they really knew what they were doing.”
I expected that his story would have strong religious overtones, because in our first interview, Isaiah told me that he felt one reason he needed to come to the Clubhouse was in order to share his Evangelical viewpoint with people. He cited what he called “God’s creative power” as a guide for himself:

Look at the stars, the universe, the galaxies, this is beyond our imagination.... That’s not something I would create. He is a creative God with creative power. And he has instilled that power in me. The way you see things, I might not see things. However, with your creativity and my creativity, I am able to create something new, based on our creativity. When I look at things I try to see beyond what I see. I ask God sometimes to help me find a solution. And then I bring it about with little effort. I don’t think in my mind. In that communion with Him He shows me a new way of creating things. A new way of doing things. I think He gave me the ability, because I have invented many things, and they are innovative.

A week after Isaiah sent me the email about watching the digital stories, he had the misfortune to walk home past the cordoned scene of a brutal murder, whose details he learned on the evening news, and his reflection on the event started to develop alongside his story. The event troubled him so deeply that he wrote a “revelation” (his term) of two single-spaced pages exploring sin and salvation and addressing the title he gave the piece, “What is Life? What is Time?” He gladly sent along a copy of the document, which I’ve excerpted below:

Time is a train theoretically and spiritually speaking, speeding by, express from the beginning to the end of its destination. The realm outside this train is eternity. Imagine for a moment yourself in that train and everything you see outside passes you by with blistering speed. Indeed you are within the boundaries of that train or time, and whatever happens in that train happens, only those in that train will know of any event that takes place while inside. Now imagine being thrown out of that train into the outside realm; you begin to slow down and eventually stop. The speed you were accelerating at on that train now has no effect on you, in fact you can see the time [the train] pass by.

Before reading the piece, he and I discussed how the tragic event and his writing about it had helped him understand revelation as knowledge that he has inside himself and was suddenly able to comprehend in a new way. As he spoke he gestured, making a little box with his hands that he opened to describe how the insight (which he got, he said, from God) opened up the knowledge.
Coincidentally, by the time he wrote his revelation, we had begun importing images onto the timeline of his video project, and he had already faced the struggle of stepping outside of the day-to-day work of his invention to collect images that he found inspiring: photographs from nature of birds flying or cosmic phenomena. On the same day he sent me the revelation on life and time, he also sent me his script. He labeled it “final” a few days later. It included parenthetical cues for visual images, as well.

Who am I?

Before I was formed in my mother’s womb, (Mother’s Belly) God had called me and formed me, to be different. (The universe) Upon the day that I was formed, running through my blood was the urge to create, be creative in everything I do. Be different. At age 7, I built my first helicopter, at least what I thought was; it never flew. This experience for me was a time of absolute failure in design and technology. But my desire to build and invent was not left for this sad event to decide. (Picture of me thinking)

Life in its most perfect definition of things gave me a better perspective of myself. I learned from the birds that at a very young age never stop learning how to fly, until finally, success. (Mother Eagle and the Baby)

I have learned to pay close attention to the most basic forms and characteristics of nature; (insects on a plant) how it works, with its ever so persistent ways of adaptation. (Antarctica)

The complexity (cells in the body) of nature hidden by its simplicity. The placidity of creation, and the flow of life. (Oceans and streams)

This is what I am! (Show pictures)

A mere outward representation of who I am,
    my nature, to be simple, and different,
    And,
    never to follow.
This is my mind, my character,
my dream, my urge, my desire.

(Towards the End)
One cannot tell the absolute wonders of creation by its mere outward appearance, and so, neither will my true nature ever be known by anyone, nor will it ever be discovered. That’s who I am. I am what I am.
Except for his portfolio of his own 3D design work, the pictures Isaiah collected were mostly images and movies from nature, all things he found on the Internet. He also included a single picture of himself, with the word “Failure” falling across it, at the point in the script when he describes his failed attempts at invention in his youth. Then, as his soundtrack shifted, the pictures shifted to the 3D rendered drawings of his inventions and designs, and he said, “This is what I am!”
Once Isaiah was nearly done, I asked him to start checking in with the other members when I was not there to see if they had any questions that he could help them solve. His natural curiosity seemed well-suited to ferry him into the role of mentor.

As we wrapped up his project, Isaiah raved about the control the software tools gave him. Together we slogged through a non-intuitive interface to discover how to make one last lens flare effect behave the way he had wanted, and he revealed the thrill he got from making it work, saying,

Ooh! Wow, Michelle! Exciting! Perfect, perrrfect. And now I can do a pan, and now it moves. [...] and I click here, and you see that...? Wait, where is it? [I show him where the keyframes are in the timeline.] Oh cool. And now see, it’s like the sun is rising from one part of the world to the next. So I bring it here, and I make it colorful, as it burns with desire [we laugh]. Let’s see now if it works. And it does! And I do it with the pan, and it works perfectly. That’s awesome. I love it. I tell you.

Isaiah’s enthusiasm for the tools reflected the kind of curiosity he brought to all inquiry, as with his scientific investigations in his family’s garage. His approach to science resembled his relationship to his story: “You always research, you never come to a conclusion. In science there is never a common ground.” Isaiah used the making of the digital story to explore many different effects. Several of the participants, especially those at Clayton using Movie Maker, chose to use a different flashy effect for every slide and transition. I asked Isaiah if he used one particularly nice effect, falling text, in any other part of the movie, and he explained to me:

I didn’t want to use too many of the same effects, I just wanted it to be different each time. I only wanted it to be if necessary, if it requires it another time. Because I don’t wanna.... I got one idea from my brother. He said, no, why, like I pan from all the way over here to over there. So he saw some of the same transitions, and he said "Isaiah, rewind it," or "I’ve seen this before," or "Rewind it to the beginning," or "Am I seeing this again? No I’m not seeing this again, it’s almost finished, but it’s the same transitions, the same pictures, you couldn’t see the difference." I just didn’t want it to be the same. I can’t really explain.

At times, however, the result of special effects and transitions he chose were unexpected. Once they produced something he wanted to keep, he
distrusted his command of the software enough that he opted not to tinker with the settings further, worried he would inadvertently eliminate the serendipitous effect:

Isaiah: Oh! One thing I discovered was that lighting effect—you know, between the auroras? I don’t know how I did that. It just happened.

Me: What do you mean it “just happened”?

Isaiah: [laughs] I don’t know how it happened. I was doing it one day, and I guess I chose the right transition, and all of a sudden I see this light, and I think, how did I do this?

Me: You didn’t open it up to see which transition it was?

Isaiah: No I didn’t want to destroy it! [laughs again] Because if I got rid of it, I don’t know how I got it in the first place.

Me: [smiling] That’s kind of unfortunate, though, that you didn’t open it up.

Isaiah: Well it’s fortunate and unfortunate. [laughs]

We both laughed again when I suggested he could have saved the file under a different name and investigated the effect without risk. He hadn’t thought of doing this, and instead he responded, “There’s so much luck to it, it’s amazing. It did that in the other slides too. Like in the 3D designs, it goes from one picture to another, and it just lights up. It’s quite a transition. Amazing.” As a new learner of the tool, he felt he was not in control of the effects, yet he was also quite happy to play within the editing environment and see what emerged.

Once Isaiah decided that his project was “done for now,” I asked him what the most difficult part of the project had been. Given the complexity of his finished piece, he surprised me with his answer: “Coming up with the pictures and coming up with a story. That’s the hardest part, because you have to think, what you want to do. You have all these tools, these resources, but what are you going to do with it?”

Isaiah’s motivation and drive stood out among the other participants. When I asked him where this came from, his response pointed back to the Clubhouse guiding principle of pursuing projects based on one’s own interests. As Isaiah told me, in his own words:

I didn’t know where to start, until you said, what it is you wanted, or what you would like us to do, a story on this. So I had to think for a while, what pictures I’m going to associate with the story. Well, for me, I am already interested in my thing [that is, his FAHS/SAF
invention]. You targeted something I am interested in, that’s why. So if you’d said, do this on Boston, it would have been a little harder for me. If you’d said do something on history, ugh, if you’d said other things such as that, I wouldn’t have been finished now....

Isaiah worked diligently. To develop his script, he prepared, as he said, “drafts, drafts, drafts.” He struggled with what images he’d show with which words, but in the end he just tried things out and liked the result. When he talked about this process, he denied himself the agency in this creative act, saying, once again, that “it just happened.” By rating his project, he implied that there was a great deal of luck involved: “I would say that on a scale of 1 to 10, ten being perfect, it was eight. Because like the music just fit, immediately. Everything worked fine.”

Later, Isaiah called this project “fun,” so I asked him to tell me what he meant. For other participants, the process had sometimes been more frustrating than fun. Why was it different for him?

Isaiah: Because this is fun. This is... to see all of my projects, what I like in terms of nature, my voice, in terms of how I view these things, about myself, to all see it all incorporated into one movie. It’s very interesting. Other than just written paper, or PowerPoint slide shows. Here you can add effects, make it alive, make it become alive. It’s really cool. [...] It’s like you get to see me in a different way. You’re not reading, I’m telling you.

Me: Is it something you’ve never told people in that way before?

Isaiah: Yes, I’ve never told... well, actually I’ve told them a lot of things, people would ask, or people I would speak to for inspiration, or meaning I would like to inspire them, but not like this. Here, they can see, hear, and perhaps experience because of all the effects added to it.

Me: Is it just the effects that are different?

Isaiah: The effects and... like, for example, if I’m talking to you about how I love the birds and how the birds have really inspired me, I cannot really show you a bird now, or if I say I’ve designed this because this inspired me, you would only depend on the words. But here, this has pictures, and it has my actual designs, and stuff like that, so that’s pretty cool. So it’s like three of me in one: my designs, nature inspired me, and my voice.

Isaiah found multiple ways to express his personality, his motivation, and his vision. The story he constructed went beyond simple narrative; he understood himself and the possibilities of expression more deeply and in a new way.
In this next excerpt from our debriefing, he described how he intertwined the different media elements to give greater meaning to his story, and how he felt they established extra dimensionality to his thinking. His experience pointed to the potential for a digital storytelling system to fit within Marina Bers’ model of identity construction environments (ICE) (Bers, 2001). Bers developed Zora as an ICE where young people could explore issues of identity and morals. In Zora, users navigated a 3D world with unique avatars, and they built rooms and temples to fill with personally meaningful, virtual objects. ICEs value design, narrative, community, and self in ways consistent with the Behind the Screens project. Isaiah contrasted his intimate relationship with his story, as distinct from earlier assignments to define himself in essay form.

Isaiah: It’s really like writing a story. In school they tell you to write an autobiography. You find things about yourself. Here, I should say, it’s more like a three-dimensional autobiography. You get pictures, you get voice. It’s not just text, it’s not just one-dimensional, it’s three-dimensional. It feels good, because here’s the music surrounding you, and with my movie, how I feel, I turn up the music, I tell you, when I listen to it. Because it brings me into myself. That’s so awesome. Because I would normally [...] I would sometimes in the night I would just turn off everything and I would just think. But here, I’m listening to the movie, and it’s like, Wo-W! I know I did this, but this is me? [laughs] I know I am interested in these things, I know that I created this movie in Premiere, but this is really who I am, this is really what I do, this is what I was inspired by....

Me: When you describe it as three dimensions, it sounds like there’s more space, there’s more wiggle room. Is that the way you think about it?

Isaiah: On paper you wouldn’t see any of that. A teacher... for example: if I were to go to a college, and they were to ask me to write something about myself, it would be good, but then that would be all they would see about myself. It would create a picture in their minds of what I’m trying to talk about. Here, you don’t have to create a picture. It’s there for you.

Me: You were asked to do this in school a lot?

Isaiah: Yes, you were asked a lot. I was asked to write journals, stuff like that. To write journals, journals, sometimes I write journals talking to God. Relating to the Bible...to the project, or some interesting person or something like that. All words. But here, like I said, this is fun, because, one, you get to learn the software and second, I dunno, you get to see if you are really interested in portraying who you are to other people.
Isaiah described his story as an encapsulated unit which he could share with others.

People have asked me to tell them about myself before, but I spoke in front of them. [With] this: I go home, I sleep, and I send them the video. They look at it and they figure out who I am. I don’t have to stumble for words because this was planned. All the thinking was done while the project was being made. It’s really cool.

This relates to Roger Schank’s description of how stories mediate conversation and relationships, by allowing people to communicate in shorthand and “gists.” That is, the stories have been created through a process of “condensing an experience into a story-sized chunk that can be told in a reasonable amount of time.” (Schank, 1990, p115) Here, Isaiah expected that his careful attention to crafting his digital story would save him from redefining himself to others in the future.

Isaiah was hooked. He told me how he would return to add the next chapter to his digital story. “When,” he emphasized, his manufacturer accepted his product pitch, he would tell a story of “desire fueled to the second level” (making a reference to his digital story—with a laugh.)

Before the project, Isaiah already enjoyed habits of reflective practice, in that he kept a journal and a sketchbook to record his observations and ideas. He didn’t go back and look at these very often, however. The creation of a digital story demonstrated to him the importance of taking a step away from his work. He explained how working on the project had shown him how to look back in order to move forward:

I think I should do more. Or not just do more, but rather, save more. Not just do something, like I find an invention today, there’s no way for people to know about it if they’re interested in the same thing, so I just throw it away. Or not throw it away, but put it in the back somewhere. But here I can take pictures, store it as a movie, they could see it for themselves. It’s kind of like virtual space. Instead of storing it in a box and saying, [eagerly] “Come, come, see all my stuff,” you can see all in a movie. Like if I had my helicopter, I’d have pictures of my helicopter, it would be in here, y’know.

Isaiah’s experience matched pretty closely the image of an individual Clubhouse member’s experience in the Behind the Screens workshop as originally conceived: a young person with a body of creative work, moti-
ISAIAH AMONG THE OTHERS

Isaiah's experience creating the story did not take place at the Clubhouse, for the most part. Because he had such limited time each afternoon after work, and such a great desire to work on it, he installed a copy of the software on his laptop so that he could continue on the project at home—as he told me that he often did—late into the night. He would tinker with the project independently and come to Beacon with questions or simply to share it with me, Nelson, and others interested in seeing its progress.

Unfortunately, this had the side effect of discouraging another member, Antoine, from participating in the project. Noting the amount of effort Isaiah's developing story required, Antoine felt increasingly pressured for time by his record label projects and the end of a school semester in which he was failing all his subjects except Spanish. I asked Isaiah to tell Antoine what he liked about the project, and he told him “It's a lot of fun. You want to see mine? What happens is you could display... well, it gives you a chance to present yourself, like what you think.” Antoine shook his head and explained that if he couldn't do a very good job of it, if he couldn't devote the time that he wants to make it perfect, he didn't want to do it at all. Antoine was not interested in making something that was not up to his high standard. Isaiah's digital story fit that standard. I offered to help Antoine make something “short and fabulous,” but he again shook his head. It was not on his mind anymore, he told me, and he could not get enthusiastic about it again. Isaiah, in contrast to Antoine, had had the free time and desire needed to get this project done.

Isaiah more clearly reflected on his motivation in his creative work than any other participant, answering the question I posed to them all: Why do you do what you do? By answering this for himself and his potential audience, he moved from the staid description of his PowerPoint presentation to a digital story filled with verbal and visual poetry. He investigated the use of the tool with relish. He revealed aspects of himself to me, to himself, and to others, and he did so freely. Finally, he explored issues of his own identity and constructed a narrative space he felt he and others could enter.
Although Coretta drew avidly as a child, and her parents enrolled her in art classes years ago, she'd been coming to the Clubhouse for a couple of years before she started drawing again, sometime within the year before we worked together. The Girls Day coordinator Sara called drawing Coretta's "hidden talent," something she was keeping from us and revealed only recently. Coretta nodded in agreement, adding "Yeah, because I never did anything at the Clubhouse for a while. I just sat there." She attributed the long drought in her creative output to a lack of focus and inspiration. She surmised the turnaround happened because she was "no longer lazy."

She came in all days of the week, not just Mondays (Girls Day, when no boys are allowed), but also on days when there were never more than three girls in the sea of boys; often she would be the only female in the room when I arrived. She first came to Beacon to make a video of a public service announcement for a school assignment. She worked on that project with her "former friend," Sally, another Clubhouse member who still came to Beacon, although I hadn't seen them acknowledge one another much less speak for six months or so. Coretta enjoyed that experience but claimed her video editing skills had languished, and the video disappeared—a not-so-regrettable tragedy, as she thought it was "pretty bad," and they were too rushed to finish it in the end.

Coretta frequently drifted into the Clubhouse for just a few minutes at a time, to "make the rounds," quietly checking in with friends and offering hugs and handshakes to both members and mentors. She often had one or two reticent friends in tow. Other days she stayed for hours, usually when she was working on a project for school. She managed to devise a creative Clubhouse take on any assignment: when I first started spending more time with her in the fall, she was developing a comic strip in Photoshop about the interactions of Native Americans and settlers for history class; in January she used Beacon's video camera as a scientific instrument to document how different magnets moved at the moment of attraction.
Seeking members who come frequently, I asked Coretta to participate in the workshop (not realizing that her periods of daily visits come in spurts correlated with school deadlines.) She had also mentioned a fierce interest in media production, filmmaking, and fashion design to me. I suspected that the subtlety and fantasy prevalent in her artwork could yield a rich, deep digital story.

She later revealed that she used to “draw stories” as a child. These were scenes filled with detail of setting and character, but with little or no text. Although she doubted she had any examples of those accessible to her now, she had kept her recent artwork in a three-ring binder. She looked back at the final pieces she collected, she said, whenever she was “bored” or looking for inspiration to draw something else. As she did so, she said she did not “think about much. I just think, ‘Oh... I drew that. Maybe I should draw something else too.’ That kind of thing. I’m not really on that deep level of drawing things.” Her art, though, was more intricate and original than most other work I’ve seen at the Clubhouse, possibly influenced by visits to her cousins in her mother’s homeland of Thailand nearly every year. To her, Thai culture places a premium on art and entertainment, with greatest respect given those who dance well, for example.

Aside from the drawn stories she made as a child, she liked listening to stories more than telling them, although she also felt she had a “vivid imagination” and had no problem inventing stories if asked. She told me she especially enjoyed changing things—turning down the volume on television, for example, so she and her friends could concoct new dialogue. But her need for change went beyond mere appropriation and adaptation; she felt her art should also inspire people to change things, and that what she makes should make a statement, “any kind of statement.” She continued:

Coretta: I like people to listen to me. So whether it’s a good statement or not, well it mostly should be a good statement. If not, I would still like people to hear me and feel good. Because not everyone, there’s not enough people making statements. There has to be someone making a statement, why not me?
Me: Why is it important for people to be making statements?
Coretta: For changes. If you don't make statements, everybody would be the same, they'd be ordinary, nothing would ever change. They'd all be worker bees, all doing the same thing every day. Because there's no change, nobody's saying anything, everyone's just going along with everything, but when you make a statement, you can change opinions, make new ideas, things like that.

Me: What's a statement look like?
Coretta: A statement is like [gestures with hands bursting out]—not like "wow!," I don't know how to describe it in words. But more like something that can hit you hard, like something you can feel. That will bring you new ideas and new state of mind and new thoughts.

She pointed to an example from popular culture: a music video by DMX, which uses images from the civil rights movement in the 1950s and 1960s to show people "rising up for more rights."

Given this conversation we had before getting started, I expected Coretta's project to progress smoothly. But we hit a wall when we sat down to come up with a story a week or so later. We struggled for about an hour to get her story out. I asked her questions. I offered her story prompts [like those in Appendix D]. I encouraged her to just start writing anything, just to get going, and we could move from there. On my suggestion she wrote about the meaning of her Thai name, Nam Fon, which means "rain." We made little headway, and so I provided her with a list of prompting questions for her to get started. She told me she'd work on it and return the following week. Then Coretta got involved with schoolwork, and we did not get a chance to work together for over a month. In that period I regretted not having captured her interest and kept picturing her expression as she left that first unproductive day: a bemused look in her eyes tinged with a hint of a smile—combining "you gotta be kidding" and "I really don't know what you want me to do."

The few times I saw her in this period she just stopped to pick up her paycheck for her job at the museum: payday is Wednesday. The next time we were both there for a whole afternoon was five weeks later. Isaiah was nearly done with his digital story. Seeing the rough cut, Coretta seemed to be interested again. But she still didn't know what to do. We tried to dig deeper to get to some kernel of a story.
Me: What do you want to talk about?
Coretta: I don’t know.
Me: Why do you come here?
Coretta: I don’t know. I have nothing to do at home.
Me: And what do you have to do here?
Coretta: (laughs) Nothing also. But it’s better than doing nothing at home.

Coretta was not telling me something. I hoped that the digital story could get her past this reticence. We looked at the art in her folder. “I don’t know why I draw the things I draw. It’s just what I felt like at that moment. [...] I don’t do very much. I don’t have much to show you,” she said. But she had a folder full of artwork: fantastic sketches, self-portraits, snapshots, and drawings made for class projects. She also conscientiously saved all components of her collages. For one of her collages, she saved the original photo she used as a background, as well as files showing the collage at four different stages of her artistic process. She was thus able to show how she had developed her project—starting from an original sketch (which she had drawn on the back of a scratch paper printout of a banner ad about learning Thai) through its evolution into a final richly-colored triptych.

Although she was exhausted from school and uninterested in any of my suggestions for story leads, she seemed to enjoy our interaction as much as I did. We watched digital stories online at the Third World Majority and Creative Narrations sites [see Appendix B]. We watched movies by Nina, Max, Tony, Maricel, Lisa, and Nora, and those by Desi and Hmong youth. Desperate for a “power nap,” she lay down. A few minutes later I joined her on the floor. We stared up at the ceiling, and she started musing out loud about the tiles above her. They were composed of coiling strings, and she said they might be civilizations of extraterrestrial life. The lights were stars, like their suns, and the ventilation grid was a black hole. Astonished by her creativity, I suggested we contrast this fantastical riff with her refrain, “I don’t know why I do anything. I do it because I’m bored” in her story, and we laughed. To me, she didn’t sound bored—she sounded imaginative.

When we took another look at her folder near the end of the day, I real-
ized the parallel between the fantasy worlds she creates in her art and in her power naps, and I suggested she approach her story as a poem. My full thought didn’t get out of my mouth before her enthusiastic reply: “Yeah... I can write a poem!” Finally, something clicked. Had she been waiting for permission? We discussed how she could use a poem to convey her thoughts. “I like that about poetry,” she told me, “that you can say so much with so little words, the rhythm of the words, it’s like a song, a song, a song that, it’s a song that has a beat, but it has a beat to it, in your head, what it would be. [I’ll write a poem about] myself. I keep poems in my head.”

Indeed, half an hour later she had produced two poems, and she handed me the second one. I got lost in its lavish language, and she told me it represented her feelings, how she felt when she made the art, and that
she had a lot of colors in her head as she wrote it. She suggested she would revise it further, adding, “My teacher always said, there’s no great writers, they’re always great rewriters.” Later she recorded her voiceover on the digital audio recorder in the quiet and privacy in the hallway. (The music booth was booked for the day.) She had eight takes, each with a slightly different tone of voice: one dreamy, another “slam” style, for example. For her voiceover, she read the poem unrevised, exactly as she had first written it:

```
Never satisfied, satisfaction exists only in realms unheard to me, 
written in books lost and diminished by true relativity.

Lost, I do feel, beneath mounds of immense reality, 
forever feeling smothered by blankets of insanity.

My only release from this liquid of monotony 
is the art and words that is forever imbued in my soul.

The words that I write are the key to my mind, 
however the art and colours are the path to me.

I fulfill my empty heart with light, colour and array 
to lift my spirit from the deep gray.

Even with this I still lust for perfection, although 
my idea of perfection is really a form of imperfection.

I sleep, dream and even feel art flowing through me, 
but expressing it is a different story.

I do still long every day to be left timeless, 
ageless in the form of art, 
displayed in colors so rare and unseen, 
forever in a casing deep within the center, 
lost and wrapped within the universe.
```

After this, Coretta came back the next time to Beacon with a whole concept of what she wanted to do, and she assured me she would move forward without my help on Monday. Our poetry breakthrough provided enough momentum for three weeks.
When I came to Beacon again a few days later, Coretta was experimenting with opacity of a gray swatch overlaid on a self-portrait, trying to get half in black and white and the other half to be color. I showed her one way to do it, and en route to this she discovered a video effect that made the color “freaky,” and she decided to keep it. She delighted in playing like this with her artwork within the video editing environment. As she worked, the software crashed, but she demonstrated patience with any losses, claiming every time I expressed regret for her unsaved changes that she was planning on redoing it anyhow. When she used the motion palette to make her image bounce, she giggled softly. She had become so entranced with playing with her imagery, that she wouldn’t stop what she was doing to share the project with another member, responding with “No, wait, let me do this, I’m on a roll.” After testing the use of the “Iris Diamonds” transition flashing through the layers of the pre-colored and post-colored images, she said, “Aaahhh! That’s lovely! Really lovely.” Before importing images into Premiere, she fooled around with different tools in Photoshop, zooming in and out and back in again, as close as 1600 percent. Her interactions with her artwork seemed rather intimate, and the activity onscreen consumed her as she developed her digital story.

Her editing technique showed again and again how she moves from line drawing sketch to a fully rendered piece of art. She said she wanted to integrate Adobe Photoshop and Adobe Premiere so that she could record the action history of how she made something, just as she would rewind a series of actions by using the “Step Backward” command in Photoshop. She said, “I’d make a film, starting from my finished work, and have it work all the way down to how I started. Because I like seeing things from where they came from instead of where they’re going. I don’t know. I like seeing things where they come from.”

Catastrophe struck as Coretta worked independently one Girls Day. She lost many of the images she had included in her piece. As she later described it, some images disappeared right in front of her while she worked on the project, and she suspected foul play. She believed someone went into her folder and maliciously deleted her art. She also
CORETTA AMONG THE OTHERS

Coretta’s work inspired another member, Olutoyin, to want to do a digital story too, but he never came in often enough or for adequate lengths of time to get started. He also continually cited a need to first edit his elaborate website, which he hoped would be the focus of his digital story. When I reminded him I wouldn’t be around to help him work on it later, he suggested that Coretta would help him do it. He didn’t punctuate this assumption with a request of Coretta, who sat between the two of us, working hard. He just assumed it would be all right with her, and it was.

Olutoyin also sparked an incident which raised the importance of documentation and history. He came over and made a teasing comment about the photos on the wall of Coretta and her “former friend” which were hanging right next to her shoulder. “Aren’t those two best friends lookin’ so cute together?” A bit peeved with his comment, Coretta turned and ripped down the sheet of six pictures of her and Sally, putting it face down on the top of the hard drive next to her. “I knew, I knew she was going to do it [i.e., take down the photos]. That’s why I said it because I knew she was going to rip it off.” I told him he was being cruel. He said, “You know what I’m saying, because life is cruel and you live in a cruel world. Your president is cruel.” (The war in Iraq had begun the day before.)

Later, when Nelson was closing up, I helped by picking up the papers strewn around the room, realizing only after I grabbed a handful from her area that the stack included the image Coretta had torn down before. Not knowing what to do, I put the stack face up in front of the printer. A minute or so later, Coretta buzzed around the Clubhouse on her way to the exit. I saw her walking back over to the spot where the pictures had been hanging, and she pinned it back up again. Charmed by such a sweet gesture, I commented on how it was admirable that she’d put it back up. “It’s memories,” she said. “And you can’t take those away. Also, I look good in those pictures.”

blamed the computer, anthropomorphizing it more than ever: “It doesn’t like me. It’s mean to me. I can’t believe it did that to me. Oh, it hates me.” Her patience with the crashes transformed into antagonism, and she became convinced the computer was against her. It took a week to recover her files from tape, and she lost a day of work. But she persevered and bore this setback well. Her work rhythm suffered, and she again got busy with other projects outside of the Clubhouse.
Coretta wanted to make a digital story. I had an intuition she would enjoy it, and she thought she would too. The initial catch of engagement was hard-coming and required me to travel with her for a little while to see where our conversation would lead. This complex negotiation required us to meet each other half-way, and in the end the project fit both our expectations well. Our relationship as mentor-member helped this negotiation along, and that relationship deepened as the story moved through different possibilities.

Once we found the common ground, Coretta could work happily and independently for long stretches. Video editing is a dynamic canvas that could capture the experience she had all the time at the Clubhouse: watching her art evolve as she originally worked on it. It seemed she enjoyed being able to represent that process and invite others to witness it.
Ethan snuck into the Behind the Screens workshop. A few weeks shy of his 13th birthday when he began, he did not yet follow the Boys & Girls Club's teen rotation schedule. He approached me independently while I was working with Pablo, and asked if he could join, and I assumed he was in the right age cohort. This produced a small logistical headache I gladly negotiated once I realized his consistent enthusiasm. Although he emoted great frustration in the form of faked sobs, pained cries of “argh,” and invented expressions like “gerber” and “humperfrump,” Ethan stuck with the project for the entire time and maintained extraordinary patience with technical snafus despite his tendency to complain. A few weeks into the project, I misjudged him in an early journal entry, writing, “I'd be surprised if he has enough patience to finish.” In the end, I was surprised. He didn't give up easily.

Like many of the kids I became acquainted with over the course of the project, Ethan faced a great deal of stress in his day-to-day life, which he attributed to his mother wanting him to improve his grades. He told me he is a B+ student in all his classes (“all my classes,” he repeated to emphasize this), but she would like him to excel even more and gather the kinds of academic awards his older sister accrued in high school. He told me he confided in his brother (a young father having problems with his baby's mother) and in Paul, an older member who was about to age out of the Club's 18-year-old cutoff.

Ethan sought release in music, especially the work of the current hip-hop star 50 Cent, and in basketball. To demonstrate how much he loves the sport, Ethan told me he broke his foot early one season, but didn't tell anyone because he wanted to keep playing. In the evenings, he navigated between three different households. Whenever the home of the night was his aunt's place in the South End, we rode the bus together and chatted some more. He worked on the project even when I was not there, explaining that the coordinator Merrill told him, “No half-stepping on Michelle's project.” He clearly created his digital story almost as much for me as he did it for himself.
As we began, Ethan had a vision of his digital story that he could not communicate to me, no matter how hard we tried. He first wanted to do a movie about guns and violence, and I encouraged him to bring it back to what he likes to do and why. I was sure he was motivated by an example digital story we watched by Ben from Springfield. In the piece, Ben described how the loss of his sister to gang violence inspired him to join the military and then come home and work as a community advocate. We went back and forth about the guns some more, then he offered that he wrote poetry and would concentrate on that. At school, he had a portfolio of his poems (which he never remembered to bring.) He described interspersing poems and images, and I asked him to write this down, hoping we could work with a script or a storyboard once he had put it down on paper. Instead, he started typing a poem, and then he turned to me for approval when he finished it about twenty minutes later.

<table>
<thead>
<tr>
<th>Shady Feelings</th>
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<tbody>
<tr>
<td>By Ethan Thomas</td>
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<tr>
<td>Sometimes I feel like the sun won’t shine</td>
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<td>Sometimes I feel like I wish I were blind</td>
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<td>Sometimes I feel shady</td>
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<td>Sometimes I feel like some people hate me</td>
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<td>Sometimes I feel nothing inside</td>
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<td>Like someone just wants to step aside</td>
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<td>Sometimes I feel angry</td>
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<td>Or sometime I feel crazy</td>
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<tr>
<td>At times I can’t explain these things</td>
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<tr>
<td>That is why I have SHADY FEELINGS</td>
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I was impressed that he could produce such an honest, revealing poem with so little apparent effort. We had a short conversation about the difference between a story and a poem, and I encouraged him to try to write a story script that could accommodate the poem. At the time, though, I had it in my head that the kids should write stories, and I had a hard time imagining how to move from this poem to a story, or how to frame it within a story. He waved his hands around as he described how his poems and Langston Hughes' poems would run side-by-side on the screen. Still confused, I again asked him to write down what he'd just
described to me. He grabbed a piece of paper and a Crayola marker, scrawling out a commitment: “I will start my story about what I like to do. Then I will state my poems in between the different parts of the story. Then I would show clips that relate to my basic theme.” This didn’t capture his vision, which involved what sounded like some kind of visual dialogue between the two poems. Before we could focus on what he’d written, he had basketball practice and ran out of the Clubhouse. Later, he returned to write another poem:

COLD FEELINGS

Cold inside
Only enraged
Love for negative things
Devouring hatred
Forever being mad
Exceptions on life
Earning nothing in life
Level of hatred on a 1 to 10 scale (5)
Irate and bitter
Never right
Guns
Suicide

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Again, he surprised me with his open expressiveness, but when I tried to engage him in a conversation about how his digital story would use these two poems, he got frustrated. Ethan progressed at a fast clip in the first days, but even then he called the work hard and said he wanted to be “finished with it already.” He imagined this would be a short project, and done quickly. We suffered a few problems with the computers’ configurations, and I wasted a lot of our time trying to convert into the right format music he brought (which turned out to be a trivial task.) He made lots of simultaneous demands—let’s get the song digitized off this CD, find these images, get going on actually putting all the elements together—and because he worked at such a breakneck pace, and I had to help others, he spun his wheels a bit.
A week later we returned to his poems, and although I told him they would make excellent voiceovers, he chose not to use them. Either our conversation about the difference between stories and poems, or a shyness he developed over the course of the project, dissuaded him from sharing these personal confessions. Such shyness might have been correlated with his joining the teen cohort. On one of the first days in his new rotation, I overheard another kid ask loudly, “Why is Ethan here?” as he walked into the room. Later that week Ethan told me that some of the other teens had been mistreating him. He became more and more sensitive about what others thought about him.

Despite my suggestions to add his poems back in, he never incorporated them into his story after that first writing of them. Instead, he opted to animate the text of the Langston Hughes poem, “Still Here,” as part of his movie:

I been scared and battered.
My hopes the wind done scattered.
Snow has friz me,
Sun has baked me,

Looks like between ’em they done
Tried to make me

Stop laughin’, stop lovin’, stop livin’—
But I don’t care!
I’m still here!

— Langston Hughes

At one point, a few weeks after he’d written them, Ethan momentarily entertained the idea of putting his poems into his story. I asked again if he wanted to treat his poems as he had the Hughes poem, with animated text, or to speak them in his voiceover. “How am I supposed to do that? I don’t remember the poems.” I reminded him that he had written two of his poems at the Clubhouse, and they were in his folder. “Yeah, but how am I supposed to remem... obbb! Think think!” He pounded his forehead and seemed to realize that he can just print them and read them. But two days later, this plan had again been forgotten, and we spent a great deal of time massaging the language of his non-poem script laboriously, which he read straight into the microphone. In an early version, he said:
Hi. My name is Ethan Thomas. The name of my story is called Life. My story is based on my fascination of things in life. They are: knives, basketball, and poetry. Poetry is a major thing in my life. For example, in the second grade my teacher Mrs. Johnson stated our classes should write something other than stories. I stated that we should write poetry. From thereafter, her classes have written poetry to present. Since I love poetry so much, here's a poem by a famous poet.

He stopped, and we discussed what he had so far.

Ethan: It needs more speech. To talk more...

Me: I think it needs to sound less like a speech and more like you’re just talking to someone.

Ethan: Dude! But how do I know how to talk like that? I dunno!

Me: How are we going to make this happen? Think about Isaiah’s movie we saw at lunch. What do you want to say about your love of basketball? You’ve got those clips of you playing basketball for a minute and a half, and you’ve got to say something, and it won’t be enough to just say, "I really love basketball."

Ethan: I know, I actually know what I’m going to say, I just haven’t said it yet.

This last line, “I actually know what I’m going to say, I just haven’t said it yet” perplexed me. I had heard similar assertions from other kids at both Clubhouses. There were two versions of most stories—the one typed on-screen or spoken into an audio file, and the one they still had in their heads.

After some more discussion about his love of basketball and how he could make his take on it unique, he recorded:

I get irate and really unnerving. Basketball is the most important thing in my life. It also keeps me from doing bad things. Basketball also helps me to calm down and actually be patient. When I’m off the court, I still have basketball in my mind, but if I don’t actually reinforce it, so when things happen I get really unnerving and I’m really impatient. So that’s why basketball’s so important to me and that’s why I like to play it.

Although neither of these voiceover pieces had the elements I considered to be essential for digital stories—like a story arc or a dramatic question, for example—this part felt more honest and I told him it was great. We returned to the first part, which still felt too bland to me, lacking in the richness of detail that makes for a good story. I pushed him to revise it, and we struggled.
In our discussion, I noticed that Ethan had great difficulty applying knowledge he understands intellectually, and that some helpful tips he learned in the classroom enter into his out-of-school practice reluctantly. In school, students learn rules—of grammar, of arithmetic, or of writing—that may seem to apply only to a school context, and when they need to use that knowledge in another situation, it may fail them. In Ethan's case, he had learned from his teacher the rule of thumb, "no announcements."

Ethan: I'm trying to figure out what I want to write. In that particular poem he writes about his feelings and survival, and I like that.

Me: Could you say that?

Ethan: Are you recording this?

Me: Do you want me to turn this off?

Ethan: No.

Me: Could you say that: "Here's a poem that talks about feelings and..."

Ethan: "...survival."

Me: I don't even think you have to say "I like this..."

Ethan: "Here's a poem about survival:"

Me: Try not to say "here's a..." or "this is..." Try not to say that anywhere in your story.

Ethan: Because it's like I'm "announcing," right.

Me: Exactly.

Ethan: Oooh.... Why did I forget that? [puts his head in his hands]

Me: What'd you forget?

Ethan: No announcements, because my teacher she said every time we write stories, we're not supposed to use announcements. Or every time we write an essay we're not supposed to use announcements. I just totally forgot, because I'm not in school.

Me: Do you want to take look at your thing and look for the announcements and take out the announcements?

Ethan: [yawns] I dunno.

Me: So for the poem, you could say "This poem about feelings and struggle [he interrupts, saying, "This poem's about"] means a lot to me."

Ethan: "This poem is so important to me because it talks about hard feelings and survival." OK.

Me: Do you want to write that down?

Ethan: "This poem is by Langston Hughes."

Me: "It says that on the screen, so you don't have to say that if you don't want to.

Me: "Here's a poem about survival:"
He mentally revised his voiceover further, and when we read his new text into the microphone, straight into the movie, he had lost the piece about “survival,” and I asked him why. He hid in his shirt, ducking up to his eyebrows, responding, “I just took it out.” I ask him, “Why are you hiding?” He was tired, he told me, and hadn’t wanted to sit still in the first place.

A few minutes later, he tried again:

HI. My name is Ethan Thomas. The name of my story is called Life. My story is based on my fascination of things in life. These things are: knives, basketball, and poetry. Poetry is a major thing in my life. For example, in the second grade my teacher Mrs. Johnson-King stated our classes should write something other than stories. I stated that we should write poetry. From thereafter, our classes have written poetry to present. “Still Here,” a poem by Langston Hughes, means a lot to me because it states key points about courage and emotion. And this is what I like about poems. They say key things about courage and emotion. So here’s a poem by Langston Hughes. Because he had mentioned the “no announcing” rule, I asked him if his audience could tell it’s a poem by looking at it, and he responded that he “just want{ed} to state that to be on the safe side.” I asked him about his first lines.

Ethan: [sigh] Why I like this stuff and how it affects my life. That’s why it’s called Life.

Me: Why are you sighing? What’s the matter?

Ethan: I thought the talking part was going to be easy! It’s hard.

Me: Why is it hard?

Ethan: There are so many steps. […] I’m stuck at the last easy step.

Me: This is the hardest part for everybody. You’ve got to tell me why this part is complicated, because I want to make it easy for you.

Ethan: Because I’m saying, there are so many steps to do. I have the story, I have the pictures I have the music, and now all of a sudden I have to do the speech. There’s no progress. So it’s really unnerving. It’s getting on my nerves.

Me: But you’ve made progress.

Ethan: I’ve got nothing, and I came in here with something. OK, I won’t be able to be here tomorrow. So why don’t we just save it here now. Try something else. We’ve wasted a lot of time talking. I have it all already planned out and I’m saying I need to spread all this out. [referring to the voice clips, which were bunched up in one part of the movie]
This step was hard for both of us. I wished he would go back to the poems, but he showed no interest in that suggestion. Without other members working on the project that day, I sat nearby to work with him, and my involvement complicated his process. He needed some time alone with the piece.

A few days later he took a new approach reminiscent of his poem “Cold Feelings” where each line begins with the letters of the poem in sequence. He told his story in terms of the letters in the word “LIFE.” This was the first time this acronym came up, and it was not clear if the letters had that meaning for him all along, or if he simply riffed off an idea he had spontaneously in front of me. Even as he re-recorded certain clips, the meaning of each letter shifted slightly. We recorded these lines straight into the computer, but a couple of weeks later, these clips had been replaced by a voiceover he had re-worked in my absence. In it, he consciously reflects on the story he is making, while also making broad categorizations of the different elements in his story.

L-I-F-E. Life. The “L” in my title, Life, stands for the things I Like in life. The “I” in my title, Life, stands for things I like to Invent, like poetry. The “F” in my title, Life, stands for the Fun things I like to do, which is basketball, writing poetry, and looking at different designs. The “E” in my story, finally but not least, means the whole Effect of this story.

The basketball involved in this story is the F in my title, Life. Basketball is very Fun to me. The clips I’m about to show you are about me playing basketball. When I’m on the court playing basketball, there’s three things I think about: my family, my friends, and how they all come together to actually help me. On the court, my family and their wrongdoings are my motivation. My friends are also my motivation.

We continued our earlier negotiation. I convinced him to delete the sentence, “The clips I’m about to show you are about basketball,” but didn’t get much more headway. I knew he had a gift for words, and I still believed his story could benefit from more detail.

Me: But you don’t give us a little glimpse of yourself.
Ethan: Yeah I do, I talk about myself. I’m just saying brief summaries of what I like. If I did the whole thing, it would be a two-hour movie.
Me: Summaries aren’t enough, though, to explain what you’re all about.
Ethan: I’m gonna need more than just these pictures to explain it. [...] It’s actually starting to look boring. I’m trying to put this stuff together so it actually seems interesting. And sometimes when I start working on it it gets hard, it gets boring. I’m saying... it’s not that I want to keep it basic, it’s just that I want to keep it to where it’s easy, where it’s gonna follow with the flow of the story. If I was to add that in there, I think it would kind of change the flow of the whole story.

I finally decided I had been pushing too hard. If he didn’t want to bring the same flourish of language into his expository writing that he demonstrated in his poetry, perhaps he simply understood the concept of “Story” differently than I did. While my goal was to refine his story and help him understand how to capture an audience, by developing a dramatic question and providing concrete detail, for example, I realized that I was not giving him room to try things on his own. The bulk of his work on the project he did with me by his side. This deprived him of the chance to experience his project as Isaiah did: when Isaiah listened to his own story, he felt “it brings me into myself.”

Ethan’s first writing provided the clearest sense of him and his struggles; the longer we massaged the text, the blander and safer and less “him” it became. Neither, appropriately, did I feel it was “me.” The personality disappeared as Ethan plodded patiently to the finish line. Tiny and uncontrollable miscommunications and mismatches of our expectations produced these slips, slides, and downward spirals and may have set the whole project off in the wrong direction. Recovery from these detours was possible. Fortunately, when the voiceover got him down, Ethan could turn to another aspect of the story, such as the music, the effects, or the images.

While Ethan’s story shifted frequently, the visual material he used stayed nearly the same from day one: pictures of two fancy knives (chosen for their artistic merit), Langston Hughes, a football skirmish, a basketball, and a video game screenshot—plus some additional video clips we shot with the digital camera near the end of the project.

Inspired by my success of shooting video of Miles—another participant but at the other site, Beacon—as he breakdanced, I had suggested that
Prerna (another digital story mentor who helped me two days of the workshop) slip into the gym to capture Ethan as he played basketball. The digital camera could capture a few seconds of video at a time. Ethan did not notice her, and he delighted in the results when he saw the clips. Stringing all the videos back-to-back no matter if they showed anything interesting or not, he squealed, “Wee! I’m great!” This enthusiasm energized him (even if the size of the clips probably also slowed down the computer’s processing of his movie significantly—to his later consternation).

Ethan became strangely obsessed with the length of the movie. When Alana asked why his movie was so long, about four minutes, he replied, “I don’t want my story to be 30 seconds. I want it to be at least two minutes and a half.” He complained loudly as the transitions he added shaved seconds off the final length, and he tried to lengthen it beyond three and a half minutes.
After he was done, I asked him how aware he was of other digital stories that were being developed around him. He admired Juan's project, especially how he celebrated his heritage:

He actually thought about it. He went deep into his roots, and he thought about his culture, and he thought about the differences between his home country and here. And he tried to influence those differences by making the movie. [...] 

It made me think about how I should work on my story, like what things I should put in it. And it made me think about the whole quality of the whole movie. It made me think about what's gonna happen if I do this, what's gonna happen if I do that. [...] 

It wasn't easy to talk about what he was talking about. And the way he talks about it, it's really good. He has this type of seriousness to his voice, instead of all jolly. It actually tells us that something happened. It actually develops the story more.

Ethan helped Juan develop his story idea as he struggled to decide what it would be, so Ethan may have had a certain amount of pride in Juan's final piece, even if he was also “jealous” of it at first. Although I wished there had been more members working together to perfect each other's stories as Ethan had helped Juan with his, at least Ethan got the satisfaction from their interaction that I had hoped all the participants would feel through more story circles and story sharing.

Ethan was determined to finish, and he did. Once he did, I asked him about his motivation. He told me he had been “mad and disappointed” with his mother and sister, and that for him the project was a way of “just showin' them that I'm not always doin' stuff bad, I can actually do stuff right.” This explained why he would persist in a project which in retrospect he described as “hard and time-consuming,” requiring great “effort” and “concentration.” Once he realized that it would be a long process, he decided he would “have to buckle down and do it.”

An incident early in our interaction, I believe, played a key role in Ethan's continued interest. As he sat down to work on the project, he lamented that he was missing out on his favorite rotation—gym—and that his school had cancelled gym that day as well. Although I really wanted to see him get farther along on his digital story, I also told him
Ethan among the others

Ethan demonstrated an accommodating and helpful spirit that established a small community among those who worked on the project at the same time. After he and Juan had been working all day, I invited Alana to see what they had produced while she had skipped out on the workshop to get her hair done. To encourage her, Ethan said, “It actually would help to catch up. You wanna see what I did?” She had nasty questions for him about some of the choices he made, and he responded gracefully and intelligently. On another day, Ethan insisted I go help Marty, even though Ethan needed my help excising the swear words from his soundtrack. He knew Marty was getting increasingly agitated with my attempts to split my time fairly between all the participants in the room, as Marty complained loudly about this.

Ethan also had an audience in mind as he worked on his project. In particular, he was eager to show it to his old teacher whom he planned to visit one Friday, and was nearly angry when he asked me, “What do you mean it'll be too big for a disk?” Even with a target audience, he seemed very shy about the project, and every time he played his soundtrack he turned down the speakers as low as they would go and put them right next to his ear. Several other Clayton members had developed this habit as well. With all the computers facing the middle of the room, or with all the kids knowing each other quite well, perhaps they felt more vulnerable than they might otherwise.

that if he felt conflicted about his choice, he should just go run around and shoot hoops and come back later. He thanked me, although I insisted that no gratitude was necessary. He came back too late that afternoon to get any meaningful progress on the project, but both of us understood our contract better. We had priorities, and I had to honor a love of the game for him to honor a love for stories.
Yadira’s maturity, leadership, and the clarity of her opinions made her stand out at the Club. Direct, powerful, bright, and quick—her name suited her: it translated to “lightning.” (Her pseudonym does not have similar flair, or flare.) Yadira competed on the debate team and dominated conversations with her peers. When the young women’s group at the Club wasn’t serving her needs, she led the coup to take it over so that they could talk about issues that interested them. She transferred to magnet school for science and technology because she felt her original high school didn’t challenge her enough. A week after she took the MCAS, a standardized test Massachusetts requires for graduation, she described it as “fun,” because she enjoyed writing the essay. She plans to go to college and graduate school and major in advertising so that she can be creative and travel around the world.

I met Yadira with her “other half,” Veronica, as I was trying to reignite Veronica’s interest in the project. Together they solved some puzzles posted in the Club. Yadira solved these so often that the staff had a stash of preprinted signs reading, “Yadira did it again!” As a tactic to get Veronica excited, I suggested they work together on a digital story, especially since Yadira was getting started later than the others. They thought about it. Yadira asked, “Veronimica (sic), do you want that, for people all over the world to see you?” Yadira immediately stuck out her tongue and answered for herself: “I don’t want that.”

Nonetheless, Yadira and Veronica went upstairs to work on their shared digital story a few minutes later. After discussing several possibilities, they decided to focus on their friendship. They quickly composed a definition of friendship, then asked me what I thought of it. It wasn’t a story. I struggled for something to say. I pushed them to think of a concrete episode in their friendship, and they thought again for a little while, but then wanted to leave for lunch. They didn’t come back again that day. When I found her in the TV room watching a Disney movie, Veronica told me again that there was “too much thinking” in the Behind the Screens project.
In Veronica’s absence, Yadira began formulating a different digital story. During a group meeting Veronica missed, the conversation reminded Yadira of the journals she kept. She ran to retrieve one to share with the group. She made it for her sister who lived on Thompson Island, because Yadira missed her. In three days, Yadira stuffed a composition book so that its thickness swelled from 1cm to 20cm. She filled its pages with poems, clippings, candy wrappers, drawings, and photographs. She had been making her journals since the fifth grade, and now as a high school sophomore, she owned several full books. She inspired other girls at the Club to make journals, too. She explained to me:

[When] I used to do a lot of jumping around and stuff, [...] eventually I started to pick up books and start writing in them. I would write anything down on paper, and I would put it into a folder, and eventually I would put it into a ghetto notebook. Like an empty soda can—[it] can remind me of something, anything can make me think of something. I pick it up and I have this junk box at home. A piece of paper, notes that people write to me in school classes or whatever. I put it in there. A card that’s really sweet, whatever, I put it in there. A photo album. I put it in there. I don’t really keep a diary around, because my sister’s too nosy.

I asked her to describe the story that she would tell about her journals, and she replied:

Sometimes you can leave everything inside you. It hurts a lot, and it’s never gonna be good. It could lead to suicide. You could be like write it down, throw it away—at least you read it yourself, or you could keep like a journal of ... yourself! [...] It’s more like a project. The importance of writing. The hard thing is with a journal you have to hide it so nobody knows where it’s at. Because there are things you don’t want them to see. Like in my journal, I just put pictures that remind me of things that I don’t want to write in my journal because I don’t feel comfortable. Some people got hurt inside, and they put it in their journal. I think it’s important. To me it’s important.

Yadira tried to bring the two story ideas together, and offered that she and Veronica could do the piece “as a friendship journal.” But, despite our efforts to engage her, Veronica eased out of the workshop more and more. “I want to be an actress some day and the first step to that could be directing, but nothing interesting ever happens in my life,” Veronica told me. Although she continued to keep watch on the projects out of the corner of her eye, no amount of questions, brainstorming, and gentle coercion could pull her back in.
Yadira was generally very busy, so she had little time to spend on her project or with others. At her best, she would pay close attention to the stories of the other participants and offer feedback and advice. Sometimes she offered too much, so that it felt like she took over some projects. At other times, she took the story sharing as a time to discuss how she felt personally about the topic. When Pablo wanted his story to emphasize how underappreciated fathers are and how he envied people who have fathers, Yadira chimed in:

Yadira: Well, in my case, my story changes, because my father didn't live with me and he left when I was five and he comes back and then he leaves again and so right now I could give a [struggles for a word that is not a swear, says "blech" or something] so to me my father is dead. He could show up tomorrow he could show up any day, but....

Me: [interrupting] How does this relate to [Pablo]?

Yadira: He's saying you should appreciate your father, and I'm saying, how can I appreciate someone who is not in my life?

Yadira would troubleshoot stories more than the others did. Pablo had been having a hard time with his story, so Yadira offered her two cents.
Yadira: Write about what you feel like when you hear stories about him? Like what it would be like to grow up to be like him. Like if he was your hero or something. You know how people pass away but people have stories about them still, like oh he was a great man, like those things that they do stories, and people see you and they say, oh you remind me so much of your father. Like, he always used to do blah blah blah blah blah. Like do people tell you that?

Pablo: Yes.

Yadira: Write about that, how they say blah blah blah blah.

At the next group check-in, Yadira explained more clearly her independent digital story (without Veronica), but her description still lacked the feel of a story, even though she had added narrative elements.

Like how it changes. How it makes me feel. Because you could be in any place at any time. Like the other day I walked into Papa Gino’s, and I found a bib, and it reminded me of when I was little, and it had little pretty butterflies. And I wrote about how it reminded me of life, and it reminded me of swimming [...] And anything, like you see a picture and you get really emotional, you just put it in a notebook and you write about it. As long as you get it down on paper and you get it out there in some sort of way, like you can yell you can scream you can just stomp your feet like a lot. [...] If you write that thing down, then I really think it would make a difference in your attitude.

Given her comfort with recording her thoughts and reflecting on them, I expected Yadira to race through the project. But, like Coretta, she encountered a roadblock right away. Yadira told me she “started figuring it out and then didn’t know what to do.”

Like I started it out I wanted to do it on Tigger, right? Then I wanted to do it on my notebook, and the importance of writing it down and stuff. [...] I have my journal but I don’t know exactly what to write on.

When Yadira described her project a week later, “about my journal, but it’s going to be a mixture of different things, [...] about how school is, Tigger, why he’s my favorite character, and coloring, and the importance of writing in the journal.” Alana immediately responded after Yadira finished her sentence: “I’m doing it about Omarion.” At that moment, I didn’t realized that Alana may have recognized a parallel between her love of Omarion and Yadira’s love of Tigger.
From day one, Alana had been constructing an homage to her favorite boy band, B2K, and its member, her “future husband” Omarion. B2K’s hit single got so much (over)play during the workshop that anyone would be able to recite its lines: “I got everything I need / except for a main squeeze / I need a girlfriend! / Won’t you be my girlfriend?” I occasionally engaged Alana in conversations about her project. When I asked why there were so many pictures of Omarion and not of her, she looked at me like I was utterly empty-headed, and replied, “I am Omarion.” A nearly identical conversation with Yadira about her Tigger obsession yielded the same response.

Yadira: I’m gonna do it about Tigger.
Me: Can it be more about you and less about Tigger?
Yadira: Tigger is involved with me!

Yadira loved Tigger, called him “sexy” and appreciated his bounciness, but she also thought of herself as Tigger. She originally got the nickname because she “always used to be hyper all the time.”

The similarity between Alana and Yadira didn’t become obvious until later. As Yadira began photographing pages from her journal, I realized the parallels between the two projects. Just as Alana had come in every day to collect another five dozen images of B2K, Yadira flipped past her poems and drawings to capture any journal pages featuring Tigger. (On my suggestion, she also snapped a few shots of different pop-up constructions in the journal.) She had a whole idea worked out, in which she’d start her digital story by showing the journal opening, then tell why she makes it, what kinds of things she can have in it, and show images of it. Most of these were images of Tigger. Such assemblage of images of idolized figures from the media by their adolescent fans recalls Henry Jenkins’ observations of teens online. They create private worlds with images of their dearest passions, and online they can connect to other youth with shared interests (Jenkins, 2002).

Once Yadira had all of her images set, all that was left to do was the voiceover. In our first attempt to record it, she felt increasing pressure from her sister and cousin, who had come to join her in seeing a new movie at a distant cineplex. Her sister asked every few minutes if she was done yet, and Yadira grew increasingly agitated. Her cousin, who
YADIRA AMONG THE OTHERS

Yadira attempted to broaden the conversation, to find relevance in each person’s story, and to give honest feedback. When Zuzu told her story, Yadira reacted loudly to Zuzu’s line, “When I was four my mother was stabbed 14 times.” She said, “Whoa! That’s a little gruesome, don’t you think? A little Julius Caesar.” I tried to rein in her very over-the-top, gestureful reaction so that it could be useful to Zuzu, as I saw Zuzu recoiling a bit from the reaction, pulling into herself as Yadira confidently told her exactly what she thought was wrong with starting the story so dramatically. We then tried to talk to about it reasonably.

Zuzu suggested she wanted the beginning to be emotional, and Yadira immediately started in with, “Emotional? Yeah, I’m pissed off. I wanna find the guy and hurt him bad.” They began to talk about restraining orders and stalkers and the constant fear they live with from early trauma. I watched as girls who had known one another well from other interactions in the Club discovered new things about one another. Another girl in the circle, Peggy, watched the discussion, in awe of both the girls and impressed because of her own inexperience with tragedy. Where other teens were too polite to engage in this kind of conversation during the story circles, Yadira took the role with particular skill and great pleasure.

In the end, she felt she didn’t know as much about the other stories as she would have liked, but she enjoyed the “different perspective(s), from different views and different ages” the whole group brought together. “And different cultures. [her fist in air] Diversity—Cool! ... I actually didn’t get to see everybody else’s, but Juan told me his idea and I thought it was good.”

quite by chance had once been a mentor at the Beacon Clubhouse, counseled her in Spanish asking why she was doing the project. He assured her she should do it if she wants to, but only if she wants to, not just out of obligation to me. In the end, Yadira was too shy to record the voiceover, and her ride to the movie theater arrived.

We met again two weeks later in a narrow window of time in Yadira’s busy schedule. She had to prepare a speech for a teen recognition dinner the next day, so she was already nervous as we started—both because of the pressure of time and her unease around public speaking. She made a few small edits to her storyboard and then spent over 45 minutes coaxing herself into recording the voiceover. Her mind was “completely blank” she told me, and she kept trying to summon her courage, almost
as if she were going to jump into a cold swimming pool:
—“Okay, okay, okay. What am I going to say?”
—“This isn’t hard! I should just do it!”
—“It’s so simple. But why? Why won’t I just do it?”
—“I had it and then it left. The confidence. Poof!”
I offered her questions, and she told me I sounded like a journalist. I asked her if she wanted privacy, and I would step away, and she replied, “That doesn’t make any sense. Both ways I lose.”

As she had been encouraging herself to begin, she had stared at the screen, making only occasional, but friendly, eye contact with me. She was shy and anxious about people listening and her quickly disappearing free time. Her breakthrough came when she found an audience—an unusual one at that. She noticed that her computer was missing the blue smiley face that indicated it as a computer for the workshop. She took a sticker off another machine, then put the blue smiley face in the middle of her screen.

Yadira: Cool. I’ll speak to a sticker. Or… I could put it on my finger and act like I’m talking to it! C’mere c’mere c’mere c’mere come here—oh! Get off!

Me: You can talk to me if you want.
Yadira: But you’re not silly looking!
Me: I can be!

[I tried to put my hair in a springy ponytail on my head. She laughed, but returned to the blue smiley face until Melanie walked in. Then she enlisted Melanie. She sat Melanie in front of her and put the smiley face on Melanie’s forehead.]

Yadira: Ok—you’re gonna be looking at me while I’m talking to you, but you’re going to act like you don’t know me at all. [then, apparently for the record:] I currently have a person seated in front of me with a blue dot on her head, OK? All right.

With this tactic she was able to record her voiceover. She catalogued the images as they passed on the screen, like a voice-annotated slide show.

My name is Yadira, and this is a journey through my mind.
This is Tigger. My favorite character in the whole wide world. Isn’t he sexy?
That’s a map of where his house is and that’s his house.
That’s my first certificate from the… thing: I had to go find some stuff.
And that’s a picture that my friend drew for me for a present.
Oh, look at my pretty little stickers!
And that’s my little tasteful flower. I made it out of M&Ms. Talk about ghetto!
And that’s my newspaper from September 11th.
And a couple of flowers that was given to me on Valentine’s Day from a couple of my friends, oh sweet!
That’s my sister’s name on a flag.
And that’s____, my little sister, and that’s my other sister. And there she goes again. She’s so purty! Disregard Pooh in the background please.
That’s____ one of my bestest friends. That’s one of my only pictures of me and my sister; ___ we have together.
Those are pictures Charlotte and I drew for fun at the Boys & Girls Club.
And these are pictures of sites I would like to go see
And that’s a Valentine’s Day card from my friend Robert.
Ohhhh... how cute!
Disregard that.
And that was one of the longest poems I ever wrote. It’s called I love you forever. Really huge.
This is my friend’s book I inspired her to make one. It’s a pretty gum collection, but of course: it’s Starburst wrappers. So that doesn’t count.
So as you can see there’s a big difference from mine because she’s colorfut and I’m dark, I guess, Yeah, talk about evil, right?
John D. O’Bryant. The guy who came up with my school name.
And this is my soccer team.
That’s Dontoface, and that’s Dontoface playing.
That’s Mandy and Helida who were making a presentation.
That’s Adombi, representin’ her Nigerian culture.
And that’s Don, representing his culture.
And there’s the whole crew again.
And again, it’s kind of funny looking, they all go by height.
That’s Mr Spur, he’s my math teacher, one of a kind.
Mr. Carty. He’s kind of a mystery to me, I don’t know how he can stand up straight with his belly like that.
That’s Mr. McCloud teaching class.
And that’s Kimberly who told me not to put this picture on here but I did.
That’s Stephanie. I caught her by surprise.
That’s Johny. He’s a little punk you don’t wanna know him either.
That’s ____ and ____ one of my brother’s best friends.
And that’s Rufus—trying to look sophisticated doing his work. He really was.
That’s ____ and ____ in the middle of Spanish Class.
And that’s Helida again.
That’s Yong who was playing cards. You’re not supposed to, but hey.
That’s Charlotte being silly in the hallway.
That’s ____ trying to look cute.
And that’s my brother Anthony and Charlotte.
That’s ____ and Charlotte. Isn’t that cute?
That’s____ he has a thing for Cartoonman.
Stills from Yadira's final digital story.

That's Veronimica, or Veronica.
That's Camille.
That's Betty and Charlotte in a fundraiser for the girls group trying to go to New York and stuff. As you can see we're not going that far, but hey, we're getting there.

When she finished, she threw her arms up in the air and celebrated.

Then she played back the recording, and she made a face as she listened. Clearly she was not pleased. Like many people who are not used to listening to themselves on tape, she did not recognize her own voice. But while other digital storytellers thought their voice sounded strange, she rejected it completely, saying she sounded too old.

Yadira: I sound grown! It sounds like a woman, it doesn't sound like me!
Me: But you are a woman.

Yadira: No, I sound [gestures with a rotating arm, moving up and up, then waving around) ... 27, 36 area [age) range.

Me: Does that surprise you?
Yadira: It doesn’t sound like me.
Me: What does it sound like?
Yadira: It doesn’t sound like me at all. Do I really talk like that?

As we wrestled with the voiceover, Yadira resisted writing down her thoughts. It wasn’t because she didn’t want to write, though, but because she worried that her hands would not be able to keep up with her brain, as she explained:

It takes too long to write because once you start writing you get your memory running and then from there you’re like blah blah blah and from there you think, oh man this would be so much easier if I was just talking. Your memory you run it so much, and you say, oh shoot, I could say this and this and this and this... but I don’t want to start writing. [...] I don’t mind writing things down. But because I write it, it kick-starts my memory, and I think, how about I put this, I put this, I put this, and my hands, they can’t write it that quick. [...] I have everything in my head, right? [...] I just didn’t feel like writing.

Later she explained that writing makes everything just start “coming at you.” We talked about whether this would be a good thing, though, to get over the hesitation she had had in recording the voiceover. In the end, she wasn’t interested in writing, in part because she had a big paper to write for her English class in school.

While I talked to her she seemed to monitor several other conversations happening around her, leaping in with her own commentary. Similarly, her thoughts seemed to go in a dozen different, interesting directions at once. She made connections and thought metaphorically with great ease. She wished she could have brought her memory box from home to the Club.

It would have been really neat if I’d pulled out everything from my box and bring that box in and be like, hey this is my can! If you saw the can and all this junk in the box, you’d be like, what the heck are you doing with all this trash? No, because, I see beyond it, like in my book I see beyond what people see.

At first she didn’t recognize how she used images as symbols and metaphors in her digital story, but then she corrected herself mid-thought: “I don’t think there was much insight, in my personal one. Because, actually there was, like the whole thing was, because every-
thing I have in there, like a card with Tigger, why would you have that in there? Well, because I love Tigger so much." She chose to use images of Tigger rather than her PSAT (a standardized test) score results, because the test scores don’t exhibit her “creative side.” She felt the project forced her and others to look at things differently. On the spot, she invented a new word to describe this: “deca-faced....Y’know how some people say two-faced, two faces? Now I say deca-faced, ten-faced, you have to see things in different ways.” She continued:

Like, you see a rock. Oh God! That looks so annoying, right? I see a rock. Hey... I could use that as like a way, remember the thing I said about life? Always stay solid. So you see something and you have to imagine it in a different way. I see a tree, and I think, the tree is me, and all the branches are all my opportunities I have in life, all the pathways I can take. Another person sees a tree, and says, oh it’s a tree, what’s so special about the tree? For me it represents life.

Yadira used her digital story as an opportunity not only to advocate for something very important to her, the importance of using journals, but to step outside of herself and examine her thinking and public persona. This was especially important the day before her first experience speaking in public; she said that the project helped her “practice talking.” If she had had more free time, I imagine she would have played with this even more, gone through more iterations, and taken the role of audience to her verbalized thoughts. In making her digital story, Yadira also exercised a skill she had already developed very well in making her scrapbooks: communicating through visual imagery. She started with that comfortable task. She then decoded these memories with her methodical voiceover, making public her private visual code (which her “nosy” sister, for one, could not have otherwise interpreted).
DISCUSSION

(Children) transcribe and expose the words and images that crowd their minds and place them on a stage, becoming actor, writer, critic, linguist, mathematician, and philosopher all at once. And they do not need us to teach them how.

— Vivian Gussin Paley,
The Boy Who Would Be a Helicopter

As with the students in Paley’s classroom (described in the quote above) who spontaneously stepped outside their experience and examined their thoughts and feelings, the approach of the Behind the Screens workshop opened up a space for sophisticated, narrative play. Rather than ask the kids to reflect, the project asked them to “put it out” in story form, and that “putting out” made reflection possible.

If the goal of Behind the Screens was reflection, why not just sit around and tell stories to one another? Why not gather in a Freireian culture circle seeking conscientização (critical consciousness) bringing reflection and action together through dialogue? (Freire, 1970, p90—see Chapter 2 for more on Freire). In this chapter, I analyze how the youth in the Behind the Screens workshop interacted with and reacted to digital storytelling and the supporting activities. Through their work, the youth made connections between the materials of their digital story and they also made connections to an implicit community—their imagined audience. Their projects raised issues of voice, authenticity, power, agency, identity, expression. In this chapter I also examine the unexpected directions in which the participants pulled the activity, and the ways in which their thinking and their projects evolved over the course of the workshop.
Most of the teens at Clayton started their digital stories similarly:

“My name is Marty King. I am going to tell you about my personal life. I am 14, go to school, and I stay out of trouble sometimes.”

“Hello. My name is Pablo Martinez. I’m in the eighth grade. I’m a student at the Dearborn Middle School. I’m an A/B/C-student.”

“My name is Juan. I was born in Rio Piedras, Puerto Rico.”

“Whassup everybody. My name is Alana Sanchez-Smith and I am a member of the Clayton Boys & Girls Club.”

“Hi. My name is Ethan Thomas.”

Because beginning a story by stating your name contradicted my own instincts for writing, I encouraged each of these digital storytellers to consider starting with a concrete detail instead. They refused. Pablo, for example, explained “I’m talking about myself. I think I should say my name. My name is Pablo. I’m thirteen.” I asked him if this was the style in the movies he liked most, and he responded

Like “Life Stories,” they do. In “Life Stories” movies they do. They say this is my name, and I had a rough life. Then they start the movie. I see the movies like that. That’s where I got the idea, that I’ll put my name, and how I am, and what my life’s like.

A few of the participants edited their name out of their spoken text when I suggested putting an opening title credit at the beginning.

Marty wanted to tell three stories at once. He would like to be a chef someday and own his own restaurant, because he used to help prepare Sunday dinners with his grandmother. He wanted to emphasize that he was a nice guy, even though some people think he’s a jerk. Finally, he wanted to point to the absence of a father figure in his life, and how he thought that affected him. These three strands could have related to one another, but the script he wrote hadn’t made the connection between them. We discussed how they might flow from one to another, but he had no interest or patience in making those connections. Finally, he grabbed the keyboard and asked, “Do you want me to lie? I can lie if
you'd like!" A challenge in writing is to make pieces fit together. There are so many different ways to portray a fact or a situation, and disparate pieces can be rewritten until they “fit” better with one another. It had never occurred to me that someone would consider this kind of editing to be lying.

I struggled with how much to mold the stories with my suggestions. Perhaps their conception of story was different, and I should honor that. After all, my intention was not to teach them how to write well, but to see how these tools could encourage reflection and construction of narrative. I could observe what kinds of genres of narrative emerged, or I could coax them into styles that were familiar to me. In the end, I compromised, offering my opinion but not pushing too hard. That meant being open to more poetic, abstract expression, as with the poems of Coretta and Ethan. Delpit (1988) also faced this dilemma—how to honor a student’s authentic voice while also introducing academic rules for writing that are more readily accepted by the establishment. She discussed the choices she made—to allow for and insist on both modes of communication—in the context of an exploration of power relationships in multiracial classrooms.
SITUATING THEMSELVES IN THEIR WORLD

Being open to other kinds of stories also meant not devaluing personal expression made through aggregating catalogs of images from popular culture. I worried that the youth could have been hiding behind the celebrity snapshots they collected, so that they would not have to expose their own thoughts and feelings. Alana began the trend by assembling an homage to the pop star Omarion; for her, Omarion represents her aspirations: she wants to be a fashion designer or a performer because those careers would pave the way to her “future husband.” Such media symbols gain ready acceptance in her social milieu and provide a safe way for talking about what feels very personal.

Likewise, Yadira emphasized Tigger because, as she put it, “Tigger is involved with me”—he represented the characteristics she wanted others to associate with her.

Melanie started with a story she struggled to get out, and when she saw her peers assembling what superficially appeared to be simple slideshows of favorite pop stars, she abandoned her original plan and began one too. But then when she returned to work on her project again, she realized that the pictures had nothing to do with the story she wanted to tell, and she began afresh, this time with more enthusiasm.

Because these adolescents occupy a social world in which popular culture defines so much of their interaction with one another, it would follow that they employ these images in their construction of personal identity. Peggy Miller et al. (1990) observed how young children become acclimated to social norms of narrative practice by participating in the routines of expression in order to create a “social construction of self”; similarly, the teens in Behind the Screens who turned to images of their favorite celebrities participated in the routines of expression they see all the time on MTV and BET. Stitching together their own sequences of these images places them firmly in their own social sphere—they employ the visual language of their adolescent culture to describe themselves.
A “popular culture” of digital storytelling would help participants to be able to express themselves authentically and with original material. Coretta and Isaiah both benefited from taking the time to look at extra examples. The more they watched, the more widely the range of what was possible opened up. Isaiah’s piece spurred others, particularly because it directly addressed the theme of Behind the Screens. The original examples, on the other hand, required us to translate: “this digital story is by an adult talking about their work in the community; instead, you can talk about why you make the things you make or do the things you do.”

Many of these teens had not been challenged to tell stories too often in the past. For example, Nelson had faced the same challenges getting Beacon members to develop a storyline for the ongoing comic book project they had been developing over the past year. As they drew, he said, they didn’t consider story or character development. Nelson believed they concentrated on what great effects they could render with the technology, and he said, “I tell them, naw, don’t worry about the effects, just concentrate on the story, and they say, wow, that’s a good idea.”

A digital storyteller needs time for the re-working, massage, and assemblage that goes into editing a richly layered video text. When I approached Ryan about how his story was developing, about two weeks after we had begun, he told me he couldn’t rush it, that he wanted to do it well, and he was waiting for when the time was right. He had seemed motivated, and he had told me a few times that he would work on the script and bring it in the next time. So after this I backed off. (Unfortunately, not long afterwards Ryan stopped being able to come to the Clubhouse.)

Once I removed the restrictive definition of the project as a workshop, I began allowing new kids to start projects too, long after the workshop had begun. For the first two months of the workshop, Niama and David
watched the workshop from a distance—then suddenly they stepped forward. They started their digital stories, worked quickly and enthusiastically, and showed the possibility of a culture of digital storytelling.

For all the stories, I wondered what the next story would look like, after the novelty of the tools had worn off. And the next? Often, digital storytelling workshops build capacity in communities of practitioners. We assume that the new digital storytellers will go on to make more, many more, digital stories. Yet most digital storytellers make a single piece. How would the expression of the participants in Behind the Screens change if they did not consider this their only chance to make a movie about themselves, but the first of many?
EXPRESSIVE USES OF TECHNOLOGY

In workshops led by MIT’s Center for Reflective Community Practice, learning a new technological tool motivates some of the adult participants to sign up. They want to build their technical skill set, and the CRCP facilitators want to build the capacity for media creation in the community (Freidus & Hlubinka, 2002). In a technology-rich environment like the Clubhouse, this can be less of a draw. Some members had already fooled around a little with video editing projects before, and in these cases, I built on the previous interest.

An interest in the technology could get in the way of telling a good story. Nelson said, “They’re so preoccupied with working with the computer and coming up with this incredible stuff, because they think that’s what a computer’s supposed to do.” This could be one of the reasons Miles generally does not finish his Clubhouse projects. The thrill for him is in the act of creativity and playing around with the possibilities available to him. Playing with the technical effects could also re-energize the participants when they needed a break from writing their voiceovers, for instance.

The computer is like a sandbox. In the use of digital media for constructing personal narratives—like the digital stories in Behind the Screens—people can test out multiple representations of identity. They can see and hear their words come back to them, and they act as the first audience to their construction of self. Turkle (1984) calls this use of computers as “a canvas for personal expression” on which teens “[work] through personal concerns” a way of making computation a “constructive as well as projective medium.” (1984, p138) An ability to try out ideas without consequence is one of the great strengths of digital storytelling, as Isaiah and other members attested.

Kids repeatedly watched their stories to their own great delight. Miles rendered and replayed his digital story from beginning to end with every small change he made to the project. Isaiah described how the project “brings me into myself” and he was amazed that he made something that showed “this is really who I am, this is really what I do, this is what I was inspired by.”

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THE SCREEN AS A STAGE

The screen of the computer acts as a stage where these digital storytellers could stand back from the reality of their lives and observe and make connections. Ethan danced around with joy as he watched the basketball clips in his digital story, or as friends gathered around to ask him, "How'd you do that?" The digital storytellers took part in the careful listening that storytelling requires, and their responses to their own representations further deepened the meaning of their stories. It is a private process with a public outcome.

Traditional storytellers who perform in front of live audiences will often rehearse their stories with a tape recorder close at hand. They then listen back to their voices and perfect their technique. The use of audio recording separate from video turned out to be an important design element in Behind the Screens. When people record audio only, they tend to point the device at themselves. They record their own voice. The teens I worked with were very interested in recording short segments of audio and listening to themselves immediately afterwards.

In contrast, when you hold a video camera, the lens points away from you. It points at the people you see and the places you go. Video documentation implies an objective point of view much more strongly, then. You go out into the world and respond to it. People rarely walk around narrating their video tape. Instead, they play "spy," capturing the goings-on around them.

The kind of bricolage that digital storytelling inspires forces people to look inward and see themselves and their work, and to use that material for expression. Assemblage and montage of evocative bits happens in any kind of expression—one never starts from scratch when writing, drawing, or composing in any other medium.
At Clayton, the members who volunteered were for the most part those who hadn't done much creative work at the Clubhouse before they began, and so the project competed with other responsibilities at the Club but not with creative pursuits as at Beacon. The pitch, “create a documentary about yourself and your Clubhouse portfolio,” appealed to these budding artists as other possible Clubhouse projects had not in the past. A lack of creative work to reflect on made it difficult to decide on a subject for their digital stories that related to the theme of “what you do and why or how you do it.” So at Clayton, most of the digital stories became personal explorations of identity. Broadly speaking, in adolescence, defining one’s identity is one of the most vital, central, creative acts, so the creation of digital stories became an opportunity to reflect on that creative process universal to all teenagers.

Another workshop design that had been considered would have started with another workshop, such as designing a programmable bricks sculpture, during the first half of the project, and then guided the participants through documenting their projects in a digital storytelling form, so that it would have a first-person narrative and be personally relevant. I suspect that this approach could have worked well at the Clayton site. Those participants who were most interested in talking about themselves and (or through) their favorite celebrities might not have participated in that kind of workshop, however.
GETTING THE WRITING RIGHT, RIGHT AWAY

I naïvely assumed that the kids would have dozens of stories ripe for the picking. These remained out of reach for many of the kids.

Although I offered feedback gently, several of the teens took any suggestions to refine their text as harsh criticism. When I suggested to Tina to go through her script to find pieces which could be illustrated with images rather than described by voice, she immediately asked, “What’s wrong with it?” Tina works very hard in school and appears to derive much of her self-worth from achievements, praise, and recognition from others. When she misinterpreted my comment as negative feedback, she seemed to lose interest in the project, and it fell behind other school priorities.

Marty began with the text. He kept telling me he didn’t know how to do anything, and several times he pushed the keyboard towards me and told me to do it for him, particularly when he wanted to correct his document so that all of the squiggles that mark mistakes would go away.

The hesitancy in the face of Microsoft Word’s automatic spelling and grammar checks that Marty demonstrated was also a challenge for Tara Rosenberger Shankar in her work with students studying for the GED (graduation equivalency diploma) in New York City. She observed some of the traits in her students that I also encountered: students who think “their writing is transparent, their intentions clear, and their knowledge common” and thereby don’t take audience into account as they write; who learned in school that only full sentences count as “writing,” and therefore cannot compose an “intentional fragment” or “bullet point”; and who can write much, much more using pen and paper than on a keyboard. She found this makes it more difficult to engage these youth in incremental evolution of a piece of writing, starting with a sketch or a brainstorm of what their message may be and building and refining that meaning. (Shankar, 2003)
Marty’s reluctance reminded me of my first conversation with another participant, Pablo. He explained what he liked most about using computers.

[Y]ou can just write whatever you want. Like in Microsoft Word, you can just write away, you can just type, it’s fun typing, to hear the sounds, that’s what I like about it. [...] I really just like Microsoft Word. You can just write whatever[^s] in your head, your thinking. [...] When I’m not doing homework, I write what happened today. But I don’t save it, just what happened, like, oh man, what just happened today. [...] I just delete. It’s just to get it out, not keep it, not boiling in my head, just get everything out. Cuz while you’re typing you can think. You can come up with new words, or when you’re doing your homework or something, ask for new words, and you learn. That’s why I use Microsoft Word, and that’s what I usually do, write about what happened, the year, the day, what happened yesterday, what happened last Saturday, what’d I do, what I ask my mom, stuff like that.

He didn’t save his writing because he worried “people might come into my stuff, checking it, reading it. I don’t want people getting into my life.” He was interested in “keeping it private.” Nonetheless, he claimed he wanted to share his digital story eventually. Pablo’s reluctance with writing his script came from the pressure, mostly from himself, to make something great, because this was going to be “the only present” he’d ever made for his father, who was killed when he was two years old. Pablo understood the importance of his message, and he worried that he couldn’t do that justice. As Pablo discussed his story with me, he suddenly began to characterize his piece as inadequate.

I am mostly missing, in the story, a lot of words. [...] Like this sentence, it’s kind of confusing, so I should change it up. I should put more words on it, and um.... [really long pause] I don’t know! [voice becomes high pitched] I’m confused! I think it’s confusing and messed up. I don’t think it’s... I don’t know. I want it to be more words, to make it bigger, I don’t want it to be this little, cheap. It basically feels like I don’t really care about it. And I feel I really do care about this video piece. If I didn’t, I wouldn’t be doing it. And I’m thinking, I’m just reading it, I’m just thinking like, it’s just a waste of time, writing it, I should just make more, make more of it.

What to do with someone who suddenly loses all confidence in his ability to express himself? When I tried to help Pablo get that great story he had told me out loud into text, he crumbled. I never found out if we could catch his story again. He quit soon afterwards, mostly because his mother pulled him out of the Club after he spent a late night playing basketball.
MULTIPLE WAYS TO PLAN

After my experience with Pablo, I emphasized even more strongly to the other participants that writing was optional, and I usually first offered to have the participants speak their first narration run-through straight onto the computer or the digital audio recorder I used for interviews. We immediately listened to these recorded bits. Some editing happened in this method for voiceover capture. I usually offered to email them the transcript of their voiceover too, so they could see it in another form, either to edit it or use as a guideline for planning.

But the participants for the most part resisted any kind of planning. Tina and Coretta both told me they had their whole digital stories in their heads, and every suggestion to put that vision down on paper received a polite shake of the head. Melanie equated the collection of images with the writing of an outline, and said that would not work for her.

I have to have pictures that read into my story, and with me, I can’t have an outline, and pictures are like an outline. Even when I write like five-paragraph essays for my teachers at school, they say write an outline, I write an outline then do the opposite of my outline.

This left me wondering how we could start at all.
THE RISK OF REVEALING

In a careful five-year study in inner-city youth organizations, including a Boys & Girls Club, Shirley Brice Heath and her colleagues followed how older teenagers (ages 14 to 18) interacted through narrative. She observed that

Being serious, thoughtful, or prescriptive within the inner city or about topics such as racial tensions, drug use, or family violence marks one as vulnerable and sensitive—qualities that do not make for survival in the transition between childhood and adult life in urban areas. (1994, p215)

Her viewpoint resonates with Nelson's. He and I talked about the difference between the subtle stories the members tell everyday through their art and the story they would tell in Behind the Screens. He believed that members saw no need to share their story publicly, because anyone they would want to share it with already knows their story—and as much as they need to know:

... (W)hen you’re going to tell a story about who you are and sometimes they may feel intimidated or afraid to tell something like that, what they’re revealing about themselves. Since their friends are in their space, they don’t want their friends to know about all the bad stuff that’s happening in their lives! It’s embarrassing for them. They just don’t want to talk about it.

He contrasted this attitude with what he guessed Isaiah felt. Isaiah had fewer social ties in the Clubhouse, so he had less at risk when he put together his script, and his story paints an honest portrait of his religious fervor and pride in his design. This left him open to ridicule, as when some of the others mocked his line, “God called me to be different.” But he largely ignored these comments. Isaiah was also the oldest, most mature participant. Nelson guessed it would take years for some of the younger participants to have the self-assurance that Isaiah demonstrated.

The climate of respect and trust that the Clubhouse assumes should provide the safe environment such vulnerable expression requires. In Chapter 7, I discuss further the limits of this guiding principle.
LETTING IT ALL OUT

Nelson pointed out that the example digital stories the kids saw may have fueled the misconception that I was interested in hearing only "sob stories." Lacking digital stories made by youth, one of the movies I used to introduce the project was by Ben, whose sister's death at the hands of gang violence inspired him to serve in the military and then return home to Springfield, Massachusetts, to work as a community advocate. Nelson asked, "Yeah, were there other examples without his sister getting shot, just like 'Hey! I love art!'?" No, there weren't.

I certainly didn't want the kids to sustain stereotypes about how dangerous their lives and neighborhoods were, nor did I want them to think I came to them only to hear that. Above all, they should have spoken truthfully about their interests, their work, and themselves. Nelson suggested this misunderstanding might have been a "bottleneck" for those kids who didn't want others to know what they're going through—like Miles, perhaps. In fact, the only time Miles put concentrated effort into working on his digital story was a late night when he and I stayed an extra four hours after closing, just the two of us shaping his story by working one-on-one. He may not have felt comfortable developing his digital story in front of his peers. But working in isolation as we did is not in the spirit of the Clubhouse model.

Nelson also suspected that the youth would not respond to "letting it all out," especially not in a way that Nelson characterized as "positive" and "fruity." He reasoned, "If they sound soft when they're telling their story to their friends, their friends are gonna laugh at them: 'You're a wimp!' 'You're a punk!'" He felt the youth are more "aggressive" about evaluating their work against others, and he imagined that they would prefer to say, "This is my stuff. It's nice. Your stuff sucks." This would be a way of positioning their work in the context of others. Similarly, Shirley Brice Heath witnessed how the youth would use spoken stories to test theories about what others think, influence their peers, and consider consequences, all without losing face.
THE PRIVATE BECOMES PUBLIC

Telling personal stories at Clayton within the small group when other youth had left for the day took on a character of theory-testing and considering consequences in the spirit of the teens Heath studied. Zuzu began her story, "I was born September 29, 1988. When I was four years old my mother got stabbed in different parts of her body around 18 times," the other girls, particularly Yadira, reacted vociferously and bluntly. They interrupted her story to complain. It was too shocking for them. This led to a thoughtful discussion of the inefficacy of restraining orders. For the first time, they shared with one another their own stories of fears in their own homes. Behind the Screens, not entirely by design, created a safe space for talking about the grief, loss, and anxiety some of these kids harbored, that they may have been processing only in a more private world. In this way, any work with digital storytelling on a personal level, especially among teens, could take cues from the spheres of narrative and art therapy. (Freedman, 1996; Rubin, 1984)

Except for Juan, the participants also felt comfortable in telling me the details of real hardships they'd lived through. Marty and Pablo, both boys who were raised without fathers, told me tender, truthful stories about what family meant to them and how they felt the absence of father figures in their lives. This comfort had its limits, though. When I saw Marty in the Club's lobby and began to pull his story out of my bag, he lunged for it and crumpled it up before anyone could see his words—
a surprising gesture given that nobody was near enough to read the paper. In this way, he insisted the space of his story construction should remain private.

Marty, Ethan, and Niama all turned down the volume on their speakers as they test-watched their stories, and put a speaker right to their ears. Niama froze up when she originally recorded her voiceover as well. She explained this shyness to me:

It's hard for me to think of what I'm saying when there are a lot of people around. People look at me and just start staring at me. I have to get used to it. Because usually at my house it's very noisy, because my cousins come over and stuff. If it's gonna be quiet, then I have to be alone, if I'm gonna be doing something like what we're doing.

Clearly, the Clayton Clubhouse is in need of the planned music studio, a soundproof room where the kids could speak, sing, and compose music without being overheard. Niama said that she would feel comfortable sharing the finished product, because “I would have already done it, so I don't have to be up in front of all those people saying what I say... because it's already done.” When I asked her how the two—speaking versus showing her story—were different, she replied, “Because I’m not saying it myself (in the finished piece).”

FITTING IN

Few teenagers are willing to seem like they don't fit in. The fear of doing something wrong or appearing foolish makes revealing oneself to others feel like a risk. This fear first arose with Pablo. When I asked Pablo which part of his story was most important to him, he answered that “people, they should appreciate their fathers.” He hadn't included this in his script, and I asked him why, and this unleashed a torrent of self-doubt.

Pablo: I'm not really used to it. My first time doing something like this, talking about me and my father.

Me: I'm not saying you're doing it wrong.... do you want to include that?

Pablo: If I have to, yeah.
Me: You don’t have to. It’s what you want to do. What do you want to do?
Pablo: I don’t know. [gets quiet] It’s sort of confusing. I really don’t know what to talk about. All I got to say is my story is messed up. […] Right now I just feel I want to quit, I think whatever. I’m just making a fool of myself.

After this interchange with Pablo, I began to wonder if there was something about writing in particular that made the participants less open and more timid. In Pablo’s case, he could explain his story much more poignantly than he could write it down. Was there something about opening up a word processing program or looking at a blank sheet of paper that shifted these teens into school-essay mode, using stilted language or unable to say anything at all?

DISCOVERING POWER AND AGENCY

Juan struggled with his story as well. “So I should do the movie about why I’m childish,” Juan said. The word “should” activated many emotions in me, and, as I had explained to Juan before, and to just about every participant in the workshop, “This isn’t about what you should do. It’s about what you want to do. What do you want to do?” He responded “I dunno,” which was the first answer to most of my questions for many of the teens, the prelude to the answer waiting in the wings.

Juan wanted to explore a theme of how he managed to balance his role as a member of the teen staff at the Boys & Girls Club with his desire to play around with the kids who are five to eight years younger than his own age of 14. He had brought it up repeatedly, yet he kept losing the narrative thread. This surprised me. He performed his staff duties at the Club with a self-awareness and direction I didn’t sense from the other teens. He struck me as cool, collected, at peace, mature, quiet, and determined. But as he struggled to choose a theme for his story, his confidence evaporated. He wrote a few rough drafts, and had thrown them all away. I offered him the transcript of his pre-interview, hoping the several rich topics we began to discuss in it would provide him a point of departure. Upon seeing the transcript, he asked me, “Why did you waste ink on my interview?” His self-deprecating comment took me
aback as I continued to reshuffle my assumptions about this capable young person.

Such language of “should” and “must” came up much more often at Clayton than Beacon, and this could be attributed to the pressures of the rotation schedule and the greater number of rules the kids are asked to follow in the Club. Are some teens so used to having things done to them, whether it is consuming popular culture or being herded from one classroom to another, that they don’t recognize their own agency and ability to make a decision? When Marty told me to write his story for him (and I refused), he was expressing a lack of control of how his story would be told. (Dweck, 1999)

Was this a provocation, to see how much I was willing to release control of a situation in which they were accustomed to seeing adults retain power? Shirley Brice Heath points to this kind of disconnection in narratives told by teens.

Common expressions such as “I don’t know” or “I’m not sure” suggest possibilities beyond events of the telling and establish a distance between the teller and any apparent authoritative position as knower. When the young step into such positions, they do so by assuming the voice of the outsider and not that of their own personal character. (1994, p. 214–215)

Adolescence can be a confusing time of swirling emotions and ideas, none of which feel reliable. By distancing themselves from their stories and points of view, Heath’s teens tested out hypotheses. Likewise with the participants in Behind the Screens, claiming confusion, boredom, or apathy was one way to define what the boundaries of the activity were, and what was their responsibility and what was mine. It was a dance.

How much of their hesitation and looking to me for authority grew from a recognition that the project represented something foreign to them but familiar to me? I knew the “rules of the game” better than they did, and maybe they were asking me to help them navigate this new space until they got their legs. Isaiah never said “I dunno,” but after he watched some of the other digital stories online he wrote that he thought he had “a clear understanding now of what you would like me to
do.” (my italics) Part of the participants’ hesitation may have been an ambiguity in the project, even though I felt I had been clear. When they looked to me as an authority, it was because I knew better than anyone in the room how my world of digital storytellers defined “Story.” Their questions were attempts to clarify that definition and to see how they might fit in with that definition.

**HIGH VALUE AND LONG ENGAGEMENT**

Participants who felt they didn’t have the time to devote to making a digital story of the high quality they expected dropped out. A digital story is a personal statement, and the quality makes a statement about its creator. As discussed in Isaiah’s case narrative, Antoine felt he had to concentrate on his schoolwork and his record label, telling me, “If I come I want to put all my effort into it and I can’t because I have school.” I suggested doing something smaller, and he said, “No, because if I’m going to put my effort into it, I want it to be good, big. [...] It’s just too late for me. It’s just in my mind it’s too late. That’s all.” A cynic might read this as a cop-out, but indeed Antoine had very high standards for all his Clubhouse work, and, as the “CEO” of his record label, he didn’t want to do anything sub-standard.

Similarly, kids who wanted quick satisfaction dropped out. Video editing can take a long time and the learning curve is steep, and—as in the case of Ethan—simply identifying and evoking the story to be told could consume the most time in the process. Once done, Ethan told me that any future participants needed a lot of patience, more than anything else. For him, completing the project proved to himself and his family that he could follow through on a promise.

What incentive did the kids have to finish their projects? With Ethan, progress was slow, and although he complained (at times loudly) about the fussiness of the software, he enjoyed our interaction. Like two-year-olds who, when having an interesting conversation with an adult, will ask “Why?” repeatedly—not out of curiosity, but in order to prolong their chat—the members participating in Behind the Screens may have want-
ed the experience to last as long as possible, and albeit unconsciously, they didn't want it to end. I showed interest in their personal stories and in the value of that story to be shared with others. Behind the Screens was my reason for being at the Clubhouse. When the stories were finished, I would leave. (Not all the youth seemed to realize this, but some did.) I wanted them to make this same commitment to one another.

Not all workshops have this kind of personal connection between participants at the core of the design. In the next chapter, I examine some of the factors which may have affected the workshop regardless of the content of the workshop. What aspects of the workshop format as a format affected the outcomes of Behind the Screens? How much of what I observed was an outgrowth of the challenge of introducing new activities into the Clubhouse versus a struggle with storytelling? If I had come in and asked the kids to weave floor mats or fold origami with me, which of these issues would have disappeared? What particular issues came up because of what digital storytelling specifically elicits? Could the format be further refined into something that fits better into the Clubhouse culture, perhaps by providing the supports for its presence as an ongoing initiative?
WE LEARN FROM OUR MISTAKES. Identifying an error and probing it “to study what happened, to understand what went wrong, and, through understanding, to fix it” is what computer programmers refer to as debugging. (Papert, 1980, p11.) Some children get the opportunity to play with the powerful idea of debugging in programmable environments like LEGO/Logo, MicroWorlds, and LogoBlocks. These are the children who persevere in the face of challenge—that is, when their results don’t match their expectations. For instance, they may try to make a “turtle” move around an interface to draw a star, and instead the resulting picture looks more like a bow-tie. When something doesn’t go as they planned, they must examine their thinking more deeply, and they come away with a more powerful understanding of procedure, for example, than if everything had come out perfectly on the first try.

In designing the Behind the Screens workshop, I was involved with “programming” in another sense of the term: as it is used in youth service organizations to set the schedule of what the kids will do when and coming up with a “program” they will follow. In this kind of programming, adults give youth opportunities to play basketball and do homework or, in my case, reflect on their work and themselves by building digital stories.

I had some expectations in mind for my other kind of programming, the Behind the Screens workshop, and these didn’t pan out. So I debugged. What could I change mid-course to make the project appeal to the kids? What needed to be different now? What could be different in the future? While at times the “workshop” seemed to be in a crisis—when kids weren’t showing up to work on their projects, when groups didn’t coalesce, when kids were too shy to share their stories, when stories didn’t live up to my definition of “Story”—the results as they played out
were far more interesting than if everything had proceeded as if following a script. In the same way that the kids best learn through debugging and perseverance, so do researchers and educators. There is always a gap between one's plan and "situated learning" (Suchman, 1987) and this gap offers opportunity for creative improvisation and improvement. This refinement forms the core of what any "reflective practitioner" does. (Schön, 1983, 1987, 1991; Raelin, 2001)

In this chapter, I assess the difficulties integrating the workshop into the informal learning communities—the two Computer Clubhouses—where I introduced Behind the Screens. This analysis should be useful to those who endeavor to initiate workshops at the Clubhouse in the future, especially those who serve in the role of mentor. I end the chapter with a list of specific suggestions.
WHY A WORKSHOP?

Coordinators and Computer Clubhouse Network staff have recently been struggling with the issue of “structure.” Some might misinterpret the idea of an “informal learning environment” to mean that Clubhouses should offer no curriculum and that workshops are anathema because, they suggest, introducing a workshop runs contrary to the guiding principle of youth following their own interests. Running a workshop means running the risk of making the Clubhouse seem too much like school, they argue. While these can be legitimate concerns, offering new approaches to creative work and sparking new project ideas align well with the “Clubhouse Approach”—as long as nobody requires members to participate in these workshops. (Resnick, 2002) The Behind the Screens project, then, presented a concerted attempt to integrate an optional workshop into the culture of the Clubhouse.

As conceived, the initial workshop plan allowed for three weeks of activity culminating in a celebratory final screening. As realized, the workshop meandered into a three-month initiative, with kids wandering in and out of involvement as external needs allowed, with new members asking to join the project in the last days of my visits, and with no obvious way to stop the workshop fairly for all the participants (that is, to schedule a final screening without some participants feeling they hadn’t had adequate time to finish.)

To distinguish themselves from the surrounding ongoing activity, workshops may need to nail down a few key factors: commitment, contracts, clear motivating goals, a timeline (perhaps with deadlines), and an assessment of distractions that may compete for the participants’ time. While it is unclear whether defining these more strictly in Behind the Screens would have made a difference in the participation, involvement, interaction, and follow-through, these multiple factors merit further discussion. This chapter begins this discussion.
COMMITTING TO A WELL-DEFINED GROUP

While digital storytelling workshops have been led successfully with adults and youth in the past in many different kinds of settings, this may have been the first attempt to develop digital stories within a pre-existing community of learners in which not all the people present in the room were participating in the workshop. That is, only a few members could sign up for the workshop, and the Clubhouse continued to function as a Clubhouse, and their friends still expected them to be able to join in any activity they desired—web-surfing, breakdancing, or a trip to the mall, for instance.

In contrast, digital storytelling workshops (as led by CRCP or CDS, for example—see Chapter 2) often involve less than a dozen participants and two or more experienced facilitators working together in a small window of time, such as three days or a week of constant work. They gather together and work in a space physically removed from their day-to-day responsibilities. Their work during that time is just the workshop. The momentum builds, and the group as a whole has the energy to pull everything together for a final screening at the end of the experience, even if some loose ends remain to be tidied away later. For Behind the Screens, the challenge was to keep the workshop in the space of the Clubhouse, not isolated from its day-to-day activity.

Some youth expected to produce results quickly—in an afternoon or two. Other youth may be open to workshops where the activities follow a clear path in which each session has an achievable goal. In the case of digital storytelling, which is by its very nature a very individual process, some people start with writing a script, others begin with a storyboard, others begin by gathering images. Each of these can take a long time.

When some kids can work on it every day and others only once a week, the metaphor of the workshop begins to unravel. And when low frequency of attendance inhibits any coalescing of a group to offer feedback and advice, then the term “workshop” seems even more misapplied. Activities planned for the group, such as story games, were aban-
doned when the participants were clearly at different places and would require different strategies. And even when we had a quorum to have a discussion, the youth drifted in and out of our group conversations.

**COMPETING COMMITMENTS, LIMITED TIME**

It's not as if the kids cannot commit to an activity. Far from it. The teenagers involved with Behind the Screens were quite overextended—involved with multiple activities, and so the workshop was frequently thwarted by their competing interests. The youth volunteered to work on a digital story the same way that they took on many other responsibilities. At Clayton, Juan and Alana had jobs that limited their involvement with the project and with their peers. The girls seemed to be involved with every club available to them: reading, women's, and the service group Keystone. At Beacon, Tina couldn't balance her enthusiasm for the project against her school commitments to debate and athletic teams; she kept phoning me to assure me she was interested, but she only came in three times. More significantly at Beacon, the pull of other ongoing creative work took attention away from digital stories. Miles played a key role in the drawing contests, and the scarce music studio time took priority over everything else for the musicians who signed up for Behind the Screens.

Free time is scarce for these young people. It can be hard to commit to an activity at the end of a long, very structured school day: Coretta, for example, went to school from 7:25 to 1:45, with four minutes between classes, no recess, and 18 minutes for lunch when she was not allowed to leave the building. These kids were *tired*. Antoine woke up at 4 a.m. every school day in order to iron his clothes, get ready, and make the long commute to campus. (My impression of his calmness and placidity could have been simple exhaustion.) Melanie took the *METCO* bus to Lexington, waking up at five in the morning to spend 90 minutes traveling. Isaiah, the only participant who had graduated from high school already, noted that the others probably had limited free time if they were still in school.
When I asked Yadira about her motivations, she betrayed her impression that the project had a bit of “school” about it:

[T]hey signed up to stay on the program, but I guess...but I guess it was like another school-class type of thing, so it was kind of hard—not hard at all but I guess they didn’t want to just keep working on the same thing. They just wanted to take a break and at some point go back to it later. Rather than stick to it for hours and hours.

Yadira thought that everyone has a right time and a personal pace.

THE SAFETY OF A SHARED COMMITMENT

What does it mean—and what does it take—to build a community of people with shared interests? To open up a space for trust? Nelson suggested that Miles may have been more enthusiastic if several people around him were working on the project at the same time. It is this social aspect which supports his creative efforts generally.

But at Beacon, I felt I could not involve membors—those members who are older than 18 but who do not come clearly to mentor, but to draw and socialize—because they were older than the age range I focused on: 12 to 18 years old. Miles, for one, held a great deal of respect for these membors, socialized with them after hours, and got distracted from his work by their conversations or sharing new music they had found. In some conversations I had with Miles, a few of these older friends would answer questions for him. One also ridiculed his project after Miles had spent four concentrated hours working on it. This excerpt from my journal described the interaction between the two friends when Miles shared his halfway completed movie with him:

Miles looked to Balu for approval, and a smile spread across Balu’s face. Miles shouted, “Balu’s the only one who doesn’t like it!” Miles read his expression immediately as an open door to teasing, and Balu launched right into him. “I didn’t say I didn’t like it. But my face hurts... it’s so funny. You made it slower so it made it look like you did a ‘1990’ [a breakdance move] for longer than you did.” Then he laughed. I knew I’d lost Miles then. Balu continued, “Miles has never done that for more than three seconds, and he’s trying to make it seem like he did.” Miles responded that he was doing it to the beat. He then feigned a sob, and said, “I don’t want to work on it anymore.” Blam. Balu insisted, “I didn’t say it wasn’t good. It’s [long pause, and a smile] ... okay.”
Of course, this kind of faint praise and outright ridicule flies in the face of the Clubhouse guiding principle of fostering an environment of respect and trust. But these young men are also friends, and they assume that this kind of teasing is acceptable. And it was discouraging. Miles never really did any serious work on the his story again after that, although he did continue to show it to other friends he thought hadn't seen it.

Ideally, Miles would have been able to share his digital story with other digital storytellers, who understood the process because they too were experiencing it. Ordinarily, digital storytelling workshops open up a space for dialogue about the stories as they are being made, so that the fellow workshop participants serve as the first audience to the story. The girls who gathered one evening to talk about their story ideas at Clayton shared deeply personal traumas and supported one another at the same time that they challenged their use of shocking detail. In digital storytelling workshops, fellow participants offer their responses, advice, and insight. Balu had no real stake in giving constructive feedback to Miles, and as a force external to the work of the group, he shook his friend's confidence.

MEETINGS

Specific meeting times for story circles were never set, so we never had enough critical mass for kids to comment on each others’ digital-stories-in-progress and to make a careful commitment to one another. (Or, at Beacon, any date that was set was ignored by those participants.)

Without the critical mass for peer-to-peer interaction on story content, I became the principal arbiter of whether their stories communicated well. In the workshop design, kids would counsel one another; in the workshop as it played out, I was the only consistent one, and they turned to me for feedback. I was not interested in a role where the kids placed greater and greater authority in me. When others were present, I intentionally pulled them into conversations that may have been happening one-on-one, between me and a member.
Group conversations at Clayton, which we gathered spontaneously four times when more than three kids were present, were thwarted by ringing cell phones, requests to go to the bathroom, and verbal jabs at one another. The kids knew each other too well and were not interested in giving each other public feedback, for the most part. Even when I offered specific prompts to elicit meaningful commentary, the kids usually just said, “It’s good.”

CONTRACTS

Some Boys & Girls Clubs have begun asking workshop leaders who begin new initiatives to produce “memos of understanding.” These written documents describe the commitment that the adult volunteer is making to the Club, so that the staff of the Club can more clearly picture of the goals and outcomes of the new project. While I provided both coordinators with a copy of my thesis proposal and distributed to participants a sheet describing my commitment and their commitment, and listing everyone involved, I felt the coordinators’ understanding of the project continually shifted.

Merrill believed the kids didn’t take me seriously because I was from MIT and not the Boys & Girls Club, and that I would have had more consistent involvement had the members signed a letter. For other Club projects, they must commit to a program and pledge to follow through on it. The only form they signed for me was a consent form acknowledging that I was doing a research study and agreeing to be a subject [see Appendix E].

Merrill felt that defining participation more explicitly and strictly would have helped. “If you say you’re interested in doing it, you wanna do it, then let’s do it. I wouldn’t do the stop-and-go thing. If you’re in it you’re in it, if you’re out you’re out. No gray areas: (you shouldn’t say) you can work on it when you feel like it.” Both coordinators felt that, in Nelson’s words, it “is important to teach them how to be committed, and the importance of why they should commit, not just because you said so.”
MOTIVATING GOALS

Why would members want to make a digital story? As the initiative began, I wanted to make sure that the experience and their expressions felt authentic to them, and that this was not just my pet research project. I identified a few goals I hoped might inspire the kids to finish their projects. When complete, their digital stories would be linked to online websites, burned onto a CD or DVD with all the other digital stories from both sites, posted to the Clubhouse Village, projected in a special screening at each Clubhouse, and exhibited as part of the Boston CyberArts Festival—an event of three weekends starting in late April.

Coretta was an ideal case in motivation. She would do creative work when there was a reason to do it. This explained why several of her Clubhouse projects related to school assignments. She approached the digital story imaginatively. She created another new drawing to premiere in her story. The joy she got from animating her still images fueled her interest, and although she claimed embarrassment at hearing her voice, I noted a certain pride in her poetry.

Merrill believed that my lack of authority undermined the workshop, and I should have endeavored to take charge of the kids. He joked with me one evening, “You should threaten them. Do you want me to?” While I resisted adopting a more disciplinary tone, hoping the kids would be led by their own intrinsic motivation to complete their projects, this could also backfire. I still came and constantly tried to drum up interest with some participants. John Holt pointed to the problems with any kind of coercion, whether the intentions are good or bad. He writes, even in the case of “gently persuasive, subtle, and kindly” urging, the kids still read underlying fear:

The idea of painless, non-threatening coercion is an illusion. Fear is the inseparable companion of coercion, and its inescapable consequence... You can simply let your own fear, about what will happen to you if the children don’t do what you want, reach out and infect them. Thus the children will feel more and more that... the goodwill of adults like you... is perishable and must be earned anew each day. (p179, 1964)

The best scenario would be a young person who completes a project
because they are eager to finish it, not because they fear the repercussions of their loss of interest.

When I wasn’t exercising enough discipline on my own, Merrill frequently stepped in: “Michelle, are you letting them make movies with swears in them? You can’t do that!” I hadn’t noticed. My priority was to support the creative expression of the Clubhouse members I mentored. I paid little attention to the lyrics, and I was proud of kids like Ethan for knowing what the rules were and asking me how to edit their audio track so they could adhere to those rules, as they had.

**DEADLINES**

Commitments may not resonate with the youth who participate in the workshops. Nelson and I discussed this at length. He felt that focused projects can “throw kids off,” because the kids are used to having no deadlines and not being asked to complete anything. But he recognized that deadlines can be appropriate for some people at certain times. He pointed to the example of the CyberArts festival, “If you miss the deadline, then you’re not in. We give the members some pretty harsh rules, that they need to follow these guidelines. Life lessons right there, that’s the point for them.” If they are not in the festival, their work can be featured on the website and in other ways. He continued:

So I feel like when there’s deadlines, the kids get turned off, they get confused, because we say at the Clubhouse, you don’t gotta do this, you don’t have to do that. To them, I can see where the confusion comes in, where when you’re in a normal mode of doing what you’re interested in, and then there’s a switch in there, it’s hard for them to sometimes commit to that switch. ‘Oh no, that’s not what I wanted to do. I don’t want to commit to this.’ They get really annoying about it, aggressive about it, or they just become disconnected to the group, and that causes a problem sometimes, because it’s not something that’s normal.

Some kids get motivated by events, and others do not. The CyberArts Festival (and, regretfully, my own thesis schedule) provided the only sense of urgency and deadlines to the project timeline. In the face of a cutoff for my assistance or for inclusion in the festival, at least three participants voiced a concern that they would give up on their stories.
Peggy became increasingly anxious as a deadline I had set approached, and after inadvertently deleting part of her text without first saving it, she opted to stop working on script to look for photos. She explained this decision with all the frustration of someone stuck on a slow subway car trying to catch a plane, running out to find a taxi.

Miles thumbed his nose at the deadlines. A few days before the day we had scheduled a final screening at Beacon, he preferred to sketch at the Green Table rather than finish his project. Nearly ten weeks after he had agreed to work on the digital story, he had hardly started. He smiled and, in a whispered yell with the defiant undertones of a comic book hero, he declared, “I’ve got three days left!” Earlier, other approaching deadlines intimidated Miles, and he suggested he quit.

SOCIAL NEEDS

Getting friends involved with the project helped motivate some of the more socially driven members to stay involved. This tactic worked for a while with Veronica, and as a result, Yadira made a digital story (although Veronica in the end decided not to).

In the example of Miles sharing his digital story with his older friend, Balu, Miles’ friend/membtor had great influence on him. Nelson explained to me his perception of what was happening for Miles:

In Miles’ case a lot of it has to do with his personal life. It’s not that good. […] His friend asks you wanna go to the mall, and he says sure I’ll go to the mall with you. They’re not concentrating on the project, and while they’re working on it even, they’re thinking about all the problems at home, just like a lot of us do. ‘Damn I gotta get this done,’ they think. And I’d say that’s happening to more than half the kids who are here. A lot of social baggage.

For Miles, the Clubhouse is as much a social experience as it is a creative one. He judges himself too harshly, and the esteem of his peers outweighs the personal satisfaction he gets from completing a piece of work. Indeed, he told me early on that he rarely completes the sketches and projects he starts. His sketchbook is full of half-rendered figures.
The home life of the youth also played into the participation. Although I sent home information, consent forms, my schedule, and my contact information, I wondered if I should have done more, earlier, to bring the Clayton parents and guardians on board with the project. But that, too, would not have been easy and may not have changed things much. Some kids would be picked up to go shopping when they were just getting into a work groove, for example. Pablo was pulled out of the Club permanently and Ethan for a few days by their mothers, as punishment for shooting hoops too late at night. Connections with families became essential for a few members at Clayton; at Beacon, such communication seemed inappropriate because of the greater independence of the members.

Behind the Screens also competed with real needs, like hunger; some kids told me they had not eaten all day, and when they had pocket money they would disappear for food. Given intense school schedules with negligible free time, just hanging out with friends or checking email were real social needs that I respected (to a point).

**LOOKING FOR SOLUTIONS**

This workshop represented a significant change in the teens' usual experience in the Clubhouse. The kids endured several simultaneous shifts in the culture of the Clubhouse as they experienced it from day to day: They were asked to tell a story about themselves. They were asked to help one another perfect their stories. They used particular software titles they may not have used before. They worked with this woman they didn't know, especially at Clayton where I literally came from the other side of town—the other end of a very long bus line—and they hadn't met me before the workshop began. They tried to figure me out as I shifted roles—as a learner, a mentor, a researcher, and an interviewer. And as the stories became more personal, I also became a friend who knew details of their lives that their peers might not have heard before.

The tendency for youth to drift in and out of commitment affects any initiative in an informal afterschool setting. The set of issues the workshop raised have been tackled by progressive educators for decades. (See
for example: Basu, 2002; Delpit, 1988.) It is a tough nut to crack. But I offer some considerations that verge on recommendations:

1. Before the project begins, workshop leaders should explicitly identify what other commitments and potential competing interests participants have and what expectations they and caring adults in their lives (like their parents or host organization staff) might have.

2. If possible and appropriate, workshop leaders should state the goals clearly, what steps need to be taken to achieve those goals, any other expectations and responsibilities. This can be done concretely without intimidating participants. When feasible, this contract or letter of agreement should be arrived at mutually through group discussion.

3. Commitment at the Clubhouse should be defined to allow for an ebb and flow of interest. This should be done so that it feels fair to the kids who stick with the workshop from beginning to end, and to workshop organizers who may invest a great deal of personal energy in actualizing the project. This may mean opening up to and designing for broader participation, so that the probability of having enough youth involved at any given time increases, permitting the kind of drifting in and out that their lives and other commitments require.

4. Workshops should guarantee a respectful and safe environment for exploring personal expression. Youth should compose contracts detailing their commitment to one another (such as the respect that they will show to each other's work.) Non-participants who may see the work in progress should be made aware of the “rules” of this contract.

5. Deadlines should be set with the coordinator and the youth, keeping in mind possible delays and closures due to holidays and weather.

6. When the work became challenging—or too mundane and undifferentiated—participants complained of “boredom” and frustration. Those who called the activity “fun” rather than boring felt engaged in the activity. Careful consideration of their skill set and abilities and adaptation of
the activity to their skills will engage them and, perhaps, get participants into “flow” mode (Csikszentmihályi, 1990).

7. Similarly, workshop sessions should have single-session outcomes: work that can be accomplished in a short amount of time so that participants can feel as if they have made progress and that they are effective. Workshops that “drag on” for months without much variation in activity can suffer dramatic fall-off of participation.

8. Put the youth into leadership positions, making decisions about the structure and schedule of the activity and helping one another make progress. Youth should identify the motivating goals that their completed projects will satisfy: what contests, exhibitions, or celebrations their projects will be featured in.

9. Feed them. Several youth suggested food as a way to keep their peers involved in the project. Food is cheap, in both senses of the term: it feels like it is cheating to lure the kids with food, but a little nourishment can go a long way.

It would be difficult to generalize from these first two iterations of the Behind the Screens workshop. Digital storytelling seems to hold great promise as a medium for expression among the youth. It will take time—and trials—to find the right fit.
RETHINKING TOOLS

THE FORM OF DIGITAL STORYTELLING, with its preference for using still images over video clips, does not tax technical resources; true video editing requires more disk space and processing power, and far more expensive cameras for original image capture, than using readily available digital materials and digital still cameras, and assembling those into a final documentary piece. While Behind the Screens used pre-existing tools—both software and hardware—that Clubhouses already had, software designed with more relevant features may allow digital storytellers to do more.

The tools most widely used or best suited for authoring digital stories evolved in professional media production contexts and have been constrained by a legacy of a large user base that demands certain high-end features. Or, as Joe Lambert put it, “[I]n doing digital storytelling we are saddled with the inelegant, feature ridden, toolset that is regrettably laden with the dominant male attitude of the more toys, the more bells and whistles, the more value is invested in the tool.” (2002, p160) Such software—like Adobe Premiere (used in Beacon for Behind the Screens)—presents a steep learning curve for someone who just wants to tell a story. More accessible—and lower cost—applications like Windows Movie Maker 2 (used at Clayton) and Apple’s iMovie provide less flexibility, but digital storytellers can produce their pieces more easily and quickly using their simpler interfaces. In this chapter, I try to step away from this legacy of video editing software as it exists to define features that would enhance the kind of bricolage, play, and reflection that should be a part of the making of any digital story.

In Behind the Screens, the activities opened a door to a new kind of expression for many of these youth. I was most interested in what kinds of digital stories would emerge, not necessarily whether one kind of
video editing tool was more effective than another. Nor was I interested in designing a tool for the youth to use before seeing what aspects of commercially available tools helped and hindered their progress.

Having observed over 20 young people tackle this project, I offer some sketches of possible software design features. These respond to the interactions the youth had with the existing software used in Behind the Screens. I emphasize any outstanding or unusual positive aspects of the existing software, and I propose recommendations to consider in the future design of software tools intended to support the creation of digital stories. Many of the suggestions by members come from Beacon; those members who participated at that site had greater fluency with the tools available to them generally, and so their tactics for problem-solving highlighted some of the deficiencies in the video-editing software we used, as they reached for more familiar tools to get done what needed to get done.
I pose some of these suggestions hoping they might contribute to two particular projects I had in mind as I began this work. The Lifelong Kindergarten group at the MIT Media Lab is currently developing a multimedia authoring system, Scratch, that will allow for programmability of media objects, including video. The system is built on top of Squeak, an open-source implementation of the Smalltalk-80 language. In addition, the Center for Community Reflective Practice is in the early stages of developing StoryLink, an intranet for use by the digital storytelling community.
COLLECTION BINS AND STORYBOARDS

Many video editing and animation programs require users to add any objects they plan to use to some variation of a bin or directory. Users then drag items they have imported to this collection onto their stage, timeline, or storyboard. These directories always force the images into a grid or a list—this makes for easy scanning, but not easy planning. Storyboards, often used in media production houses as a way to plan a narrative visually or to present ideas, become one primary way to construct the story in both Windows Movie Maker and Apple iMovie. There is no intermediate space for being able to plan the story and sort elements before actually constructing the sequence.

Traditionally, storyboards served to sketch out the visual activity of a film and to portray camera angles and scenes so that the intentions of the director could be communicated to those doing the shooting, as in these animation storyboards [see storyboards above and opposite]. Digital storytellers, in contrast, may start with a collection of images, and storyboarding can be a messy process requiring easy, fluid shuffling in order to find the right flow from one image to the next, to decide what should
stay and what should go, and to construct a meaningful sequence of images. Often, this kind of arrangement and rearrangement can only happen on the workspace that is the project’s timeline. For example, I noticed that Isaiah placed all the images he considered using at the end of his movie, where he moved the items around in the narrow space of the timeline to decide which he wanted and which he didn’t want to use. Once finished, he deleted the unused images.

In contrast, I observed Miles as he sorted pictures of himself taken with an eyeball camera in the workspace of the camera’s software. He posed, and I clicked the shutter, so he ended up having a mound of over seventy self-portraits to sort through. He created three piles on screen: in one corner he placed images he might use, in another corner, the ones he disliked, and in a third corner, the real keepers. A few images he closed altogether without considering them at all. Then he re-examined the piles, moving them to other parts of the screen, and finally he came up with a set which pleased him, and saved those to his server folder.

In collection bins (in both Premiere and Movie Maker) items are often listed in alphabetical order, with the option of making directory structures in some programs. Movie Maker 2 allows the same views of these
directories that are permitted in the Windows desktop (thumbnails, list, details, etc.) and to change the order of listing (by date modified, size, name, etc.)

An environment for digital storytelling should allow for the kind of flexibility of placement in the workspace that Miles needed in order to make his decisions about which images he wanted to keep—in essence, a spatially oriented collection. Grids and timelines can be too restrictive to allow people to sort what they want to put where. For some projects, it may be more meaningful to treat the workspace as a map of the city, placing images in geographic relationship to one another in order to plan out the story to be told through the pictures, for example. Users should be able to toggle between views that are more organic and natural, and those that are cleaner and more organized, as best suits their needs at the time.

Related to this problem is that video editing software considers a video to be the final product, so it generally makes it impossible to print out on paper a sheet of thumbnails of the images being used. The activity of image sorting can be accomplished in the real world only through convoluted measures—taking multiple screenshots of directories of images, then printing these screenshots from an image processing program, for example. Ideally, one could print out a representation of all the media in a format of 9, 16, or 30 per page, for example, so that digital storytellers can collect their images onscreen and then cut apart and arrange these elements in the physical world if they choose.
NOTES AND ANNOTATION

Storyboards should also permit simple annotations. Such notes might comment on existing images, making for easier sorting, or serve as placeholders to mark holes that the user would fill in with an image, script fragment, or audio clip that may come later. To mark out frames of text with the current software, users would create a title. Melanie, for instance, who ironically resisted anything she suspected to be planning (such as collecting images, writing a script or making an outline), began her movie in a more structured way than most participants. She created titles to mark out each of the chapters of her story, deposited these in her timeline, and then began filling between the titles with pictures. These titles required a lot of overhead for a simple task: to mark out sections of her digital story in a way that felt natural to her.

Annotation could also support metadata that might travel with image, movie, and sound files. Digital storytellers acquire many such files online, often through tools like Google Image Search. For files not originally created by the story's producer, annotations could note original authorship and location. Isaiah chose not to crop out the copyrights on any images that had them. Authorship information might be collected for credits at the end of the digital story. QuickTime authoring tools permit text annotations to appear in the control bar of movies. These annotations usually indicate information like chapter title in long video clips. To emphasize the importance of authorship, such data could be displayed in this fashion. [see below]

A QuickTime film with annotation in the control bar.
(from http://www.bum-net.ucla.edu/web/qtde/s)
A number of youth could locate their favorite music online, but finding a file format that the software would accept presented a significant challenge to their Googling skills. Niama finally gave up on my insistence that we find a .WAV or .MP3 of her favorite song, and she held a microphone up to the speaker as some streaming audio from launch.com played. I had warned her that the sound quality would be inferior, and after her experiment she proudly called me over to hear the result. “See, Miss Michelle. It sounds great.” I had to admit that I couldn’t detect much degradation in the audio quality.

Niama’s subversion highlighted how useful a “virtual microphone” that is both onscreen and in-screen could be. Anything the computer can produce in the user interface should be something that can be captured by the video editing software. Now, most video editing software uses the metaphor of importing files; but the file formats may or may not be compatible. Niama easily found the music she wanted, but it was a RealAudio stream that she could only capture and convert by placing her microphone up to the speaker. A software version of Niama’s microphone could be used to go outside of the video editor and into computer’s desktop, pointing at whatever needed to be captured. (This poses obvious copyright issues, of course, which must be treated for all digital story projects regardless of where the raw material comes from.)

The metaphor of a virtual microphone could be extended: when managing several different sound source files, a microphone icon could be used to indicate which file should be louder, and which quieter, and moving this microphone icon could represent a smooth transition from one sound to another. This interface concept, inspired by James Patten and Ben Recht’s AudioPad (2003), has a crude analogy in Movie Maker. [see below]. This cannot be done progressively, however, and only a single rel-
ative volume level can be assigned to the whole track. In Recht and Patten's AudioPad, a tangible interface for mixing tracks of music, a token placed on the tabletop represents a microphone, and as the user moves the token closer to a representation of one source or another, that sound becomes louder in the total mix. [see above]

**TAPING WITH A VIRTUAL CAMERA**

Like a “virtual microphone,” there should be a virtual camera that can record activity both onscreen and in-screen. Software to capture video of activity on the screen exists for the Macintosh. Snapz Pro activates when the user presses a combination of “hot keys.” A dialogue box pops up. The clip's destination, color palette, and frame rate settings may be specified. Upon selecting the “Movie” button, a dotted line appears on screen to indicate the captured area, and this can be adjusted. An
authoritative voice then shouts "Action!" The movie of activity onscreen is captured until the hot keys are hit again. The voice shouts "Cut!" and once the user saves the movie in the next dialogue box, he says, "That's a wrap!" If the microphone track is checked, audio is captured as well. The file is saved as a QuickTime movie.

This kind of live, onscreen capture could help Clubhouse members document their art and other projects. Such a utility could be especially useful to record a document's behavior as the artists watch them change while hitting the undo command 20 steps back through their work. In Photoshop, for example, I observed both Coretta and Miles using the key commands for "Step Backward" and "Step Forward" repeatedly to review their design decisions, and these became live animations of their process. These two members, at least, would likely appreciate being able to capture in a movie the behavior they already know how to control, like the filters and images controls of Photoshop.

**AN UNTETHERED HANDHELD VIRTUAL CAMERA**

One useful feature of the Snapz Pro interface is its flexibility of camera modes—fixed camera, smooth pan, and follow cursor—to define the behavior of the capturing frame. Most video editing software treats the screen as a stage: elements dance across it, one after another, like characters in a play, and what is more or less a featureless camera on a stationary tripod records the performance. In contrast, a feature like Snapz Pro's "follow cursor" resembles a handheld camera that inhabits the (onscreen) world, going to different documents and scanning around them as the mouse movement indicates. Having both options—the fixed, tripod camera and the moving, handheld camera—would be preferable.
The frame of capture remains a fixed size and orientation in Snapz Pro, however, and only collects one sequence of images at a time. The frame of this virtual camera I propose could grow larger and smaller to emulate zooming in and out of an image. The frame could move across the image to create a "pan" effect. Or the frame could rotate, as if a handheld camera were being turned around and around in the person's hands.

One could further extend this handheld metaphor to encompass how a user might move the frame of capture across a collection, as an alternative to dragging images to a sequential representation (a linear storyboard or a timeline.) As in the sorted collections described earlier, placement in the workspace may correspond to geography, significance, or other meaning. Allowing digital storytellers to choose the path a camera may take around a collection (as shown below) would accommodate multiple styles of bricolage and planning, and perhaps open up to different forms of storytelling, where narrative may not always follow a chronologically linear path.

Alan Kay and Bob Arning have developed a similar tool in the Squeak environment. They called it ThreadNavigator. Kay gives over fifty talks and presentations a year, and he must necessarily recycle his material for
Isaiah adjusts the sound in his Adobe Premiere project. He wanted the same intuitive control over the video effects.

The earlier proposed metaphor of the virtual camera becomes even more interesting when one imagines the possibilities for "in-camera editing." In this sense, the camera become a digital object in the interface which can be picked up to record items of interest as they arise. Captured clips would be concatenated, and one would zoom in and out by controls on the virtual camera, rather than by controlling the image. Like hardware digital video cameras which sometimes have features that make the recorded image appear to be that of an older 16mm camera, this onscreen, virtual camera could also apply different effects to the moving image as it is captured.

**A PROGRAMMABLE CAMERA**

Untethering the camera leads to the perhaps obvious suggestion that the movement of virtual cameras should be programmable. This would give the finer control that Isaiah wished he had over some of the effects in Premiere. To explain to me what he meant, he showed me the audio track, where a red line indicated the track's volume, and he could select points to be anchors for the level.

In the image at left, the volume started a little lower than the original imported volume level, then it inched above, dropped down to nearly muted, back up to original, and then shot up quickly to blaringly loud. He felt that this representation was more intuitive than the way he applied effects like the Image Pan, for instance. In that case, he first marked starting and ending keyframes on the timeline, then opened up a separate window where he would set up the shot for each keyframe in the sequence. This dialogue box did not show him the state of any other keyframes, however, so he had to keep track of his settings in his head. Adding programmability to the virtual camera would permit Isaiah to define the movement of the camera, and more explicitly, to have move-
ment along an arc, for example, as he had wished he could have done.

To sum up, a virtual camera would zoom, pan, or spin in capturing output on the desktop. As a virtual camera, it would concatenate clips and then users could opened up (allowing for a mode of in-camera editing). Lastly, it would be programmable, allowing for additional inputs for control and the possibility for making more dynamic or branching narratives.

CLUMPING

For any given effect in Premiere, a user opens up a control panel to set up the values of the effect; for example, how blurry it will be. Combining this parameter control with the use of keyframes, users can control how the effect changes the image over time. This hints at the beginnings of programmability, but users have limited power in the use of these effects. Only certain parameters can be altered, and the process is tedious.

This became especially obvious when Miles asked how to create an antiquing effect for his clips. He wanted to string together multiple still portraits of himself with different expressions and head positions, to make a simple animation that moved with the beat of the soundtrack. Then he wanted these stills to look like a video clip we found while we were searching for his lost breakdancing clips from a few years ago. We stumbled on a film apparently from the 1950s of a little boy riding a bicycle in his suburban neighborhood. Miles tried a few of the effects in the palette, but none of them satisfied him. He then exported all 327 frames of his short movie to Flash and attempted to render this antiquing there. Meanwhile, I experimented with Premiere on another machine, combining a few of the choices from the palette. It used four different video effects. Miles liked the result. He went to work, painstakingly applying the effects and changing the five different settings until he had set up all his clips similarly.

Unfortunately, there was no way to apply this combination of effects to all his stills at once. There was no way to “clump” the effects. Had he decided on using a black-and-white tone rather than a sepia tone, he would have had to open up each clip and each setting and change the value of the color.
Without Windows XP running on the Beacon machines we could not use Movie Maker, where this task was trivial. In the “Film Age” video effects in Movie Maker, as with all the effects, no parameters can be changed, however. Movie Maker effects are all pre-packaged modules that get applied to the image. If more than one is applied, the effects are overlapped or applied serially depending on the type of effect. The “Ease In” effect can be placed on a clip six times, and the camera will zoom in very close onto the image.

Related to this notion of “clumping,” Alana discovered a website called Zeoflicks, where she created a fan film of her favorite boy band, B2K, by adding images and captions from her collection to one of several movie templates. The resulting film was posted and voted on by other visitors to the site. She continually modified her film in hopes of increasing her
low ranking. (The website promised a phone call from the band to the winning filmmaker.) She demonstrated enormous pride in these online films. While she made decisions about what images to include and how to annotate them, the film itself was automatically generated in one of several styles. One looked like an old-fashioned silent film, another like skating photos on a reflective ice rink, and a third had a mid-century Modern style reminiscent of the Jetsons. Is there a place for these kinds of video templates in digital storytelling, at least as a starting point?

**CONTROL**

Something between the quantitative control of Premiere and the qualitative control of Movie Maker would be ideal. A limited palette of preset modules of effects and transitions could be available, but these should be transparent and manipulable, so that users can “look under the hood”, see how they work, and add a feature or change a parameter. Users should further be able to combine several simple effects into a single module of their own, just as in a word processing or page layout program, where attributes of font, character, and paragraph can be assigned to a “style.” Essentially, users should be able to define their own macros and procedures which they can apply to their video images more easily.

Simple effects should be more prominent than stylistic and specialized ones. Movie Maker’s vast palette of choices led several of the Behind the Screens participants to use as
many as possible, and representational ones figured prominently in a few digital stories—the heart, keyhole, stars, and football aperture transitions. While the digital storytellers seemed thoughtful about choosing the transition that best suited each pair of images, I suspect that they would be equally satisfied with using simpler transitions—such as dissolves, wipes, irises, and spins—with greater control. This calls for a system of simpler operations that could be combined for surprising effect, with a palette of example module effects that combine several of these simpler pieces.

Isaiah's sentiment, from a conversation I quoted earlier, was that he "didn't want to use too many of the same effects, I just wanted it to be different each time. I only wanted it to be if necessary, if it requires it another time." The transitions in his final piece did not seem overdone.

**Layering**

Miles returned to Flash when he wanted to follow Nelson's advice to point an arrow at his body as he breakdanced. To draw any object in Premiere, a paint canvas pops up, disconnected from the stage. When you create a title or a graphic, you use this separate canvas, and then you save it as a file which gets placed in the collections bin. Titles in Movie Maker require navigation of a multi-step dialogue box. With Flash, Miles could paint straight onto his still, putting the arrow precisely where he wanted it for each frame. He tried drawing on his face and applying large swatches of color to pieces of the image. He cha-chaed with the undo and redo commands a lot in Flash, adding things and taking them away, trying to decide which he liked better.
Composing images and text in a separate space in both Premiere and Movie Maker aggravated some of the kids. All visual objects to appear in a digital story should live in the same space, as they do in Flash. For Movie Maker, the software does provide a preview window, and that helps the process somewhat. To keep them easily accessible, a layer metaphor like that used in Flash or the video tracks of Premiere might be useful. Layers could hold different kinds of objects: images like icons, titles, photographs, or video clips; effects that apply to all layers beneath them; cameras that frame the final image.

Such layering was important to Miles. He decided his antiqued images still needed an extra twist, and he set his mind on making a border of filmstrip sprockets that could sit above and below his head. When we added these in Photoshop and imported the image into Premiere, the antiquing affected his sprockets as well as the film image. He bristled at this result, and so we set out to give the sprockets their own video track and transparency so that the two could be affected separately.

In granting greater control to its users, a software environment to promote the careful assembly of images, sound, and text should not discard the playful aspects of this kind of creative work. When Coretta inadvertently misaligned her tracks, she briefly considered keeping the mistake because of its strange result. The kids wanted to try every effect and transition available to see if it they liked it. They had to keep track of which ones they tried and which they hadn’t. Coretta, for example, kept returning to the “Image Mask” effect—something about its name caught her eye. Because they paid little attention to the names of the effects as they tested each one, perhaps a simple way of cycling through each one, or applying an effect at random, could help lessen the tedium of this exploration. Some notation to indicate which effects have been tested could be helpful.

Miles was inspired by small things he noticed in the Premiere environment: an icon of a filmstrip drove him to draw a similar frame around his
image, for example, and hiccups in the playback encouraged him to explore how to make those technical glitches permanent in his final piece. The effects should be robust enough that users like Isaiah, who claimed some of the effects “just happened,” can investigate how they were achieved without worrying that opening up a dialogue box might eliminate a serendipitously discovered effect.

The participants in Behind the Screens became mesmerized, at times, by watching their own films. Coretta often pre-rendered her piece by “scrubbing” it (holding down the Alt key while sliding the playhead), and she smiled quietly to watch the effects unfold. Clayton participants enjoyed the use of Movie Maker’s full-screen preview, accessed through a single click of a button.

Playback tests should come easily. Premiere is very finicky with any changes, and it requires a relatively long wait while it renders the movie. For intermediary playback before rendering the final version of the piece, a less polished, sketchier playback with fewer frames per second would certainly satisfy most digital storytellers. The important thing is to give enough of a sense of the final project, so that they can put themselves in the position of audience to their piece, externalizing their personally meaningful images and audio and watching their expressivity play out in front of them.

REFLECTIVE PROCESS

Such externalization relates directly to the principal goal of Behind the Screens: providing the youth with an opportunity to be reflective about how and why they do the work that they do. Stepping outside themselves and seeing how they portray themselves to others is a part of this process. Being able to access some kind of documentation of process is another.

A woman I once met named Camille told me about an experience she called “bizarre and profound”. Apparently, a computer virus opened up every single file on her hard drive and flashed it open for just a second.
She watched as over a decade of her life flashed before her eyes, slowly and methodically, as this flashback virus inhabited her computer for several days.

As we began, Coretta told me she looked at her portfolio every once in a while, but as she did so, she said she did not “think about much. I just think, ‘Oh,... I drew that. Maybe I should draw something else too.’ That kind of thing. I’m not really on that deep level of drawing things.” Yet in her digital story she grew very interested in making a film that showed “... starting from my finished work, and have it work all the way down to how I started.” She explained she “like(d) seeing things where they come from.” This kind of expression should be well supported, as it promotes reflectivity.

There should be objects that serve as project scrapbooks that we can open up, review, and use as a starting point for documentation. To return to the earlier metaphor of a virtual camera, such a camera could sit at the ready onscreen, and at important moments in the development of a creative project, the camera could record a movie (in Snapz Pro style), a still image (full or partial screenshot), or an audio clip from the desktop. Just as we collect these kinds of memories in our real-world, real-life digital cameras when we take a trip to Panama City or Billund, Denmark, for example, this virtual camera would record the events in the onscreen journey that is the creative process. We could wait to “develop” the roll of film and look at all the images we’ve collected once this journey ends, or we could revisit these even as we are still involved in the project.

Such a capture device could be a tool for reflection-in-the-moment. Before the project began, I observed Miles as he experimented with enhancing one of his sketches in Photoshop. He applied a series of effects, then went through several levels of “undo”, tried another set of effects, and backed up to another point—perhaps the same image, perhaps different. As he moved back and forth along this control-Z-tree, he mapped out the realm of possibilities, but there was no way, short of saving multiple copies of his file, to preserve the many results. Even that
As a user works, images from onscreen are captured to a virtual camera.

solution would erase the "History" of commands that each visual experiment trailed behind it. Being able to mark out and reflect upon choices made and options left unexplored would be an important element of software designed to support reflective practice in creative work.

What is needed is a feature that combines two familiar metaphors from web browsers: the memory of History and the significance of Bookmarks. (Wagner, 2002) These are the monuments that mark out the important decisions made in the creative process.

This suggestion addresses the conflict I felt in involving productive, creative, busy members in Behind the Screens. To be able to document in the moment would allow the raw material for reflection to grow as the project grows. Creating a digital story to describe how and why the project was made potentially becomes a simpler task.

As an example of this in an off-screen medium, I scanned Miles's sketch of a cyborg several times as he finalized the image. He worked intently at darkening the lines, and the incremental changes in the digitized images easily became an animation in his final piece. [see left]
Perhaps the greatest challenge for the youth was developing a voiceover. As discussed in the previous chapter, their aversion to writing or planning, the schoolish connotations that word processing programs have for them, and their fear of revealing themselves all contributed to a distaste for putting together a script. The final pieces would not be experienced as written, and the youth showed particular interest in recording and listening back to their voices, a fascination that could be leveraged. Fortunately, this became clear early enough to test other approaches.

![Narrate Timeline](image)

Although they may have been shy to speak in front of their peers, the participants more readily recorded personal biographies into the microphone. Using Movie Maker's "Narrate Timeline" feature [above] we could record their voiceovers straight into their projects. This straightforward approach resembles Tara R. Shankar's current research with low-literacy students in New York City, who, similar to the youth I mentored, demonstrate more verbal ability in spoken English than their written expression might demonstrate—that is, they can generally talk better than they can write. In this early prototype, students press "record" when they are ready to speak and "stop" to finish. What they say in that segment is immediately and entirely played back to them, and

![Sound Builder](image)
then they may choose to keep the clip or erase it. Clips are concatenated to the list of previously saved files. By pressing “play,” they may listen to everything they’ve recorded, in the order they recorded it. In the end they have “a little spoken essay that the students can make piecemeal.” (Shankar, 2003)

The trouble arises when one wants to edit recorded sound. The only visualization most sound editors provide is the waveform of the voice. While this helps a person identify pauses in speech, it betrays none of the content of each voice clip. As speech-to-text recognition continues to improve, even a rough approximation with homophones and misattributed words may help identify and rearrange voice clips. I share Shankar’s misgivings about the promise of speech-to-text, however; as she points out, systems will most likely not recognize urban adolescent speech, with its non-standard patterns and vocabulary, and it may complicate matters further. (Shankar, 2003) Nonetheless, transcripts I typed by hand and shared with participants who struggled with their stories proved to be a useful tool. (And yet, even reading those caused slight anxiety for some of the youth.)

An easy way to iteratively re-record chunks of speech might have worked very well. For a while, I tried to imagine how I could cycle sound files from my digital audio recorder to the computer and have the youth record several takes, listening to themselves carefully and critically, and each time improving their voiceover. Imagine voiceover version 3 piping into headphones just as they record version 4, for example. The software I used did not support this.
AUDIo EFFECTS

I find an interesting design suggestion in a deal I struck with Miles: he bargained that he would do a voiceover only if I could find a way to convert his voice into a robot voice. Running some tests with the audio effects in Premiere, using reverberation and echo filters, I was unable to get the tinny electronic noise that would satisfy his demands. More audio filters that could render the same kind of displacement and play with voice as can be rendered visually with the video effects may open up further interesting expressivity.

ASYNCHRONOUS SUPPORT

Within an informal setting where people might not be wanting or needing to work on their digital stories at the same time, asynchronous supports should be in place to move projects forward. Isaiah was inspired by seeing the digital stories of people he had never met before. I found that I communicated with members by email and cellular phone more than I had in all seven years of my previous mentoring at the Clubhouse. They sent me scripts and we coordinated schedules. Peggy also started using a swiki (a collaboratively edited and maintained website) so she could work on her story at home and at the Clubhouse, and I could see it when she was not there. This could also help in cases like Juan, where between sessions he kept losing the thread of his narrative.

Fortunately, the digital storytelling community is developing a system to address these needs. In “StoryLink,” visitors would be able to view and offer feedback on story sets grouped by themes, authors, and communities. Digital storytellers would reflect on their process and share supporting files. Discussion boards, email, instant messenger, and a calendar would link digital storytellers to one another. An online curriculum with lesson plans would ease the job for facilitators. (CRCP, Third World Majority, & Invent Media, 2002) Such features could work well to manage workshops like Behind the Screens which don’t have the benefit of isolation in a short period of time.

See http://pb1.cc.gatech.edu/myswiki/107 for more information about wikis.
MULTIPLE METAPHORS

Software to support digital storytelling should have basic, accessible elements that can be recombined for interesting effects. It should offer several metaphors for capture, programmability, and movement. Should a virtual camera metaphor be implemented, users still must be able to return to a representation that makes it easy to align tracks and synchronize behavior. Ethan, who had used Premiere in the past, praised Movie Maker’s ability to toggle between storyboard and timeline representations of his project. A wealth of representations would allow users to choose one that fits with their model best, and open up a fuller range of what might be communicated by digital storytellers.
IN HIS NOVEL *EINSTEIN'S DREAMS*, Alan Lightman portrayed various alternate “worlds” where time takes on a different form in each vignette. In one, “time is a visible dimension.” Lightman described how people live in this particular world of visible time:

Just as one may look off in the distance and see houses, trees, mountain peaks that are landmarks in space, so one may look out in another direction and see births, marriages, deaths that are signposts in time, stretching off dimly into the far future. And just as one may choose to stay in one place or run to another, so one may choose his motion along the axis of time. Some people fear traveling far from a comfortable moment. They remain close to one temporal location, barely crawling past a familiar location. Others gallop recklessly into the future, without preparation for the rapid sequence of passing events. (1993, p133)

The act of reflection lives happily in this kind of world full of temporal “signposts.” In reflecting, we run back and forth along the timeline of our lived experience, reconsidering crucial moments and surveying the temporal landscape. The youth who participated in Behind the Screens treated time as a “visible dimension,” and like the different people in Lightman’s world, some stayed close to the present moment, and others sampled widely from their early childhoods and their imagined adult-hoods. They collected images, music, and their verbal thoughts, and then they constructed a linear narrative from these pieces. The tools they used made the metaphor of visible time concrete, in that the software demanded placing their collected media elements in a sequence (represented as either a storyboard or a timeline) as they cobbled together their digital stories. They reconstructed this landscape as they revisited it. Pablo, for instance, rewrote his relationship to his late father, emphasizing his hero status as a boxing star, and shifting Pablo’s own sense of being a fatherless son to being a son proud of who his father had been—who could hold his head up among his peers.
My thanks to Jennifer Beaudin who suggested this question to me.

In the world of visible time described by Lightman, people can move backward as well as forward in time. How do digital storytellers use their stories to think ahead in time? Within the four months of the study, it would be premature to conclude that there had been a significant cultural shift in the way the teenagers approached their projects, yet some of the youth recognized some smaller effects that their exposure to digital storytelling would have on their work. Isaiah, for one, believed his experience with digital storytelling would lead him to “do more. Or not just do more, but rather, save more” [see Chapter 5]. He described his digital story as a “virtual space” where he could record his passing thoughts and return to them. He could also imagine directing others to look inside his digital story to see what he had been thinking. While he regretted having lost the images of the helicopter he designed at age seven, he knew that if he had been able to save those sketches in a digital story, he surely would have done so.

The participants in Behind the Screens used their digital stories as a way to look ahead to their imagined futures. Marty shared a poignant story of his interest in becoming a soul food chef growing out of his close relationship with his grandmother, at the same time lamenting the absence of his father growing up.

In the future I want to be a chef. [I] am thinking about going to college to learn more about culinary arts. The reason I want to be a chef is because every time my grandmother would cook Sunday dinner, I will always ask to help and I was always around somebody while they were cooking food. Something came to mind saying when I get older, I would love to be a famous chef.

All y’all other kids may have it easy but when I grew up I did not have a father around to treat me good or to hang out. I did not have a fatherhood all I had was a motherhood. Nothing is wrong with that but I need a man in my life to teach me about men things, but all I can say is I am thankful for what I got.

I stay out of trouble sometimes. Some people think I am annoying and some may think I am bad but I don’t care because everybody is not perfect themselves. I have a lot—I mean a lot—of friends. Everywhere I go I know people. I am a nice person when you get to know me, but if you get on my nerves I can also be a jerk.

[some punctuation and spelling changed to improve readability]
Marty's story spoke not only of his aspirations as a chef, but of the power for digital stories to forge relationships. I will never forget this 13-year-old, who asked me to talk faster (I apparently chose my words too deliberately), to stop smiling so much, to dress more like him (in hooded sweatshirt and baggy jeans) and less like "an old lady"... and to please come back one last time so he could finish his project. Actually, that last request (by phone a few days before I turned in the thesis) was delivered more as a series of questions, in his typically authoritative tone:

"Where have you been?" [I'd been coming occasionally while writing the thesis, rather than a few days a week as I had.]

"Am I done yet?" [This was up to him. I asked him if he was.]

"So when are you going to come help me finish?" [We decided I would come Monday, the next day the Club would be open.]

Marty knew our contract better than almost any other participant: I was there to help him get his story done, but also to respect his commitment to the project...and to our growing friendship. He was audibly surprised, and perhaps hurt, to hear that I would not be coming back to the Club again once his project was complete, except for rare visits.

In this way, digital storytelling became something of a diagnostic probe into the mentor-member relationship at the Computer Clubhouse sites where the workshop was held. While I had spent over seven years as a mentor at Beacon before starting the project, the Behind the Screens workshop challenged my understanding of, for example, the Clubhouse guiding principle of respect and trust, and what its limits might be among the youth. This discovery had not been an aim, originally, of the
study. I had not started out wanting to clarify the member-mentor relationship, yet the activity of digital storytelling yielded "deep data" about precisely that.

If the original goal of the study had been simply understanding the member-mentor relationship, it is not clear that digital storytelling would have been an obvious choice for the study's design. More likely, I would have interviewed mentors and members specifically about these topics. The study, then, highlights the difference between what I came to think of as probes and polls. Digital storytelling probes deeply into the culture of the participants—as the participants feel comfortable inviting their audience into their lives—and it gets to more interesting material than a more directed but arguably superficial approach might have achieved.

Digital storytelling emerged as a tool for participatory ethnography [see Chapter 1.] Members were in control of what story would be told about them, and trying to decide on that story highlighted the strengths of the Clubhouse model, as well as some of the challenges.

Reflection is very much about relationship, in several ways: we reflect on how we relate to our work, to ourselves, and to others. Activities centered around reflection—if they can be woven into the cultural fabric of the Clubhouse—may not only enrich a learner's design process and a designer's learning process, as originally suggested; they might also strengthen the social ties between all those who constitute the community of learners: at the Clubhouse, the members, mentors, and staff. Digital storytelling offered a natural and constructionist path to reflective activity. Reflection does not exist outside of a social context, and neither does storytelling, and each is strengthened by their union in activities like Behind the Screens.
APPENDIX A: HANDOUTS

a workshop in making a short documentary film about you and your clubhouse portfolio
February 2003

Roxbury Story Team
Veronica
Juan
Pablo
Melanie
Peggy

maybes:
Ethan
Marty
Diego
Zuzu
Ashley

Michelle Hlubinka, MIT Media Lab
You can call or email me anytime
daytime 617-555-1212
or mobile 617-555-1234
behind@media.mit.edu

Look for updates and links at:
http://llk.media.mit.edu/projects/behind
getting started

- decide what you want to say about what you do, what you make
  ... and then relate that to what that says about who you are
- start writing and revising your story
- collect images
  - images are available online: http://www.google.com/advanced_image_search
  - under “Size” choose Return images that are… “very large”
- collect music
- talk to Michelle to get the juices flowing!

sharing your story

- online web sites
- a collective CD or DVD with all the movies
- the Boston CyberArts Festival
- Channel C and the Clubhouse Village
- a special screening
- or … nowhere at all! (you can make it just for you)

your commitment

- come up with a story
- make your digital story
- bring a signed consent form
- help others perfect their stories
- decide how you want to share your finished story
- interview with me before & after you make it
- have a good time!

my commitment

- help you with your stories
- share your finished story (I’ll make DVDs and a web site)
- find contests and film festivals for your film
- respect your wishes
- have a good time!

digital stories

2–5 minutes = images + music + your voice + a story + a point + you!
What you need to build a digital story
(in no particular order)

- images
- a music soundtrack
- a story voiceover
- an idea (this is the hardest part!)

Here are some ideas for where to find each of these things. You can check off the ones you have. You don't need all of them—just the most convenient ones and the ones that tell your story best. You'll decide how to use them later.

images
- [ ] photos from your scrapbooks & photo albums at home you bring to the Clubhouse
- [ ] digital pictures of you and your friends and family
- [ ] files from your Clubhouse server folder—saved as Photoshop or JPEGs
  - the earlier files you have, your rough drafts, may also be interesting for the story you want to tell
- [ ] screenshots of the project files you have been working on
  - use the "Print Screen" button and then paste into Photoshop
- [ ] very very short video clips (long ones will slow you down!)
- [ ] pictures of things you like from the Internet (at least 400 pixels tall or wide)
- [ ] drawings from your sketchbook — last week or eight years ago: it's all good
- [ ] printed things like maps, books, CD covers, menus, candy wrappers, ticket stubs
- [ ] stuff! bring in letters or objects that mean a lot to you—we can scan these

music soundtrack
- [ ] your own music that you made in AcidPro or another application
- [ ] simple background music
- [ ] sound effects from the Internet
- [ ] sounds and voices you record from home, school, or your neighborhood
- [ ] MP3s you download (ask Marlon or Murray about being careful)
- [ ] CDs
story voiceover

You can write on paper or just speak straight into the mic. The whole thing should be just 2-5 minutes, or just a page or less of text. Remember, using your music and images, you can communicate ideas you won’t have to state with words.

These are just ways to get started. Pick one to try if you’re having a hard time writing.

• Make a timeline of your life. Choose which parts jump out as important to who you are now, and write about those connections.
• Start with your images. Talk about each one—why you made it or how you made it or what you like about it.
• Write "I am..." at the top of a paper, and start writing. Don’t worry about what you are saying yet. Write "I will be..." or "I create..." farther down the paper. Other starters include "I come from...." or "People think I’m ...., but really I’m...."
• Make a map of your neighborhood or of the Clubhouse, with notes about each location on the map.
• Talk to someone else about an object or photo you’ve brought in, then write down what you said.
• If you have too much to say, try to write everything on a 3x5 card, and choose only what’s important.

ideas

This is the hardest part of the whole thing! You can start by looking at what other digital stories other young people have made. Try some of these links:

YouthOutlook http://www.youthoutlook.org (use the "video sights" link at left)
Youthfilms http://youthfilms.com/onscreen/cinema.html
Third World Majority http://cultureisaweapon.org/stories/mainframe.php3
Radiodiaries http://www.radiodiaries.org/teenagediaries.html (just audio)
Harlemlive http://www.harlemlive.org (there’s one movie here)
The Beat Within http://www.pacificnews.org/yo/beat/ (just writing)
Debugged magazine http://www.siliconvalleydebug.org/ (just writing)

And here are some digital story sites with pieces by people of all ages:
http://www.creativenarrations.net/site/storybook
http://www.cctvcambridge.org/stream/qt/chyme
http://www.cctvcambridge.org/stream/index2.html
http://www.silencespeaks.org/stories.html
http://www.storycenter.org/casestudies.html
http://www.uclinks.org/voices/d_story_home.html
APPENDIX B: STORY SITES ONLINE

YOUTH-PRODUCED DIGITAL STORIES AND RELATED WORK

YouthOutlook
http://www.youthoutlook.org (use the “video sights” link at left)

Youthfilms
http://youthfilms/onscreen/cinema.html

Third World Majority
http://cultureisaweapon.org/stories/mainframe.php3

Radiodiaries
http://www.radiodiaries.org/teenagediaries.html (just audio)

Harlemlive
http://www.harlemlive.org (there’s one movie here)

The Beat Within
http://www.pacificnews.org/yo/beat/ (just writing)

Debugged Magazine
http://www.siliconvalleymag.org/ (just writing)

DIGITAL STORY SITES STORYTELLERS OF ALL AGES

Digital Storytelling Association
http://www.dsaeweb.org

Creative Narrations
http://www.creativenarrations.net/site/storybook

CHYME Project
http://www.cctvcambridge.org/stream/qt/chyme

Cambridge Community Television
http://www.cctvcambridge.org/stream/index2.html

Silence Speaks
http://www.silencespeaks.org/stories.html

Center for Digital Storytelling
http://www.storycenter.org/casestudies.html
http://www.uclinks.org/voices/d_story_home.html
APPENDIX C: SOME STORY SCRIPTS

ALANA

All About Alana

Whassup everybody. My name is Alana Sanchez-Smith and I am a member of the Clayton Boys & Girls Club. I am a person of many personalities and I really know how to surprise people with the things that I do. I love to do anything that is possible even if I get into trouble sometimes. My favorite things to do are thinking of b2k, starting my own music group with my cousins, or trying to be a fashion designer. All of these things are my main goals...except thinking about b2k. Well to start this conversation I would like to tell you about my music career. My cousins Philisha, Jeteria, and I have been trying to get into the music industry for years. We can sing, dance, and we are not afraid to get in front of a crowd. We always try to write new songs and make up new dances but know one wants to see what we are made of. Another thing I am trying to accomplish is being a fashion designer. I love mixing up fabrics and making different outfits. I really do not know whether to be a clothes designer or be a music artist. I could probably do both like Selena. I do not really know what is expected of me right now but I hope I figure it out soon. I usually feel like I am surrounded by opportunities and it sometimes makes things more difficult for me. Yet I hope that I figure out my future soon so I will know what to be prepared for.

MELANIE

My name is Melanie. I’m going to be talking about the boys in my life and my little families. I started out doing little families when I was about four years old when I got tooken away from my mother. Because I have a sister and no men in my life. So when I was about five years old my first family was with this boy named Jerry. We had six children, just like my mother was planning to have, and she told us all about this. And I had them when I was four, and I don’t know how because I was five. That was my first little family. My father took that away from me when I was about seven, because he said I was getting too involved with boys. So when I was about ten I met this boy named Juan and I liked him very much. He didn’t like me but he liked my sister. And I made my first family with him when I was eleven years old. I wrote it down and it was like this: I married Juan, and we had two children. Our two children each had two children. And I was only going to allow them to have two children. My third family was with a boy named Darius D. I also pretended that Darius D and Juan A were always in a fight for me. But that didn’t happen. So. With Darius D I had three kids, and with these three kids came three children. And with these three children, each child had three children, and I was only going to allow them to have three children. To wrap this up, my influences on these families were my mother and my grandmother. They always said I had a good relationship with both. And from them, from when I was four til now when I’m 13, all my friends were based on boys. I write these little fantasies because this is a way of me sharing this with the world, and to keep this inside and not exposed. So this is why I make up these little stories.
ZUZU

Time in and time out
(Time line)

I was born September 29 1988
When I was 4 years old my mother got
stabbed in different parts of her body
around 18 times.
I later started taking counseling.
5 years later I moved to Connecticut
with my mother and brothers.
I made so many friends. But ones again
I had to move back to Boston.
Dss later put me in foster care.
3 months I started school. They put me
in the Dear Born middle school. When I first
got there people would talk about me.
4 days later I meat dimery, the first
thing that I said to her was I like your ear-
rings. At that moment I now that she would
be my best friend.
Now I’m trying to live my life the right
way by going to school and coming to the
boys &girls club every day

PABLO

Life without a father. Me without a father
is bad, I should know because I don’t have
a father so it’s hard because with no father
there no conversation about girls or about
sports also music or about cars and every-
thing that men talk about. I really don’t
know about my father I just heard about
him I heard that he was a generous because
he always gave food or money for the poor
people so he care the poor. I also heard
that he loved all his family that he always
took care of his brothers and sisters he
would not let anyone mess with and that he
did anything for them. People told me that
he was a boxer that he did not do it for the
money he did it just have fun I think that
he was doing it because he loved it not for
fun.

JUAN 1

my name is juan pedro, i was born in rio
piedras, puerto rico but mostly raised in
boston, massachussetts. i am the second
oldest in my family and the oldest of the
boys. i like listening to spanish reggae and i
like working with and looking at hooked up
cars as i was grown up from the "knee-
high" stage i was always alone, never talk-
ing to no one about my problems. but as i
kept growing i moved to a stage where i
wanted to help other children

JUAN 2

my name is juan pedro, i was born in rio
piedras, puerto rico but mostly raised in
boston, massachussetts. i am the second
oldest in my family and the oldest of the
boys. i like listening to spanish reggae and
looking at hooked up cars. as i was grown
up from the "knee-high" stage, i was
always alone, never talking to no one about
my problems. but as i kept on growing i
moved to a stage where i wanted to help
other children not be like i was because i
have seen that keeping your anger and
other feelings to your self can at some
point be very bad for you.

when i first came to the clayton boys &
girls club, i was about 7 almost 8 years old.
at first i had a hard playing and befriending
the rest of the kids because in a way i was
"anti-social". it took me a while to get
used to these kids. now, as a staff in this
clubhouse my main goal is to make every
kid
**Juan 3**

My name is Juan Pedro, I was born in Rio Piedras, Puerto Rico. Where I come from the music that is part of our cultural heritage is "La Plena," but the most listened to by adults is "Salsa." By the younger generation is "Spanish reggae" which is what I listen to. I happen to be a very proud person of my country; I represent my country at all times no matter what people think, do, or say. One of my saddest times in life was when my family and I had to leave my country to help my little brother who was just a baby. I have always looked after my little brother, helping him with anything and everything he needed. After a while, I developed this "need" to help little kids with what they need. But, overall, I help them have fun and not feel left out. This is how I ended up here, at the Clayton Boys & Girls Club. I've spent almost seven years at the club and I have always tried to make every single member that was younger than I feel that they belong where they are, which is something I did not feel when I was little.

**Ethan 2**

**COLD FEELINGS**

Cold inside
Only enraged
Love for negative things
Devouring hatred
Forever being mad
Exceptions on life
Earning nothing in life
Level of hatred on a 1 to 10 scale (5)
Irate and bitter
Never right
Guns
Suicide

**Ethan 3**

Hi. My name is Ethan Thomas. The name of my story is called Life. My story is based on my fascination of things in life. They are: knives, basketball, and poetry. Poetry is a major thing in my life. For example, in the second grade my teacher Mrs. Johnson stated our classes should write something other than stories. I stated that we should write poetry. From thereafter, her classes have written poetry to present. Since I love poetry so much, here's a poem by a famous poet.

**Ethan 4**

I get irate and really unnerving. Basketball is the most important thing in my life. It also keeps me from doing bad things. Basketball also helps me to calm down and actually be patient. When I'm off the court, I still have basketball in my mind, but if I don't actually reinforce it, so when things happen I get really unnerving and I'm really impatient. So that's why basketball's so important to me and that's why I like to play it.
HI. My name is Ethan Thomas. The name of my story is called Life. My story is based on my fascination of things in life. These things are: knives, basketball, and poetry. Poetry is a major thing in my life. For example, in the second grade my teacher Mrs. Johnson-King stated our classes should write something other than stories. I stated that we should write poetry. From thereafter, our classes have written poetry to present. "Still Here," a poem by Langston Hughes, means a lot to me because it states key points about courage and emotion. And this is what I like about poems. They say key things about courage and emotion. So here's a poem by Langston Hughes.

L-I-F-E. Life. The "L" in my title, Life, stands for the things I Like in life. The "I" in my title, Life, stands for things I like to Invent, like poetry. The "F" in my title, Life, stands for the Fun things I like to do, which is basketball, writing poetry, and looking at different designs. The "E" in my story, finally but not least, means the whole Effect of this story.

The basketball involved in this story is the F in my title, Life. Basketball is very Fun to me. The clips I'm about to show you are about me playing basketball.

When I'm on the court playing basketball, there's three things I think about: my family, my friends, and how they all come together to actually help me. On the court, my family and their wrongdoings are my motivation. My friends are also my motivation.

Never satisfied, satisfaction exists only in realms unheard to me, written in books lost and diminished by true relativity.

Lost, I do feel, beneath mounds of immense reality, forever feeling smothered by blankets of insanity.

My only release from this liquid of monotony is the art and words that is forever imbued in my soul.

The words that I write are the key to my mind, however the art and colours are the path to me.

I fulfill my empty heart with light, colour and array to lift my spirit from the deep gray.

Even with this I still lust for perfection, although my idea of perfection is really a form of imperfection.

I sleep, dream and even feel art flowing through me, but expressing it is a different story.

I do still long every day to be left timeless, ageless in the form of art, displayed in colors so rare and unseen, forever in a casing deep within the center, lost and wrapped within the universe.
NIAMA

Hi. I like to act because I've seen a whole bunch of movie stars do it and I just like the way that they put themselves out there. I saw movies like Love & Basketball and I also saw movies like The Patriot and Remember the Titans, and I just like the way that the movies picture themselves.

I also like to sing. I like singing about how our community is on the climbs in Boston, how people get killed every day, how our young kids are using drugs. And I feel that's the way I express myself and the way I feel about those things.

I also like to dance. I remember when I was little. I was about about five years old and I went into the room to show my mother a dance and she turned on a song for me. I remember I tried to dance and I had no rhythm at all. I mean I just could not do it. And everybody laughed at me. But I stuck to it and I started trying out for dance groups—various ones such as Yolanda's dance troupe, Project Concern, Flava, and as I danced with those groups I got better and better.

My concern with all the children in Boston now is that they all think they can achieve their dream just because they live in Boston and they don't have enough money to do what they want to do. But if you want to do things then you have to get out there and show people your talents, and that's what I'm gonna do and what I'm gonna keep trying to do so that I can achieve my dream.

And I also want to be a doctor when I grow up. If I don't make it in singing, which I really really want to major in, then I can be a doctor, and I really want to be a pediatrician, because I really really like dealing with kids, I just like their smiles and I just like the whole way they bring theirselves about so.

That's my life story, and that's all I wanted to say. Thank you and goodbye.

SCRIPTS

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ISAIAH

Who am I?

Before I was formed in my mother's womb, (Mothers Belly) God had called me and formed me, to be different. (The universe)

Upon the day that I was formed, running through my blood was the urge to create, to be creative in everything I do. Be different. At age 7, I built my first helicopter, at least what I thought was; it never flew. This experience for me was a time of absolute failure in design and technology. But my desire to build and invent was not left for this sad event to decide. (Picture of me thinking)

Life in its most perfect definition of things gave me a better perspective of myself. I learned from the birds that at a very young age never stop learning how to fly, until finally, success. (Mother Eagle and the Baby)

I have learned to pay close attention to the most basic forms and characteristics of nature; (insects on a plant) how it works, with its ever so persistent ways of adaptation. (Antarctica)

The complexity (cells in the body) of nature hidden by its simplicity. The placidity of creation, and the flow of life. (Oceans and streams)

This is what I am! (Show pictures)

A mere outward representation of who I am, my nature, to be simple, and different, And, never to follow.

This is my mind, my character, my dream, my urge, my desire.

(Towards the End)
One cannot tell the absolute wonders of creation by its mere outward appearance, and so, neither will my true nature ever be known by anyone, nor will it ever be discovered. That's who I am. I am what I am.
My name is Yadira, and this is a journey through my mind.
This is Tigger. My favorite character in the whole wide world. Isn't he sexy?
That's a map of where his house is and that's his house.
That's my first certificate from the ... thing: I had to go find some stuff.
And that's a picture that my friend drew for me for a present.
Oh, look at my pretty little stickers!
That's my little tasteful flower. I made it out of M&Ms. Talk about ghetto!
And that's my newspaper from September 11th.
And a couple of flowers that was given to me on Valentine's Day from a couple of my friends, oh sweet!
That’s my sister’s name on a flag.
And that’s, my little sister, and that’s my other sister. And there she goes again.
She’s so pretty! Disregard Pooh in the background please.
That’s one of my bestest friends.
That's one of my only pictures of me and my sister, we have together.
Those are pictures Charlotte and I drew for fun at the Boys & Girls Club.
And these are pictures of sites I would like to go see.
And that’s a Valentine's Day card from my friend Robert.
Ohhh... how cute!
Disregard that.
And that was one of the longest poems I ever wrote. It’s called I love you forever. Really huge.
This is my friend’s book I inspired her to make one. It’s a pretty gum collection, but of course: it’s Starburst wrappers. So that doesn’t count.
So as you can see there’s a big difference from mine because she’s colorful and I’m dark, I guess. Yeah, talk about evil, right?
John D. O’Bryant. The guy who came up with my school name.
And this is my soccer team.
That’s Dontoface, and that’s Dontoface playing.
That’s Mandy and Helida who were making a presentation.
That’s Adombi, representin’ her Nigerian culture.
And that’s Don, representing his culture.
And there’s the whole crew again.
And again, it’s kind of funny looking, they all go by height.
That’s Mr Spur, he’s my math teacher, one of a kind.
Mr. Carty. He's kind of a mystery to me, I don’t know how he can stand up straight with his belly like that.
That's Mr. McCloud teaching class.
And that’s Kimberly who told me not to put this picture on here but I did.
That’s Stephanie. I caught her by surprise.
That’s Johnny. He’s a little punk you don’t wanna know him either.
That’s and one of my brother’s best friends.
And that’s Rufus—trying to look sophisticated doing his work. He really was.
That’s and in the middle of Spanish Class.
And that’s Helida again
That’s Yong who was playing cards. You’re not supposed to, but hey.
That’s Charlotte being silly in the hallway.
That’s trying to look cute.
And that’s my brother Anthony and Charlotte.
That’s and Charlotte. Isn’t that cute?
That’s he has a thing for Cartoonman.
That’s Veronimica, or Veronica.
That’s Camille.
That’s Betty and Charlotte in a fundraiser for the girls group trying to go to New York and stuff. As you can see we’re not going that far, but hey, we’re getting there.
MARTY

In the future I want to be a chef. I am thinking about going to college to learn more about culinary arts. The reason I want to be a chef is because every time my grandmother would cook Sunday dinner, I will always ask to help and I was always around somebody while they were cooking food. Something came to mind saying when I get older, I would love to be a famous chef.

All y’all other kids may have it easy but when I grew up I did not have a father around to treat me good or to hang out I did not have a fatherhood all I had was a motherhood. Nothing is wrong with that but I need a man in my life to teach me about men things, but all I can say is I am thankful for what I got.

I stay out of trouble sometimes. Some people think I am annoying and some may think I am bad but I don’t care because everybody is not perfect theirself. I have a lot—I mean a lot—of friends. Everywhere I go I know people. I am a nice person when you get to know me, but if you get on my nerves I can also be a jerk.
APPENDIX D: STORY PROMPTS

Start small.

Interview yourself. What are the questions nobody asks you, that you want to answer?

WHERE ARE YOU COMING FROM? Where are you going to? At what point did you decide this (in time or place)?

Here’s a 4x6 index card. You have ten minutes, only on the space of the front and back of this card, draft your story write whatever comes out and don’t stop until time or the card runs out. (from Lambert, 2002)

If you have too much to say, try to write everything on a 3x5 card, and choose only what’s important.

This is a postcard. Choose a person that you think the story is for, and write them a postcard about the story. (from Lambert, 2002)

In our lives there are moments, decisive moments, when the direction of our lives was pointed in a given direction, and because of events of this moment, we are going in another direction. A bad setback, meeting a special person, the birth of a child, the end of a relationship, the death of a loved one are all forks in the road, choices you’ve made. (from Lambert, 2002)

Start with your pictures. What stories come from these pictures? (from Caesar McDowell)

For any piece of writing, choose an evocative sentence, and add "...because..." to the end of it. See where it takes you. (from Natasha Freidus)

Find the specific stories within the story. (from Natasha Freidus)

Make a timeline of your life. Choose which parts jump out as important to who you are now, and write about those connections. (from Rachel Garber)

Start with your images. Talk about each one—why you made it or how you made it or what you like about it.

Write "I am..." at the top of a paper, and start writing. Don’t worry about what you are saying yet. Write "I will be..." or "I create..." farther down the paper. Other starters include "I come from...." or "People think I’m ...., but really I’m...."

Make a map of your neighborhood or of the Clubhouse, with notes about each location on the map.

Talk to someone else about an object or photo you’ve brought in, then write down what you said.
DIGITAL STORY GENRES

A Story about Someone Important
Character Stories
Memorial Stories
  What was important in the relationship?
  How would you describe the person?
  Is there an event/incident that best captures their character?
  What about them do/did you most enjoy?
  What about them drives you crazy?
  What lesson did they give you that was most important?

A Story about an Event in My Life
Adventure Stories
Accomplishment Stories
  What was the events (time, place, incident, series of incidents)?
  What was your relationship to the event?
  With whom did you experience the event?
  Was there a defining moment in the event?
  How did you feel during this event (fear, excitement, etc)?
  What did you learn from this event?
  How did this event change your life?

A Story about a Place in My Life
  How would you describe the place?
  With whom did you share the place?
  What general experiences do you relate to the place?
  Was there a defining experience at the place?
  What lessons about yourself do you draw from your relationship to this place?
  If you have returned to this place, how has it changed?

The Story about What I Do
What is your profession or ongoing interest?
What experiences, interests, and/or knowledge in your previous life prepared you for this activity?
Was there an initial event that most affected your decision to pursue this interest?
Who influenced or assisted you in shaping your career, interest, or skill in this area?
How has your profession or interest affected your life as a whole (family, friends, where you live)?
What has been the highlight of your vocation/avocation?

Other Personal Stories
Recovery stories
Love stories
Discovery stories

(from Lambert, 2002)
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CRCP (The Center for Reflective Community Practice), Third World Majority, and Invent Media (2002). Storylink 1.0: an Interactive and Community-Based Initiative for Creating and Sharing Digital Stories. Cambridge, MA: Center for Reflective Community Practice at MIT.


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