Ethnographic Fieldwork in the Study of Game Production

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ABSTRACT

The purpose of this essay is to show the ways in which ethnographic methodology provided a useful means for investigating the work and activity of an emergent game production team and system. With neither expertise in game design nor software programming, the researcher gained access to the unit of analysis, the production of educational computer games, as a research and instructional design apprentice. The essay shares an experience of sociological inquiry in the context of a highly complex and private game production process.

Keywords

Game design and development, ethnography, research methods, systems theory

INTRODUCTION

This essay presents the theoretical foundation and methodology used in a two-year study of the process for producing a collection of educational mini games.

The goal of the study was to examine the influence of culture on the organization's production process. The purposes of the study were to (a) generate a holistic understanding of culture shared among team members, who were employed in the making of digital, education-based games, (b) explore relationships between shared culture, the production process, and games that were produced, and (c) use these data to guide the development of theory about enterprises, or systems, of innovation, specifically those that produce digital learning games.

The game production process was investigated as part of my dissertation research in fulfillment of the requirements for obtaining a doctoral degree in the field of learning design and development. The methods for conducting an investigation within the contexts of both the private media industry and a public university were both inadvertently and strategically shaped by theoretical foundations of systems theory, legal restriction, technological mediation, geography, financial requirements, and the need to understand the process from both a subjective and objective point of view.

THEORETICAL FOUNDATION

In this investigation, the game production process was perceived through the lens of systems theory (Law, 1999). Each component of the process and its relationship to other aspects of the process was interpreted as part of a closed system. Callon (1999) characterizes technological production "as a succession of steps from the birth of an idea

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(invention) to its commercialization (innovation) by way of its development" (p. 84). When applied to the game production process, the human component was impossible to ignore.

Preliminary observations should that every step was initiated or ended by the activities and decisions of the production team and its stakeholders. Callon (1999) explains that in the case of "radical" innovations, "right from the start, technical, scientific, social, economic, or political considerations have been inextricably bound up in an organic whole. Such heterogeneity and complexity, which everyone agrees is present at the end of the process, are not progressively introduced along the way. They are present from the beginning" (p. 317).

Early on in the investigation, this appeared to be true for the organization under study. The impact of technical, scientific, social, economic, and political influences became more significant and overt over time. Both in theory and in reality, technology produced by a human workforce has been directly and indirectly molded by technical, scientific, social, economic, and political influences. To identify the impact of these cultural components on game design and development, an emphasis on the human component was needed. The application of ethnography as a research method supported the study of game design and development as a system of technological production, in which people were a vital component.

As a complex system of interactive components, the sub-culture that emerged among team members in the game production system closely resembled Fischer's (2007) definition of culture as an experimental system in which humans have naturally and systematically engaged in scientific processes, including inquiry, interpretation, strategic intervention, assessment, critical reflection, and modification of behavior or situation, based on overt and covert responses to external forces and conditions. Here, he explains:

Culture is (1) that relational (ca. 1848), (2) complex whole . . . (1870s), (3) whose parts cannot be changed without affecting other parts (ca. 1914), (4) mediated through powerful and power-laden symbolic forms (1930s), (5) whose multiplicities and performatively negotiated character (1960s), (6) is transformed by alternative positions, organizational forms, and leveraging of symbolic systems (1980s), (7) as well as by emergent new technosciences, media, and biotechnical relations (ca. 2005). (Fischer, 2007, p. 1)

The benefit of approaching the game production process as a system was that it brought to light several forces that constrained and enabled both the production process and the practice of ethnographic fieldwork. Legal restriction, technological mediation, geographic boundaries, financial need, team diversity, and attitudes experienced by the team also overlapped into my work as a researcher.

METHODOLOGY

The qualitative approach of ethnography guided the collection of perspectives, activities, and interaction observed in the organization's evolving infrastructure of production. During the first year of research, I explored the field of study with the goal of understanding patterns of perspective, activities, and interaction in various workspaces. The influence of culture on the process for producing serious videogames was the central focus. Because ethnographic methodology aims to generate holistic knowledge of the

operation of cultures in production, relationships of influence could be more easily identified.

Research questions

The main research question guiding the study was, in what ways does culture influence the work of educational game production? As a result of continued observation during the first year, a sub-set of research questions emerged, which strategically targeted the causal influences of "culture" in the production of digital games.

- (1) How do design team members define their individual roles, responsibilities, activities, experiences and contributions?
- (2) In what ways have these realities (roles, responsibilities, activities, experiences and contributions) influenced the production of serious videogames?
- (3) What types of affordances have surfaced as a result of team collaboration and interaction within the context of the team's participation in serious videogame design practices?
- (4) How does the team mediate differences in personal worldview and perspective as they arise through various activities, such as the resolution of design problems?

Data sources

The following categories of activity were analyzed:

- Content analysis: selecting relevant multimedia from the game development group's online blog or writing an analytic memo about a field experience
- Spatial mapping: drawing images of sites or meeting arrangements, using OmniGraffle software or a pencil and paper
- Multimedia review: searching for previous empirical records or observing online activity outside of the production context
- Observation: audio recording a meeting or watching the team interact with a purposeful blend of focus and openness
- Elicitation: informal conversation via email or formal interviewing
- Participation: work and relationship building as a team member

Table 1 lists each form of data that was collected through these activities and identifies the research questions that each form of data addressed most directly. Core data sources included interview transcripts, internal documentation, meeting records, and observation records.

Data sources	Research questions			
22 interviews	1	2	3	4
Internal documentation				

300+ email conversations	1	2	3	4
Digital prototypes		2	3	
Images		2	3	
Video recordings		2	3	
PowerPoint presentations (3)		2	3	
Meeting records				
Video recordings (3)	1	2	3	
Audio recording (1)	1	2	3	4
Agenda documents (4)		2	3	
PowerPoint presentations (3)		2	3	
Observation records				
Field notes	1	2	3	4
Research memos	1	2	3	4
Photographs		2	3	
Audio recordings	1			4
Sketches	1	2		

Table 1: Alignment between data sources and research questions

Production team and workspaces

In the context of the production system, the informants were professionals who participated in game production for the organization under study. Relevant field spaces included those in which production-related work took place. Site A, located on the western U.S. coast, was the organization's corporate headquarters. It was also the collaborative work and meeting space for the game development group, which included the executive producer, internal game development lead, 3 artist-designers, 1 network engineer, 5 engineer-designers, and the education director.

Site B, located on the eastern U.S. coast, was the collaborative work and meeting space for the majority of the education group members. The education group included the education director, strategy consultant, the SME project manager, 13 curriculum SMEs, 2 game SMEs, 2 research apprentices, and 1 instructional design apprentice. The education director was "internal" to, or a full time permanent employee of, the company. This informant was physically located at the corporate headquarters, Site A.

Site C, located in the south-central region of the U.S., was the collaborative work and meeting space for the system engineers. These team members included 1 strategy consultant, 1 system architect, 5 engineers, 1 project manager, and 1 instructional designer.

The strategy consultant, 21st Century Skills SME, and Music SME 2 were located remotely in relationship to Sites A, B, and C. Like all team members, remote team members participated through travel, email, telephone, or videoconference.

THE MANGLE OF ETHNOGRAPHIC FIELD WORK

Breglia (2009) has explained that the conventional and functional goal of ethnographic fieldwork (Malinowski, 1961) is to attempt to understand the "native" point of view through extensive participant observation, engagement in language and practice, extensive formal and informal interviews, creation of data, development and translation of a holistic sense of lifestyle, and a representation of this holistic sense as a model for comparison (p. 131). Aligned with a traditional ethnographic approach, field observations from the production team's work space and the formal and informal reflections of informants formed the basis of analysis during the first year of study (Geertz, 1973). Perspectives of the production team, "including beliefs and values that underlie and organize their activities and utterances," emerged from a diverse collection of data, and they were comparatively analyzed for patterns of similarity and difference among all informants (Ochs & Schieffelin, 2001).

One key observation was that groups of informants who participated in the game production process were accustomed to working within specific kinds of professional cultures. The game production system appeared to present varying extremes of familiarity within the professionally diverse group of informants. With the methodological obligation "to ask how changes in one part of a social system affect other parts" (Fischer, 2007, p. 18), the core research question was expanded so that it directly addressed the ways in which the diversity of professional culture influenced the process of production.

Since the aim of ethnographic method within the context of this production system was to generate a holistic cultural portrait (Creswell, 2007), the challenge of this approach was reconciling the requirement of delivering a holistic interpretation of culture with the researcher's sense of social responsibility to learn and report practical information as a way of helping to improve the work of other production teams that build serious videogames. Though the granular details of an ethnographic portrait may not be of great importance to a design practitioner, data from this study have been analyzed, categorized, and coded based on their relevance to the research questions, which targeted the influence of culture on the production process.

In Breglia's (2009) description of anthropological research, the researcher characterized ethnographic fieldwork as an "invisible" activity when compared to what has historically been considered "more rigorous" scientific inquiry, such as archaeological studies or investigations of medical treatment. In the field activity of participant observation, for example, the traditional ethnographic researcher watches, listens, and often downplays the intrusive role as researcher in the effort to build relationships of trust with group members with the aim of learning more truthful knowledge about the group's culture.

In meetings with the education group at Site A, fieldwork practices, such as note taking or asking for clarification of meaning, were easy to hide during sessions of traditional participant observation, since part of my role as an apprentice involved keeping detailed notes about meeting activities and discussions. While I was fully aware of my strategic observation methods, it was not always obvious to teammates that I was actually working, given the typical "concealment and agreed misrecognition of ethnographic labor" (Breglia, 2009, p. 133). At times, I became so involved in my work as a participant

that, after reflecting upon these experiences, it was as though my role as an observer subconsciously faded into the background, rather than being deliberately concealed or ignored. Team meetings, for example, were a common form of organized, interactive work within the organization, and within these frames of communication, performance, time, and space, my work as an apprentice involved activities, including but not limited to recording meeting notes and assisting SMEs and the SME project manager in the completion of their tasks. My work as an apprentice at Site A seemed to fit naturally with my work as a researcher.

Alternatively, fieldwork conducted at the headquarters, Site A, required a semi-structured approach, complimented with the standard off-campus, remote, and informal interaction among informants. Table 2 presents a situation in which I made the decision to *forego* concealing and downplaying my role as a researcher.

Description of the new office space for the organization headquarters

The instructional designer and I signed in at the front desk of the company at 8:30am. The instructional designer called the main office, and a few minutes later, Game Artist 1 appeared, inviting us to join her in the elevator. Upon arriving on the private, security enabled floor, Game Artist 1 showed us the location of the restroom and other areas of the floor that would require the swipe of a security badge.

As we passed through the colorful hallways, a large cubicle space appeared and we proceeded to the far left corner of the room, away from the entrance. We were greeted by the education director, who led us roughly 20 steps from her private office space, past the executive producer's private office space, and down a short corridor to the main game development office. The Game Development Lead and Executive Producer appeared independently walking back and forth between the game development office and other areas of the floor.

Game Engineer 1 had been working in the office since 6:30am, two of the artists had arrived at around 8am, and the remaining artists, and engineers trickled into the small office space at around 8:45am. Upon arriving late to the daily 9am scrum meeting, one engineer dropped to the floor and began doing push-ups, which was penalty that the team agreed to enforce upon themselves in cases of late arrival.

Team members were stationed next to each other in a semi-square arrangement, facing the walls. The instructional designer placed her bags next to the meeting table at the center of the room, and I did the same, trying my best to blend in with the scenery and team. This proved difficult, given that I was relatively unfamiliar to the development team, and I was seated in the center of the room.

Critical reflection: Reinforced by the security features of the building itself, I felt a heightened awareness of the need for confidentiality and privileged access. With a surface level understanding of the environment and a preconceived respect for the possibility that members of the game development group may share the same nervous awareness of the need for confidentiality, I

decided to be completely forthcoming about my role as a researcher in my greetings, interactions, observations, interviews, note-taking, and audio recording. The transparency that came through in my manner of openness in talking about my research seemed to be valued among team members. If I had been secretive in this context, it is likely that it would have seemed weird to them, it would have been an awkward way for me to act, and I would not have been able to record and elicit as much information from them as I did.

They needed to know why I was there, and why I was asking the questions I was asking, which became clearer once they read and signed their statements of informed consent. In general, the team seemed enthusiastic about their work and happy and willing to talk about it. I felt fortunate.

Table 2: Memo about the arrival to Site A

By having a positive and confident attitude about conveying to informants my role as a researcher in meetings throughout the workday, I was able to establish a comfortable and non-threatening report with them, prior to conducting the individual interviews.

The comfort level established within a day of work appeared to be effective, since the interviewees from the game development group were very forthcoming in sharing their perspectives about their work. Site A was best navigated with a strategy that accounted for its corporate privacy, which meant that the focus of ethnographic fieldwork needed to be more about building open and honest relationships with team members, regarding my role as a researcher, rather than being about the effort to conceal my identity as a researcher or limit research activities for the sake of concealment.

The non-traditional approach to ethnographic fieldwork also helped in dealing with the initial concern that my involvement and participation as an apprentice would tamper with the production system in ways that would degrade the scientific integrity of the data. Early on in the investigation, the objective practice of science as a researcher (observing conflict and cooperation) and subjective performance of duties on the team (resolving conflict and promoting cooperation) had not yet appeared symbiotic. Instead, for the sake of limiting my influence on the process under investigation, I thought I would have to continually make decisions to limit the depth of my participation as an apprentice in the process. Table 3 presents the reflective analysis of a moment in which the scientific nature of my awareness as an ethnographic researcher appeared to improve the integrity of the production process.

Critical reflection about "awareness" in fieldwork and team participation

One of my first assignments was to digitize the hand drawn curriculum map, using Microsoft Visio. During this process of data entry, curriculum inconsistencies across domains became quickly visible. The Science SME, for example, radically expanded the number of concepts included in the Science Map beyond what was described in the defined scope, while the Music SME strictly limited the size of the Music Map so that it fit the precise description of the defined scope. The inconsistent approaches applied in the development of the Science and Music Maps was a problematic issue that had two cooperating effects.

First, the issue created a situation of conflict in which the appearance of consistency across the curriculum was threatened. Over the course of 15-18 months, problems like these were addressed through negotiation among SMEs, the SME Project Manager, the Education Director, an Instructional Designer, and me, the ID apprentice, in the form of iterative Map revisions, verbal dialogue, and email conversations.

Second, inconsistencies within the Science and Music maps created a situation of conflict that contributed to a more thorough regimen of analysis and enrichment across all curriculum domains, which further validated the integrity of the Map and satisfied stakeholders. In this example, the team's identification of conflict, response of collaborative negotiation, and resulting adaptation and improvement emphasize the importance of team members' objective (emic) and subjective (etic) awareness of the dynamic infrastructure in which they work. An awareness that was both emic and etic improved development of the curriculum by leading the team toward recognizing a potentially threatening circumstance and taking proactive steps to preemptively eliminate this threat.

Potential hypothesis: Objective, or emic, awareness of problematic issues and subjective, or etic, awareness of my role in working with others to resolve problematic issues enhances the resilience of the production system in situations of conflict.

Table 3: Memo about the discovery of emic-etic awareness

My concern about the extent to which I, as a scientist, should have influenced the production process by helping to resolve conflict through negotiation waned in the wake of this discovery: objective, or emic, awareness of problematic issues and subjective, or etic, awareness of my role in working with others to resolve problematic issues appeared to enhance the resilience of the production system in situations of conflict. In fact, in addition to leadership and funding, one of the most critical forces supporting the production of serious videogames was team members' emic-etic awareness of their work. Discovered as a feature of functional support in the creative collaborative production of serious videogames, the emic-etic awareness that was readily applied my fieldwork came to the foreground as an emergent behavior and evolving skill amongst team members.

Exemplified in the analysis of memos presented in Tables 6 and 7, organizing the study of culture in ways that functionally enhanced and enriched ethnographic fieldwork required ongoing, critical reflection about how the object of study might affect the fieldwork approach and vice versa. Referred to as methodological relativism (Fischer, 2007), ethnographic fieldwork needed to be methodologically sensitive to the uniqueness of the system. As a first step in developing a semi-structured strategy for guiding the mangled practice of fieldwork, the business entity, production team, and networked organization as a whole was interpreted as a system (Fischer, 2007; Hughes, 1983; Law, 1999) in which the internal practice of doing fieldwork was as relevant to the operation of the system as the production team members and work spaces.

As a researcher and fellow team member, I became an integrated part of the production system, "one of us," said the Art SME. Through both strategic and exploratory decision-making, my performance of fieldwork and apprenticeship was guided daily by the

underlying emic-etic awareness of the operation and influence of "culture" in the work of serious videogame production.

THE DISCOVERY OF GROUNDED THEORY

Guided by grounded theory methods, the selection process for ensuring the data was *relevant* to the research questions directly addressed the challenge of generating both a holistic portrait and a practical theory about the production of serious videogames (Glaser & Strauss, 1999). During the second year of fieldwork, relationships of influence among participant perspectives, realities, affordances, strategy, technique, management, and production were systematically tracked across a massive amount of ethnographic data. The aim was to generate grounded hypotheses and theories about culture in production.

As I selected, collected, organized, compared, and analyzed data sources, the depth and ethnographic nature of my participation in the field during the first year complimented the second year goal of developing a set of hypotheses and theories that were deeply grounded in the practice and culture of building serious videogames. Forces that both reinforced and destabilized the production system were interpreted as equally informative sources of evidence that contributed to the process of recognizing emergent patterns of activity within the production system. The relevance of evidence was based on the goal of understanding what was both holding together and challenging the solidarity and sustainability of the production system. Creswell (2007) explains that if a group shares a culture, then their language, patterns of behavior and attitudes tend to form a discernible pattern, most directly visible to the researcher through constant observation and interaction with the group under study.

In addition to characterizing culturally situated features of serious videogame production, a major goal of this study was to provide designers with a useful tool for building serious videogames. Even when carried out with alternative strategies for defining one's role as a researcher or making fieldwork more visible, ethnography was philosophically oriented toward the development of a holistic and relative understanding of culture, rather than generalization of concepts and synthesis of theory. Given the need for a methodology that emphasized holistic understanding and one that supported practical theory production, the ethnographic data collected for the study was analyzed, coded, and synthesized with the use of grounded theory strategies.

Interviews, internal documentation, meeting records, and observation records, such as field notes or the comprehensive report of SME feedback on games in progress, were read in search of emergent indicators of influence on the production process, outcomes of the production process, relationships between influences and outcomes, or other patterns of activity. The excerpt in Table 9 presents a collection of facts, or indicators, about SMEs emotional response to the presentation of the Pilot Prototype. Based on this field experience, I developed an emic-etic awareness of the appearance of *enthusiasm* in my first meeting with the Education group.

Observed as a fact, the emotional response of enthusiasm and other emotions were tracked in the data. Eventually, the category of "influence of enthusiasm" was derived from a collection of similar facts as all evidence was continually searched for additional indicators of enthusiasm (Glaser & Strauss, 1999, p. 23). In Table 4, examples are presented of specific facts that were coded in the analysis as indicators of the greater concept of enthusiasm (Glaser & Strauss, 1999, p. 23).

The current of applause and joyful commentary among SMEs was an overt emotional indication of the Education group's collective sense of satisfaction, and admiration. With the powerful compliment of highly developed prototype imagery, the strategy consultant and Education Director clarified the project scope and reemphasized the team's mission through live, face-to-face dialogue and an impressive presentation of achievement. Confirmed in follow-up conversations with the SME project manager and in interviews with meeting participants, the combination of audiovisual presentation of scope and mission, face-to-face dialogue, and the positive nature of the news reported appeared to foster the collective sense of enthusiasm and understanding among members of the Education group.

Table 4: Excerpt from memo about the experience of entering the field

The consistent appearance of the emotional dichotomy of enthusiasm and disappointment confirmed the relevance of this category in the production system. Codes (ENTH-INFLUENCE = influence of enthusiasm on the production system) and related properties (ENTH-MAINTAIN = evidence of leadership strategies for maintaining enthusiasm) were assigned to the categories and marked in the data as they helped to further identify, define, and characterize individual categories. Over time, "breakdown of enthusiasm" also became a property of this category. Selections of data presented in Table 5 further reinforced the influence of specific events and activities that caused an emotional response among team members about their work.

Source	Indicators of emotional response to work
Field notes	SME enthusiasm when viewing the Pilot Prototype skyrockets every time we watch the [Rio] video
	After "the death of [Rio]," SME disappointment is expressed when discussing the Pilot Project. Mathematics SME 1, Language Arts SME 1, and SME Project Manager are consistently the most vocal about it.
	Informal conversations with SMEs and project managers confirmed the enthusiasm for the Pilot Project and disappointment, re: its disappearance
	SMEs are not enthusiastic about the game reviews they are completing for PlayWorld, since the production quality does not meet expectations, based on [Rio]
	Social Studies SME 2 is disappointed in the progress made in the development of good PlayWorld games, especially now that the informant has seen the [Rio] video; suggestions made to help improve quality of game
	SMEs seem unsure about the aims of the game design team,

since their suggestions for changes not always applied during

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	SMEs enjoy playing the PlayWorld prototypes together as a group
	Social Studies SMEs sent emails expressing excitement about the appearance of a couple of Social Studies oriented PlayWorld games during the last Sprint
Individual interviews	SMEs confirmed enthusiasm for the Pilot Project and disappointment, re: its disappearance

revision stages

Table 5: Selections from data sources that indicated personal investment in work

Eventually, all categories related to ENTH contributed to the emergent core theme of management and the sub-theme of soft skills. Drawn from an analysis of categories and fact patterns, these hypotheses were determined:

- 1. Except in situations of corporate decision-making from outside of the organization, team members who appeared to have high levels of enthusiasm in meetings and email correspondence were able to sustain long-term positions on the team; were more likely to have personal connections to their work, work place(s), and co-workers; and were inspired.
- 2. Maintenance of enthusiasm helped to sustain the integrity of production because it stabilized a consistent workflow and collective effort among team members who appeared enthusiastic.

Factors affecting the maintenance of enthusiasm included and were not limited to work environment, relationships among team members, team members' sense of purpose, and team members' sense of trust among other team members.

In the process of discovering patterns across the data, evidence of alignment and misalignment between the serious videogame production process and Fischer's (2007) explanation of culture were explored. As the culture of serious videogame production, over time, became consistently recorded in field notes and memos as a "system" or "infrastructure," Fischer's (2007) historically grounded characterization of culture as a "relational, complex whole whose parts cannot be changed without affecting other parts," became increasingly relevant in structurally organizing the empirically grounded knowledge about the organization's culture (p. 1). Fischer (2007) defines culture in the following way:

Culture is (1) that relational (ca. 1848), (2) complex whole . . . (1870s), (3) whose parts cannot be changed without affecting other parts (ca. 1914), (4) mediated through powerful and power-laden symbolic forms (1930s), (5) whose multiplicities and performatively negotiated character (1960s), (6) is transformed by alternative positions, organizational forms, and leveraging of symbolic systems (1980s), (7) as well as by emergent new technosciences, media, and biotechnical relations (ca. 2005). (p. 1)

In consideration of the emergent consistencies between each aspect of this definition and the patterns of activity observed and analyzed during the process of constant comparative data analysis, data analysis and theory generation was further refined in consideration of Fischer's (2007) explanation of culture.

Fischer's (2007) interpretation of culture as an experimental system helped me to miore fully envision the way in which the organization's culture might compare to other types of systems, including instructional systems (Branch, 2009; Dick, Carey, & Carey, 2005), game systems (Salen & Zimmerman, 2004), actor networks (Callon, 1999), and technological systems (Hughes, 1983; Law, 1999). Rather than focusing primarily on the *influences* of diversity of professional culture among differing groups or the *influences* of the shared emergent culture on the production process, the concept of culture as "a relational whole" fit the conception of production as a system, or infrastructure, which performed and produced its own culture. Team members' performance of shared culture was also their performance of the shared production process within the shared production system.

Through constant comparative analysis of field notes, interview transcripts, game design documents, team email correspondence, and other relevant documentation, patterns of activity were noted, memos elaborating ideas and observations of activity were composed, and all data was coded for its relevance to the research questions (influence of culture on production), along with the degree to which it helped to explain the holistic, systemic shared culture (influence of production on culture).

CONCLUSION

In this study, ethnographic and grounded theory practices provided a useful means for investigating and interpreting a highly complex production network, situated within an organization of innovation and creativity. The analysis of findings from this study showed that the serious videogame production system was naturally and organically entrenched in a culture that reinforced its functional solidarity and strength in performance.

With the passage of two years in total, the influx of collaborative planning meetings, a significant increase in open dialogue, and the more frequent assignment of shared tasks, team interaction increased tremendously, revealing more overtly the subtle variability and overt consistency in professional affiliation, expertise, beliefs, perspectives, skills, and competencies among team members of differing professions. What grew over time and through interaction was the team's collective identity as a culture-sharing group.

Found in evidence of playfulness among informants, the production team appeared to enjoy working together. Team members celebrated holiday festivities together. They cheered for each other on race days. They helped, taught and learned from each other. They mailed a box full of gifts across the country for the newborn child of a colleague they had never met in person. They planned social events together, some of which occurred in the workplace during non-business hours. They tailgated, gone bowling, and brought flowers in times of need. They were ecstatic when a formerly technophobic SME walked into a meeting with a brand new iPad. They saran wrapped the Education Director's office; "Happy Birthday! Love, The Kids." Analyzed with grounded theory methods, data consistently showed that team members performed and participated in the cultures of their native professions and in the social trends and culture they were developing within the shared production system.

The social construction of methods for this inquiry were further subverted and enhanced by my own lack of expertise in formal academic inquiry. The greatest challenge and perhaps the greatest achievement in the making of this academic artifact was that I grew to care for, respect, support, and be continually inspired by my teammates as idols, mentors, colleagues, and friends. In the form of a socially constructed dissertation, the story and study of the organization was composed at the hands of an apprentice, guided by interest, inspiration, will, intuition, and belief and enabled by an ability to learn and adapt to the constraints of accepted qualitative methods of inquiry for the sake of generating relevant, potentially helpful, comprehensible, and empirically valid knowledge of a system of constant growth and change.

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