Introduction

The field of instructional design has resulted in the design of countless artifacts and tools of varying shape, size, and type as well as principles for designing them. Currently, we are now even witnessing design efforts towards building something like community. However, even in these latter efforts the primary focus is on learning as opposed to a broader altruistic agenda. While well-designed programs and software applications can support deep understandings and new practices, less common in design work is a social commitment towards making the world a better place. Similarly, many current ethnographers have criticized interpretive accounts that fall under the heading of “basic” anthropological research, instead advocating that there needs to be a social consequence to the work with a focus on what might be labeled “applied” or “critical” anthropological research. Fine (1996), in advocating for the role of critical, feminist ethnography, solicits work “which empowers as it exposes, which offers critique as it reveals not only what is not but what could be” (p. 16, italics added here for emphasis).

It is our belief that both anthropologists and instructional designers could better serve the world by committing to and carrying out “culture work;” that is, design work that advances the moral agenda of making the world a better place for us and for our children. The goal of making the world a better place is a messy business, with numerous struggles, opposing agendas, multiple interpretations, and unintended and controversial consequences. To this end, our work positions us as design ethnographers, enmeshing ourselves in local contexts so that we can work collaboratively with those people who transact with these contexts in order to develop and actualize social commitments. In this paper, we describe a design initiative that overtly attempts to do “culture work” by way of a technology-rich educational innovation called Quest Atlantis (see http://atlantis.crlt.indiana.edu). We begin with a discussion of doing “culture work” through design activity and then relate this commitment and discuss the process in terms of the Quest Atlantis project. While the project is currently situated in various centers or locales, the data in this account is primarily focused on our collaboration with a local Boys and Girls Club that serves hundreds of disadvantaged children each day.
Recently, there has been a shift in the manner in which researchers and theoreticians view culture. In this new conceptualization, cultures are no longer treated as static entities (Yon, 2000). Instead, culture is being viewed as being incessantly reinterpreted and reproduced as members engage in and draw interpretations from their own particular versions of culturally-appropriate actions and meanings (Lederach, 1995; Roseberry, 1989). Studies of ethnographic writing have revealed the apparent boundedness and coherence of ‘a culture’ as something made rather than found; with the ‘wholeness’ of the holistically understood object appearing more as a narrative device produced by individuals and assigned structure by anthropologists than as objectively-present, empirical truth (Abu-Lughod, 1991; Brightman, 1995; Clifford, 1986; Eisenhart, in press; Gupta & Fergusson, 1997; Marcus, 1998; Ortner, 1991). Tim Ingold (1994) stated,

The isolated culture has been revealed as a figment of the western anthropological imagination. It might be more realistic, then, to say that people live culturally rather than they live in cultures. (p. 330)

From this perspective, culture is not one primordial or coherent thing, fixed in time and space – as traditional discussions and much popular theorizing imply – but rather culture is a dynamic, continually emerging set of struggles among individuals working to identify themselves in relation to others (Clifford, 1986; Eisenhart, 2001).

This is NOT however, to say that there is nothing there, that the ethnographer’s account is meaningless, or that we should abandon the term “culture.” Clearly, context matters, and the patterns, structures, and meanings that people take up and manipulate in particular contexts and with other people are of consequence for them. They affect the way people make sense of their experiences, the concerns they feel, the opportunities that are available, the choices they make, and, ultimately, the identities they create. Context, and socio-historically negotiated fields of action provide sources of value, meaning, and ways of understanding—and resisting—for those who transact with them (Barab, Cherkes-Julkowski, Swenson, Garret, Shaw, & Young, 1999; Dewey, 1938; Eisenhart, in press; Ortner, 1991). These fields of action provide useful targets for designers interested in doing “culture work.” Culture work is a phrase that Brenda Laurel (2001) used to capture her belief that designers have an opportunity (and indeed a responsibility) to serve society in a manner that goes beyond the simple production of a technical innovation and instead has the utopian ideal of transforming and empowering “cultures.”

In our interpretation, culture work involves uncovering the multiple layers of meaning, or what Geertz (1976) referred to as “webs of significance,” held by the members of a community with the focus of transforming them to empower those members and society more generally. By deconstructing the power structures that pervade our society, culture work can serve to empower the disempowered, transforming lives and circumstances (Delgado-Gaitan, 1993; Delgado-Gaitan, & Trueba, 1991;
Eisenhart, 2001; Fine & Weiss, 1998; Freire, 1970; Levinson, 1996). Essentially, culture work, is *designing with heart*. Culture work involves having the social commitment to the notion that there needs to be a social consequence arising from the work. We view our design work which is grounded in a social commitment and that has a cultural focus as having the same set of standards. In this way, the focus of culture work should be on the resolution of specific problems or the improved functioning of a group, community, organization, or institution, with a commitment towards empowering participants to take greater control of their own lives. It is with this utopian goal, this *designing with heart*, that we discuss our Quest Atlantis design work, beginning with a description of this technological innovation and then discussing some core features of our developing trajectory and our work as design ethnographers.

**Quest Atlantis: Our Technological Innovation**

Quest Atlantis is a virtual world housed on a central Web server. It is accessible to children with Web access, a Quest Atlantis password, and the appropriate client software. At one level, Quest Atlantis is a multi-user virtual environment that immerses children (known as Questers) in educational tasks as part of an online adventure to save Atlantis from an impending disaster. However, rather than conceptualizing the Quest Atlantis project as a computer program, Quest Atlantis might be best seen as a virtual space designed to support an online as well as face-to-face community. Building on strategies from online role playing games (Koster, 2000) and what we have learned from our more educationally focused work (Barab, Kling, & Gray, in press; Kim, 2000; Smith & Kollock, 1999), Quest Atlantis combines elements of play, role playing, adventure, and learning, allowing members to virtually travel to three-dimensional lands where they select developmentally-appropriate quests (engaging curricular tasks), chat with other Questers and mentors, and build virtual persona (Bers, 2001; Turkle, 1995).

The Quest Atlantis community consists of both the virtual Quest Atlantis space and the face-to-face Quest Atlantis Centers. In order to participate in Quest Atlantis, children must be associated with a particular Quest Atlantis Center (such as Boys and Girls Clubs, Participating elementary schools, children’s museums, local libraries) and register on the Website. Once Questers are registered, they may participate at a participating Center or from other locations with Internet access. Upon entering the virtual environment, citizens travel to virtual worlds where they can read about and listen to the themes of these worlds, complete Quests (developmentally appropriate activities), talk with other children and with mentors, and build their virtual personae. Members travel through virtual villages and worlds to locate and complete quests. The virtual space is divided into worlds, and each world is divided into 3 villages that hold up to 25 quests. Each Village has a theme—for example, community power, pop culture, natural disasters, population explosion, sound of music, water quality, making sense of numbers—and an associated series of engaging Quests. The themes were designed to span all areas of knowledge and
feature something for almost everyone, yet still not mirror academic categories. Each Village houses a spectrum of Quests ranging from simulation to application problems of varying levels of complexity.

Quests are proposed by individuals with interest and expertise in the particular content area of the Quest. Completing Quests requires that Questers participate in real-world, socially and academically meaningful activities, such as conducting environmental field studies, designing museum exhibits, interviewing parents, examining current events from multiple perspectives, or developing real-world action plans. Each Quest is also connected to local academic standards and to at least one of our social commitments described below. Questers can select a number of these Quests based on their interests or as assigned by their teacher if they are participating as part of a class. The children’s work on Quests, that are submitted through an interface integrated with the client software, includes both content-area findings and personal reflections to foster retention, critical thinking, and metacognition. Both the personal, process-oriented reflections and the content-based findings are assessed by tenured reviewers with expertise in the particular content area of the Quest. In this way, the Quests bring together two traditionally disparate forces—the motivation of free-play and the rigor of academics—and through a system of checks and balances, they scaffold children’s exploration while ensuring rigorous content.

By completing Quests, the Quester earns points as well as gains increased status in the virtual environment. These points can be exchanged at the Quest Atlantis store for items such as Quest Atlantis stationary, stickers, pins, and even trading cards about famous people. Over time and after completing a series of Quests, the Quester can also review other learners’ responses to Quests and even be granted creation privileges in the virtual environment. Each member’s level of citizenship is publicly displayed in the Quest Atlantis “Hall of Fame,” which lists all Questers, their ranks, accumulated points, and links to their artifacts created by Questers. Additionally, Quester home pages allow Questers to develop an online persona, which has been shown to be a powerful motivator for engaging participation in online worlds (Turkle, 1995). Moreover, these personae contribute to their formative identities or sense of self (Bers 2001).

Children’s work on Quests includes actual Quest responses (text or uploaded attachments) and reflections, both of which are submitted through an online system that connects Questers and the “Council.” As part of the legend underlying Quest Atlantis, this Council is a group of Atlanteans committed to staving off disaster by learning about the earth by way of children. Council members are characters that occasionally appear in Quest Atlantis videos, the 3D space, and in other circumstances. The Council is actually a group of staff, volunteers and even teachers (although the latter may communicate that they are a Council helper to their students) who use the online review space to evaluate and provide feedback on children’s work. The following is an example of Council Feedback on a Quest:
Thanks for the great letter. I liked how you talked in detail about the 2 sources of media you compared. I know that you said that it was a good thing that they talked about one team more than the other, but can you think of a time when it was not a good thing to talk about one side more than the other? Look at 2 media sources for one story and tell us how they covered the same story in the 2 sources. Tell us how covering one side more than the other can be a bad thing.

The Council also processes Quests submitted by teachers, parents, volunteers, and even Questers. Tenured members act as mentors for apprentice Council members, guiding them in responding to children’s work. The 3D space also includes other structures that facilitate novice and expert use, allow Questers to experience rudimentary 3D building, facilitate collaboration among members, support Socratic events in which Questers’ put their wisdom to the test, and a multitude of other activities that support identification with the Quest Atlantis experience and that help to actualize our social commitments.

Children can also co-quest with each other. Co-questing involves two members completing the same Quest tasks and then each uploading their own reflections. Another process that we have integrated is that of guilds, a strategy adopted from the popular Microsoft multiplayer online role-playing game Asheron’s Call (Axelsson & Regan, 2001). In Quest Atlantis, a guild is a large long term group that a Quester joins by pledging allegiance to another Quester. Through this act, the pledging player becomes the other player’s apprentice and the other player his/her mentor. This relationship forms a mutual exchange system in which the apprentice automatically passes on a small percentage of Quest Atlantis points to his/her mentor, who typically will support the apprentice in completing Quests and progressing in Quest Atlantis.

Doing Culture Work through Design

The process of doing cultural work through a design project involves a different set of processes for each particular context. As one instance of culture work that involves design, we have found it useful to think of our efforts with Quest Atlantis as involving four interrelated braids, each serving as a focal point through which our design trajectories have progressed. Additionally, cutting across all these braids and serving as a necessary foundation are trust and mutual respect, which together serve as the foundation of culture work. Trust and mutual respect lie at the beginning and at the end of any relationship that seeks to empower, instruct, inform, or nurture. In our case, establishing trust involved and continues to involve the utter enmeshment with the local context to such an extent that the boundaries between designers and context whither away, becoming indiscernible. These braids present thematic groupings which, though qualitative in nature, arose through team discussions and multiple writings; moreover, they balance the criteria we deemed necessary: the braids are useful, illuminative, comprehensive, and parsimonious.
Below we present discussion on each of these braids. However, space limitations require us to only discuss the highlights thereby resulting in illuminative and not comprehensive accounts that are somewhat simplistic given the complex transactions inherent in doing culture work.

**Braid I: Becoming Enmeshed in the Local Context(s)**

Culture work begins with an investigation of the contexts in which the design will be used. However, our initial over-confidence led us to believe that we more or less knew the outcome of our efforts and we simply needed to work with an after-school context and some schools that would serve as usability sites for our design work. However, as it turned out, a series of events (other funded projects with deadlines, a project member leaving, etc.) compelled us to postpone development and, as such, we spent more time initially as ethnographers than we had intended. This unintended but sustained and deep investigation resulted in the development of rich relationships. Those who started out as our participants became our partners and we collectively gained a much richer appreciation of the needs and interests of these contexts. For example, instead of simply focusing on the development of a virtual environment for learning math and science, we became committed to the development of whole persons. We also learned a lot about the various life worlds of the groups for whom we were designing Quest Atlantis. We became committed to culture work and designing with heart. Quests, instead of simply supporting math and science learning, became targeted to the social commitments we adopted (described in the next section) and we developed, for example, “One World” with the associated villages of Community Power, Pop Culture, and All About Us—these titles capturing our commitment to empower the whole learner.

Beginning with the children, we learned about the shows they liked to watch, the movies that interested them, the games they liked (and did not like) to play, and what and who was considered “cool.” We also tried to understand differences such as which games the girls liked to play and which ones most interested the boys. We asked them about what they liked to do in school, at home, with friends, and observed them in the computer lab at the Boys and Girls Club. We also asked children what they did not like and what was missing from their lives. As much as possible we tried to instantiate these interests into our design work. For example, children and especially boys liked (and many were obsessed with) trading cards of all kinds. They liked collecting them, talking about them, and trading them. As such, we developed our own Quest Atlantis trading cards with the expectation that students who completed Quests could trade them in for cards. Our trading cards and the famous real people they depict (e.g., Jane Goodall, Mahatma Ghandi, Paul McCartney) were described in terms of their positive contributions to the world and each card highlighted the characteristics of kindness, creativity, personality, strength, and wisdom.
Just as we wanted to make the designed intervention motivating for children, it similarly had to meet the professional needs of the teachers. This was accomplished through first having Quest activities of varying lengths and difficulties, a feature that was necessary if they were going to fit into the varied time needs of the teacher. A second feature was allowing teachers to have all the work submitted by their students sent to them for review, allowing teachers to also tag certain Quests so that when students entered the virtual environment they could immediately determine which Quests were assigned by their teacher. We also worked with teachers to develop an understanding of what Quests should look like. Another feature was that much of the work on Quests now requires doing work away from the computer, a facet that was conducive to school cultures in which time in the computer lab is frequently limited. Last, and most importantly, we connected each Quest directly to a local academic standard—a feature that has been central to attracting teachers and administrators. It is our belief that culture work begins win an appreciation of existing cultures.

Braid II: Co-Creating Social Commitment(s)

A second core aspect of doing culture work is the advancement of a social commitment. However, a challenge facing design ethnographers involved in culture work is defining the particular social commitment(s) that will be of most value to those the work is meant to support. While it is possible for an outsider to adopt a social commitment that will also be relevant to multiple contexts, we have come to believe that the social commitments for a particular project should be cooperatively uncovered and not simply imposed by the design team. We have come to appreciate that such a posture is indispensable to responsible instructional design. It is not our duty to create problems or issues of concern but to position ourselves in a manner that will allow us to become attuned to these and highlight the issues among the community. At times, however, this involves exposing inequities or bringing in an outsider perspective to suggest unfair power differentials, even when those being subjugated are unaware of their disempowered position. This is necessary because some communities are subjugated to such an extent that they do not have the tools to speak out against their subjugation. In these cases, culture work involves “rocking the boat,” or as discussed below, giving a voice to the voiceless and exposing the injustice for all to see.

In our case, we spent one year simply talking with and observing children in an after-school context to better understand their concerns and to develop our social commitments (Barab, Thomas, Dodge, Newell, & Squire, 2002). However, many of these children would not have characterized their lives as being disempowered. This was evident on one occasion in which it was decided to ban the children from using the Internet, something the children were excited to use. However, when the children were informed of the Internet ban, no child raised a protest. Informal conversations with the children made it clear that they were disappointed but did not feel like they had a voice in changing the policy so
they just accepted it. Further, many children were used to arbitrary rules being imposed top-down with no explanation. If children were silent on issues of personal interest, we had little hope that they would express discontent with issues such as problems of prejudice, family issues, community problems, etc. These types of observations coupled with our reading of the literature led to our focus on supporting child agency and empowerment.

A core question for the design ethnographer is what constitutes a legitimate warrant for action and how one decides which issue(s) should be acted upon. In our work, we found few instances of misuse of power and more instances in which we acted because of an identified problem based on an examination of our field notes, interviews with staff and children, our reading of the literature, and our own personal commitments—to ignore the latter would not be consistent with our commitment to honor and leverage our team’s numerous experiences working with children. Members of our team had different interests and developed and pursued their own social commitments at the same time they contributed to the team’s overall focus. For example, one African American team member who through a conversation around a Quest with a Caucasian child became aware that this child in spite of having an adopted African American sister had no understanding of the word “race.” She explored his understanding and embraced the social commitment of diversity affirmation while at the same time questioning whether her drawing attention to the concept simply created lines in the world for a child who previously did not see the world as black and white. Another team member after talking with some African American students and reading the literature on ethnicity and academic engagement focused on identity formation and academic engagement as his social commitments. Another team member designed science Quests with a particular focus on getting children to think globally yet act locally was consistent with the social commitment of local/global responsibility. Still another team member with an appreciation for the lack of connection between the Club and the surrounding community and an explicit interest in community building focused on the social commitment of community involvement. Finally, with a focus toward understanding children’s values and ethical decisions another member become focused on more judgment and character development.

These developed commitments serve to underpin and guide our culture work as well as what we have come to understand as designing with heart, and provided the base for the development of Quest Atlantis. More specifically, Quest Atlantis was designed to support children in developing their own sense of purpose as individuals, as members of their communities, and as knowledgeable citizens of the world. As a result, in addition to connecting to academic standards, each Quest is linked to a dimension of development. There are seven dimensions or commitments that have emerged and serve as the foundation for our work:
• **Character Development** (trust me) - The child should be able to exhibit and employ honesty, integrity, wisdom, dependability, and justice.
• **Identity Formation** (I am) - The child should be able to exhibit a clear understanding of her sense of self while also maintaining a healthy expression of individuality.
• **Agency & Empowerment** (I am able, I matter) - The child should be able to articulate issues that are of concern to him/her and implement a fair plan to address the issue.
• **Community Involvement** (together we stand) - The child should be able to express feelings of connectedness and show how they are supporting members in building relationships and to create a collective that is larger than one individual.
• **Diversity Affirmation** (everyone matters) - The child should be able to value each other while appreciating the shared qualities and differences of all life.
• **Academic Engagement** (think, act, be) - The child should be able to exhibit ways in which academic learning is important and connected to the real world.
• **Local/Global Responsibility** (think globally, act locally) - The child should be able to respond locally to global concerns.

Collectively, these dimensions aim to enhance the lives of children while also aiding in the formation of knowledgeable, responsible, and empathetic adults, supporting members in believing that they are valued by their community and that they have important ways to contribute. Quest Atlantis was designed to foster the development of each of these dimensions within and among the children who participate. Each dimension also has an associated “catch phrase,” which pervades the Quest Atlantis store paraphernalia and the Center walls. These commitments are evident in the animated movies and emergent storylines in which council members share their stories and communicate with the children. Each member of our design and research team has made an explicit commitment to these dimensions and to integrate and exemplify them in the lives of the children and in their own lives—the latter being an important component of doing culture work.

**Braid III: Valuing Multiple Perspectives**

Designing interventions to serve as vehicles to engage in culture work is not a science but a messy and situated art that must constantly be informed by multiple perspectives, many of which may be in conflict. We have come to believe that a core component of doing culture work is the reverberation of multiple voices from multiple perspectives, especially providing voice to the silenced. Gardner (1991, p. 113) stated that “the common good is first of all preservation of a system in which all kinds of people can—within the law—pursue their various visions.” This suggests that any project grounded in a social commitment towards empowerment must acknowledge and work to engender multiple perspectives. We believe that a commitment to multiple perspectives is inherently empowering (Dewey, 1909/1965; Sleeter, 1991). This is evident, for example, in that fact that children not only complete Quests but based on their developed wisdom they can earn the opportunity to propose quests for others and even serve as
Council helpers, reviewing the work of their peers. Negotiating power structures around these changing roles is complicated.

Freire (1970), often associated with any discussion of empowerment in education, spoke of oppressed peoples in “cultures of silence” who are alienated by the more powerful members of societies. These downtrodden peoples have no voice and are not heard. Part of our work with Quest Atlantis is to give voice to the voiceless and agency and empowerment to those mired in cultures of silence. Freire also insisted on respect between the various segments of society. It should not involve one person acting on another, but rather on people working with one another. Central to Freire’s work was the notion of praxis, which he defined as “reflection and action upon the world in order to transform it” (Freire, 1970, p. 36). Characteristics of praxis include self-determination (as opposed to coercion), intentionality (as opposed to reaction), creativity (as opposed to homogeneity), and rationality (as opposed to chance) 1970. These characteristics are central to our design work in which children choose to engage in Quests and in the fact that they are treated as important contributors to rebuild the lost wisdom of Atlantis, wisdom that they are told is considered valuable to mentors who work at the Centers and to the reviewers here on Earth who are real people.

Our Quests while connected to academic standards begin with our social commitment and are grounded in the types of issues and interests that the children have expressed. For example, in Pop Culture Village children can work to understand their own lives in terms of the television shows and movies that they view as exciting. However, and more importantly, they can bring in stories from their family and culture and not simply take those introduced by a textbook publisher. Nieto (2000) in suggesting a model for multicultural education considers tolerance, acceptance, respect, affirmation, solidarity, and critique to be characteristics of multicultural education. We have modeled many of the developed Quests and even the overall structure on these characteristics. For example, the notion of Guilds was designed to provide children a feeling of solidarity while at the same time they could still complete individual work. However, how Guilds work to both empower individuals and foster collaboration while at the same time not establish critiques is a core challenge. Further, using point systems and various rewards structures to motivate student work in some ways is coercive and we need to find ways that student participation does not solely become about earning points and instead focuses on good work. However, we are very concerned whether using points and associated reward structures is an effective means to engender participation towards the development of life-long learners. Further, while participation in Quests is voluntary at most after-school Centers, an important research goal will be to understand differences in children’s perspectives and produced work when Quests are required by teachers.
In our design and culture work we have struggled to bring in multiple perspectives. This began with our development of the Quest Atlantis Council, consisting of animated figures who have features associated with African American, Asian, Hispanic and Anglo populations. Additionally, we have balanced male and female representations with our goal not to make even the protagonists inherently evil but simply misguided. Also, we spend time at the Club working to listen to and empower children who may not normally enter the computer laboratory. For example, we regularly have all girl time in which we explicitly support girls in getting involved in Quest Atlantis. We have also developed Quests that require the children to take on other perspectives, to share their cultures, and to find value in their own histories. Children are required to not only submit responses to Quests but to share why they think the work is of high quality and to engage in discussions with the Council about the value of their work. At the Boys and Girls Club we explicitly seek out quiet and shy children and work to engage them in the program. Lastly, we find ourselves typing alongside or even for children, helping children with low skills or feelings of insecurity still achieve success and then remove the scaffolding as necessary—helping children reach their maximal potential within their zone of proximal development (Vygotsky, 1978).

Braid IV: Doing Design Work

Central to the design of our online and face-to-face spaces is a commitment to a participatory design process in which we involve our collaborators and target learners in the development of the program itself. To use a metaphor adopted to describe the development of Linux, we have been working on building a “bazaar”—not creating a “cathedral” (Raymond, 1999). From the perspective of this metaphor, a program (such as Quest Atlantis) may be released in one fell swoop in an advanced and elaborate form, with much fanfare and with a reluctance on the part of its designers to change anything about it later as so much effort and expense was invested in it during the prerelease stage. This “cathedral” approach, stands in stark contrast to the “bizarre” approach in which iterations of the program are released frequently and are allowed to overlap one another so that the program seems to grow in a more organic way akin to the manner in which a medieval “bizarre” or marketplace might develop. Further, the potential of the design is only evident and becomes actualized through use as members interact, as opposed to being evident in disembodied bits and bytes. In fact, without member participation in the space, Quest Atlantis looks much like a ghost town.

Although participatory and emergent by design, the Quest Atlantis Program must articulate a set of easily understood goals that support meaningful learning. Play is a crucial aspect of human development that facilitates learning opportunities that are motivating and of interest to the learner (Vygotsky, 1978). However, aimless play with computer software, regardless of its educational value, cannot be sustained and is less motivating than experiences with clear challenges and outcomes. In terms
of play, a large part of the success of persistent virtual environments that involve role playing is that they provide users the opportunity to enter a different (virtual) world (Reid, 1999). A key aspect of Quest Atlantis is that the development of the game identity is based on the child’s ability to accomplish activities in the real world and not simply in the virtual environment. In this way, the design work overlaps with the real-world, providing a mutable platform from which our social commitments are manifested.

Supporting children involves continual interaction, sometimes helping children type in responses, at other times aiding the students in interpreting complex concepts like race and perspective and at other times reviewing their Quests in ways that will push their thinking, and at still others communicating to them in the online space in ways that will push their thinking and prompt them to get involved with community issues. For example, one of our team members recounted an interaction in her field notes in which she was working with a child who did not know what race was (even though his adopted brother was African American and he was Caucasian), while another child submitted a Quest with little appreciation for what perspective is (the core the challenge of the Quest was to adopt a different perspective), and still another child was having difficulty with a Quest in which he had to interview his family (of which there were serious issues that he did not want to engage). In each of these instances, supporting the children in Quest Atlantis involved engaging them in sensitive issues that provoked and deepened our social commitments. As such, the Quest Atlantis system goes beyond the technical structures, thus requiring ongoing support for the training of staff at a local Center so that they will sustain it and so that they also embrace the underlying commitments. An important component of our work is to understand and support the localization process of Quest Atlantis for each Center, supporting both adaptation to the local context while keeping intact our social commitment to supporting cultural change.

Conclusions

The Quest Atlantis project has served as a useful vehicle for doing culture work in that we have embedded our commitments in the Quest Atlantis myth and associated Council video, in the Quests we developed, in the feedback we provide as Council members, in the interactions that occur in the three-dimensional space, and in our face-to-face collaborations as mentors at the Centers. While clearly a challenging endeavor, we have found that doing culture work through design is a rewarding, useful, and necessary activity. In our work we began as designers, then become ethnographers, and now see ourselves as design ethnographers, observing the local contexts, building relationships centered on trust and respect, and through which we could develop an agenda and commitment that was grounded in the everyday needs of those our work was intended to serve and that results in a design that explicitly included multiple
perspectives. The design trajectory has evolved through an initial minimalist design with a focus on cultivating it in relation to emergent observed and expressed needs as opposed to some top-down, theoretically driven conception of what should occur. We view this process as organic and self-evolving, although unlike self-organizing systems we, at least initially, stay very much at the core in directing, stimulating, and facilitating the activity of the system.

While we nurture the growth of a new community and its associated norms, a central commitment is to collaborate with parents and local schools to ensure that the design work and resultant participant structures foster connections to important real-world issues. In other words, our goal is not to simply create an isolated system, but instead to design for a system that is linked into, takes advantage of, and provides support for existing structures already a part of the Quester’s everyday life in the community, thus promoting broader literacy and authentic praxis (Freire, 1970). We believe that Quest Atlantis moves us toward this end, serving as a technological innovation that transacts with the broader culture in useful and productive ways. More generally, the design and development of Quest Atlantis has integrated strategies used in the commercial gaming environment as well as lessons from the educational research on learning and motivation to develop a context for participation that is both engaging and educational.

Additionally, we have suggested that doing successful culture work through a design project has involved four interrelated braids, each one serving as a focal point through which our design trajectories progressed. Collectively, these braids illustrate our particular trajectories and can be thought of as a “mutable platform” from which others may begin their own work.

As alluded to above, the notion of culture is complex, messy, knotty, ephemeral, and multi-voiced. Culture work, the notion of working to transform cultures to bring out the beauty of people, then is also highly complex, idiosyncratic, and requires engaging multiple perspectives. Culture work involves working on murky and difficult issues such as identity development, ethical dilemmas, race appreciation, unequal power structures, etc. We believe that multiple perspectives are necessary for looking at these complex, sophisticated, multi-tiered problems in a manner that is likewise complex, sophisticated, and multi-tiered. A deep appreciation for multiple perspectives in design for culture work must underpin any appreciation for the complexity of culture itself. These multiple perspectives not only strengthen the intervention but work to empower both the people involved in developing it and the people who eventually make use of it. In short, multiple perspectives allow culture work to give voice to those who do not have one and empower the disempowered. Multiple perspectives lend strength to both culture work and the design work that supports it. Developing designs that are rich with multiplicity of perspective allow us to not only do more effective and more beautiful culture work but help us create better designs and more appropriate products.
We have suggested that doing successful culture work through a design project has involved four interrelated braids, each one serving as a focal point through which our design trajectories progressed. Collectively, these braids illustrate our particular trajectories and can be thought of as a “mutable platform” from which others may begin their own work. However, we are just beginning to understand the challenges involved in doing culture work through design. Over the next couple of years, we will continue to analyze the impact of our work on individual children, their families, and the broader communities. This will include more design-based research, intense ethnographic examination of particular sites, and cross-site comparisons to understand what is unique and what remains invariant across multiple sites. It is our hope that doing culture work through design more generally will become a common practice for the field of the learning sciences. We are committed to evolving Quest Atlantis as one instance of this type of work in hopes that we can truly and usefully impact the lives of the children and communities we serve.
References


ethnographies of schooling and local practices (pp. 1-54). New York: State University of New York Press.


