VIRTUALLY SPEAKING: HOW DIGITAL STORYTELLING CAN FACILITATE ORGANIZATIONAL LEARNING

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Abstract: Digital storytelling can be used as a tool in participatory action research. An organization developed to enhance teaching and learning in high schools used this method as a way to collect narratives from the rural community it served. The staff and students who participated in digital storytelling became researchers focused on the personal narrative. Digital storytelling was used to give voice to community members and also to explain policy initiatives that directly affected the community. Digital storytelling was a way for the organization to engage its members in a way that would benefit all stakeholders.

Keywords: Digital storytelling; organizational learning; participatory action research; social engagement; multimedia technologies

1. Introduction
Members of an organization need to understand their organization. Each organization has a language, standard operating procedures, rites, rituals, and normative practices. These are formal and informal, canonical and non-canonical, explicit and implicit. Organizations spend a great deal of time searching and recruiting individuals with certain traits, experiences, and expertise. Then, organizations invest heavily in the development of the new members in the ways of the organization. The purpose here is to assimilate and to retain its membership. While the conceptual and empirical research and pop cultural literature has elucidated the philosophical why and procedural how of integrating and inaugurating members into an organization, little has been said about the important roles of the individual in the evolution of the organization itself. In short, individual development and organizational efficiency and effectiveness are not mutually

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exclusive. Missing are tools that help strike the delicate balance between the socialization of members into the organizational code and the individual members’ beliefs (March, 1999a).

The purpose of this article is to report on a tool that is a vehicle for interactive or double-loop organizational learning (Argyris & Schon, 1996). We begin with an overview of the power of member voice as a necessary ingredient for organizational learning. Next, we explore how participatory action research can promote democratic inquiry and organizational effectiveness through member narrative. More specifically, we reveal Digital Storytelling as one such approach to promote organizational learning. Finally, we offer an example of Digital Storytelling in use and the implications for organizational learning.

2. Organizational Learning, Why? How?

Early organizational work sought the “one best way” to improve productivity (March & Simon, 1958; Taylor, 1911). The rational view characterized humans as inert objects and focused on the influence of such variables as cost, capacity, speed, and durability (March, 1978; March & Simon, 1958; Simon, 1957). A rational system is considered a self-correcting, interdependent organization that has the ability to build consensus between goals and means and then coordinate the dissemination of information and predict problems (Weick, 1979). However, March and Simon (1958) warned that such rationality oversimplified “models that capture the main features of a problem without capturing all its complexities” (p. 169). Consequently, the shift from the cult of efficiency (cf., Callahan, 1964) to member input and transparency has not been easy.

Understanding and diagnosing organizations has proven difficult (see Harrison, 2005). Organizational learning theory has emerged as a bridge that connects an organization’s quest for efficiency and the individual members’ need for place and sensemaking (see Argyris, 1992; Cohen & Sproull, 1996; March, 1999c; Weick, 1995). Here the value of the individual is prized. In 1950 researcher George Homans discovered that efficiency was not only a product of activity, but also of sentiment (satisfaction and motivation) and interaction (relationships and communication) (Homans, 1950). The late 20th century press to be systemic and create knowledge-based, open systems (see Deming, 1986; Drucker, 1993; Nonaka & Takeuchi, 1995; Senge, 1994; Toffler, 1990) presupposed that organizational members were “in a position to shift from naively performing actions to reflectively engaging in argumentation” (Habermas, 1984: 195). Similarly, Argyris (1992:7) states, “One way to alter behavior is through direct behavior modification . . . Another way is to understand the meaning people create when they deal with each other”. Organizational learning theory offers promising leads to simultaneously adding organizational and individual value to efforts.

James March posits that organizational learning is a function of “knowledge equilibrium” (March, 1999a). Here equilibrium is achieved when the organizational code (what the organization want members to learn) does not outpace the members’ socialization (changes in members’ beliefs). That is, the organization and the individuals that comprise it must balance the need for exploration (discovery, novelty, innovation, variation, risk taking and experimentation) with exploitation (refinement, routinization,
production, implementation, efficiency, and reliability) (March, 1999a). Other models highlight this balance between discovery and enactment (Daft & Weick, 1984), advocacy and inquiry (Bolman & Deal, 2008), or inquiry and action (Militello, Rallis, & Goldring, 2009). However such “balance is a nice word, but a cruel concept” (March, 1999b: 5); That is, it “requires developing coupling loose enough to allow groups to develop their own knowledge, but tight enough to be able to push the knowledge along the lines of process” (Brown & Duguid, 2000: 115). Nonetheless, when a balance is struck, a window of opportunity or a zone of proximal development or enactment may be opened (c.f., Wink & Putney, 2002).

Brown and Duguid (1991) posit that narration or storytelling, collaboration, and social construction make up the triumvirate of work practices. However, most formal organizational learning occurs without these practices. Participatory action research and evaluation methods have emerged as a means to simultaneously react to organizational needs and to provide a place and space for members’ voice.

3. Digital Storytelling As Participatory Action Research

Evaluative and research processes have been used to understand organizational learning. Some have been information such as reflective practice and others more formal, such as program evaluations. Additionally there are qualitative, quantitative, and mixed method approaches used to evaluate and research organizational learning. In all cases, an explicit effort is made to hear participants in order to understand the questions being explored. New methods and tools have emerged as inquiry has sought to hear from and understand multiple members of an organization, including members that were previously silent. Patton (2001) states that such participatory action-based inquiry have “increased the access of nonresearchers to both research findings and processes. In combination, constructivist, dialogical, and participatory approaches offer a vision of research and evaluation that can support deliberative democracy in the postmodern knowledge age.” (p. 190). Others have described participatory action research as emancipatory, democratic, practical and collaborative, critical and transformational (Kemmis & McTaggart, 2005). This type of participation allows “Participants in the process [to] own the inquiry” (p. 185, italics in original). Participation in inquiry has included the construction of one’s narrative (see Beverley, 2005; Chase, 2005; Polkinghorne, 1988). Chase (2005:656) states: “Narrative is a way of understanding one’s own and others’ actions, of organizing events and objects into a meaningful whole, and of connecting and seeing the consequences of actions and events”. The advancements in technologies have allowed narrative inquiry to enter into the digital age; enter Digital Storytelling.

Digital Storytelling is a tool that can be considered participatory action research. Joe Lambert at the Center for Digital Storytelling in California popularized this methodology in the early 1990s. The Center is sub-titled: “Capturing Lives, Creating Communities” and continues to focus on their mission of: “Everyone has a story to tell” (Lambert, 2002). While Digital Storytelling incorporates the qualities of participatory research, it is able to do so in a digital format. That is, technology has provided opportunity (i.e., user-friendly tools) and access (i.e., ubiquitous platforms for
viewing). Lundby (2008:6) stated that “Digital media facilitate... the possibility of narrative co-production and participation”. Now with new advances in Web 2.0 technologies (e.g., social networking, wikis, blogs, avatars, Second Life, etc.) Digital Storytelling has become “mediatized.” This mediatization of narratives can be best defined as a “process through which core elements of a social or cultural activity (like work, leisure, play, etc.) assume media form” (Hjarvard, 2004: 48).

Digital Storytelling is driven by its creators; that is, it is a “user-generated media practice” (Lundby, 2008: 4). Perhaps recent technological advances have provided means to return to our storytelling roots. Lambert (2002) states, “In traditional cultures, the intermingling of personal stories, communal stories, myths, legends and folktales not only entertained us, but created a powerful empathetic bond between ourselves and our communities” (p. xviii). Here storytelling is the creating and the sharing where “narratives are seen as cultural tools we all relate to and use in our meaning-making and activities” (Erstad & Wertsch, 2008: 22). Lambert (2006) posits that digital storytelling has taken hold because “it speaks to an undeniable need to constantly explain our identities to each other” (p. 17).

Freidus and Hlubinka (2002) studied the use of Digital Storytelling in a work environment. The study revealed that the process allowed participants to articulate purpose by distilling meaning to a wider audience. This process created affinity among participants: “Through reflective practice, individuals and groups give their work conscious attention, thereby examining and improving their positions as leaders and learners in their communities” (Freidus & Hlubinka, 2002: 26). The researchers summarize that the use of Digital Storytelling allowed “individuals [to] learn to tell a story, and in doing so, become more effective actors in collaborative work environments” (p. 24). Other research in K-12 educational settings demonstrates that digital storytelling “has great potential as an innovative and progressive way of learning inside school . . . [giving] students the opportunity to make self-representations in the school setting and foster agency” (Erstad & Silseth, 2008: 229).

Digital Storytelling also gives rise to the aesthetics of voice (Friedlander, 2008; Nyboe & Drotner, 2008). Lundby (2008) states that the process “may actually give [participants] voice, or be significant in other ways” (p. 4). The development of stories multiplies authorship and gets “to the meaningful heart of people’s social experiences by asking them to participate in a process of construction and reflection, which fosters creativity and gets the brain working in a different way” (Gauntlett, 2008: 254). What this actually looks like in an organizational setting is explicated next.

4. Digital Storytelling In Action

In a recent conversation in preparation for this article, a group of south Texas residents sat around a table to reflect on the past 10 years of storytelling work. A nonprofit worker who as a high school student collected oral histories of his grandparents, their neighbors, and others, sat at the table. A student who leads a service learning initiative sat beside him. Next to the student sat a teacher, who as a teenager approximately 15 years previously, pioneered the work of the Llano Grande Center. And facilitating the conversation was the long-time teacher who founded the Llano Grande Center for
Research and Development, a rural south Texas organization that first collected stories to enhance teaching and learning in the local high school. So what did these storytellers have to say?

- The nonprofit worker said, “We tell stories, that’s what we do, but we had no idea the stories could influence people outside our social circle. That’s what digital storytelling has done.”

- “And it has also impacted the work of the Center,” said the high school student, “it’s actually one of the important reasons why the organization has kept the youth involved in the work.”

- The younger teacher responded, “I think digital storytelling took off with this organization because we were already an organization grounded in storytelling; that’s been a big part of our identity from the beginning... we tell stories.”

We could produce a digital story out of this dialogue. It would be set to music, include still photos, and guided by the voices of the nonprofit worker, the student, and the teacher. One may be the master narrator, or maybe all three and others perhaps, would constitute the mix of voices that give shape to the story. The story could be a reflection of the impact of digital storytelling on the organization, and it could be used by the organization to assess its work. In that case, it would be a specific digital story because it takes the standard form of voice-over, stills, and focuses on particulars of the organization. The other form, the generic digital story is a more broadly defined product and process that include online games, interactive DVDs, and the like (McWilliam, 2008).

During the past decade, a number of community-based organizations, particularly education related organizations, have opened themselves to change through the use of digital storytelling. Some of these changes have been challenging, but they have also been exciting, often infusing new energy into the daily work of the organization, as well as defining future work. As organizations struggle with what March (1999a) called the exploration/exploitation trade off of an organization’s work, some have viewed digital storytelling as a mode through which to capitalize on both the exploitation of an organization’s extant practices and the possibilities of exploring new visions of how to advance the work. Much of this, of course, is contextual within an organization, and more specifically about the social context of how an organization learns. This section explores how several organizations scattered across the country have dealt with the introduction of digital storytelling into their work; in each case, digital storytelling advanced the mission of the organization and revitalized the work and practice of its members.

### 4.1. The Llano Grande Center

In 1998 the Llano Grande Center¹, a nonprofit organization in rural south Texas founded by teachers at Edcouch-Elsa High School, participated in a Kellogg Foundation national initiative called Managing Information with Rural America (MIRA). During the first national gathering held in Battle Creek, Michigan, the

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¹ More information about the Llano Grande Center including sample digital stories and a link to the Center’s digital storytelling toolbox “Captura” can be found at www.llanogrande.org
Foundation invited Dana Atchley, one of the innovators of digital storytelling, to perform his show, “Next Exit,” in front of about several hundred rural community development practitioners. Ten representatives from the Llano Grande Center sat in the audience and saw Atchley tell his digital story.

- “Wouldn’t it be great if we knew how to use that technology to tell our stories,” said one south Texan.
- “Imagine what we could do with the couple hundred oral histories we already have…we could make the voices of our elders so much more powerful,” said another.

Bam! The proverbial light went on. Digital storytelling, as the Llano Grande members had just observed through Atchley’s masterful performance, could be a skill set that could ramp the oral history work that was being done at the organization to a whole other level.

Fortunately, the Foundation also hired the Center for Digital Storytelling (CDS), an operation based out of Berkeley, California, managed by Atchley’s pioneering colleagues Joe Lambert and Nina Mullen, as consultants to the different communities participating in the MIRA initiative. South Texas quickly signed up for what the CDS called a “storytelling boot camp.” Within a few months, Joe Lambert and Thenmozhi Soundararajan travelled to south Texas to facilitate the boot camp with a group of about a dozen students, teachers, and other community members. The Llano Grande Center would never be the same.

Though the Center would be transformed by digital storytelling, its identity was clearly rooted in the early years of its oral history project, where dozens of local elders were interviewed as part of the curriculum building and community based research work. The stories of the elders inspired the trajectory of the Center’s work in every way—from the college preparation work, to the community development initiatives, and even to the policy advocacy outreach (M. Guajardo, F. Guajardo, & Casaperalta, 2008).

Through the boot camp, participants learned the technical skills of how to organize a story through digital media—digital, meaning a way to represent information numerically for input, processing, transmission, and storage; the digital system, as opposed to the analog system, which represents data through a continuous range of values (Couch, 2007). Joe and Thenmozhi taught participants how to convert voices and still photos into digital audio and images, and they taught their students how to use computer-based digital video editing software. Each of the participant’s digital stories followed the formula of: (1) identifying a compelling or formative story, (2) writing a short narrative about that story, (3) recording a voiceover of the narrative through the appropriate use of enunciation, pace, rhythm, and volume, (4) selecting music for emotional/evocative effect, and (5) organizing digital images through use of the video editing software. They imported all relevant voice, photograph, and music data into a computer file and then brought it all together to create a digital story.

The process was so innovative and compelling that the Llano Grande Center staff and students began to think differently about themselves and about the work of the organization. The Center began its work in the early 1990s with a focus on preparing...
high school students to go to college, but the identity of the work was also defined by
the place, this rural south Texas community. The Center built a college preparation
program by training students how to become effective community-based researchers,
civically engaged, and leaders in their environment (M. Guajardo & F. Guajardo, 2004). Students emerged as researchers as they developed community asset
maps, organized public forums, and conducted oral histories with elders. The oral
history research was particularly special, because it was a clear and tangible process
through which students made connections with their family members and with the
narrative of the community as they interviewed the town's elders (F. Guajardo, 2007).

The oral histories, the civic engagement, and the entire college prep work were driven
by building the time-tested skills of conversation, interviewing, and paper pencil data
collection followed by computer data entry. The first oral histories were captured
through basic audio recordings and paper pencil notes; then the Center moved into
video taping the interviews on VHS cassettes—hours and hours of data were recorded
on the old VHS format. Regardless of the technology, the oral history work was
transformative, as students, teachers, and others were moved by the stories of the
elders. Young people began to emerge as storytellers. As they listened to the stories
and learned from the experience, they began to understand the structure of story, the
rhythm of its form, and the power of owning it—indeed, they learned the
transformative value of storytelling (Bruner, 1988; F. Guajardo, 2005).

The digital storytelling boot camp experience challenged Llano Grande staff and students to
re-think the organization's use of technologies and modes of data collection. The year
following the boot camp saw the Center undergo a deep organizational change, but only
because the members who worked at the Center committed to changing themselves,
specifically in re-imagining the modality of work. Staff members began to produce digital
stories about themselves, about their families, and about their community. Oral histories
began to be recorded through digital media. When one student produced a digital story
based on his oral history he conducted with his grandparents, "It changed how my family
members valued the long history of my family," he said, "The digital story was also a way
to bring the family closer, because we all started thinking about our own stories." Other digital
story production included footage from public seminars, and students even began to create
digital stories as part of their college admissions process. As this student's life was changed,
the work of the Llano Grande Center also changed.

While digital modes and forms of expression became ubiquitous at the Center, they did
not supplant the fundamental culture of the place. To the contrary, the Center
embraced digital storytelling in large part because it was a place where stories and the
narrative form were highly valued. Conversation and storytelling still reigned supreme,
as staff meetings continued to follow a distinct storytelling and dialogical rhythm, but it
became apparent that the work of the Center could be much more far-reaching because
of this new skill set. Beyond the impact on the organization, digital storytelling had
implications for curriculum in the schools, for assessment of student growth, just as it
evinced a range of possibilities for the Center's civic engagement work.

From the boot camp, Llano Grande members focused on the personal narrative, the
story that tugs at an audience's emotional heartstrings; producing the evocative
aesthetic is at the core of the work of the Center for Digital Storytelling. But from the moment the Llano Grande students and staff heard the introduction to digital storytelling, they understood that the practice could be utilized to impact broad audiences as well. “When Lambert showed samples during the intro,” recalled a staff member who went through the training, “Juan and I looked at each other, and we both knew that we could use this skill set for some serious outreach work.” Subsequently, the impact of digital storytelling on Llano Grande would be twofold: (1) on how individuals saw themselves, and thereby gained personal power, and (2) how the organization saw itself using digital storytelling for social engagement.

4.2 Digital Stories for Social Engagement
An example of the Llano Grande Center’s use of digital storytelling for social engagement occurred recently when the local school district found deep resistance from local taxpayers to vote for a proposition to pass a bond issue to build new schools. The community’s dramatic population growth warranted more schoolhouse space. Students, teachers, and others recognized the need to build new schools, and state law would even allow the community to recapture 90% of its cost in the construction of new instructional facilities, but many residents opposed such a proposition.

That’s when the students at the Llano Grande Center got involved. They told the superintendent of schools that locals opposed the idea because they simply were not well informed about the reimbursement law or the overall needs of the school. The superintendent deferred to the students, who then promptly produced a digital story that informed the community as the story was broadcast through public access cable television. The informational digital story, along with other face-to-face public forums proved effective in educating the community about building new schools in this particular community, and when the community voted yes to the proposition, the school district proceeded to build 21 million dollars worth of new schools (F. Guajardo, 2010).

The following year, a similar experience happened in a neighboring school district, where residents learned from the work of the Llano Grande Center and its digital story. In the other community, a series of digital stories were produced as part of a public engagement campaign, and the results were similarly positive. Today, that school district is building more than 112 million dollars worth of new schools. Other organizations across the country have also incorporated digital storytelling into their work. Through its work with the Kellogg Foundation the Llano Grande Center has established close working relationships with the Boys and Girls Club of Benton Harbor, Michigan, the Laguna Department of Education in New Mexico, and the Flathead Reservation in Montana. Each of those places has found digital storytelling as a method through which to reach out to young people and to the larger community (F. Guajardo, 2010).

5. Lessons Learned
Many lessons have been learned since the introduction of digital storytelling into the work of the Llano Grande Center. The organization’s identity has evolved because of
the use of this new technology, just as members have found themselves much more reflective about their own personal lives and identities. Both the organization and its members have changed contemporaneously in an apparent symbiotic relationship. One educator recently said, “There’s much deeper introspection, and I would say even imagination, that takes place within the organization, because of the use of this new media.” It is important to state that local elders have a great deal to do with this change. They have challenged the organization from the beginning, primarily as a result of their stories. As the elders told stories through the oral history process, they challenged numerous long-held assumptions, such as the veracity of the dominant narrative of the community, telling what Bell and others call counter-narratives (Bell, 1992; Delgado, 1995; F. Guajardo, 2007). When 97 year old Jose Isabel Gutierrez told students he was a “founder of Edcouch,” because he had dug the ditches to lay down the water pipes for the town of Edcouch (F. Guajardo, 2007), he challenged everyone to think about the concept of “founder” differently. “When he first said he was a founder of Edcouch, we all looked at each other,” said a student, “how can a laborer be a founder?” The production of Mr. Gutierrez’s digital story then generated more conversations within the organization about the concept of “founder,” and counter-narrative, and so much more. Everyone had to check his or her (or its) own precepts—personally and organizationally.

The local school district also learned that tapping resources such as the Llano Grande Center helped the school become more efficient as it pursued its goal of informing the community about a bond issue. Utilizing the organization’s digital storytelling capacity was the key in accomplishing the school district’s goal, but perhaps the greatest lesson is seeing the power of the digital storytellers, the young people, at work. When the school superintendent appealed to students for assistance on a public engagement campaign because of a skill set they possessed, the students assumed a position of potential power. Their subsequent work in producing a compelling digital story as part of a broader public engagement campaign was both meaningful and transformative—for themselves, for the organization, the school district, and the community at large. This was not meaningless, trivial work; rather, it was genuine youth participation, about accomplishing real tasks that led to potent outcomes. The stories have become a source of veritable power—to shape the identity of the members of the organization as well as the organization itself, to engage youth and others in community development initiatives, and to advocate for policy at a wide range of levels.

6. Conclusion

The comedian George Carlin remarked, “You learn something new every day. Actually, you learn something old every day. Just because you just learned it, doesn’t mean it’s new. Other people already knew it. Columbus is a good example” (Carlin, 1997: 135). As organizations race to increase productivity they often pass over possible solutions that exist within the capabilities of current members. Capturing the work of the organization and the stories of the individuals that make up the organization can be a healthy task.

We have offered digital storytelling as a way to assist organizations in striking the delicate and important balance between the need for members to learn an
organizational code and the socialization of members in the organization. Without balance, organizational learning will be myopic or rooted in superstition (March, 1981; March & Levinthal, 1999). However, when such a balance is found organizations can promote and welcome thoughtful, meaningful, and effective learning. For this to take place, multiple voices must be heard, not just those of the vocal majority or minority, but all voices. Additionally, when organizational learning is at its peak there is a marked shift from the traditions of a leadership hierarchy to a collective style of leadership (Benham, Militello, & Ruder, 2010). In such a model the organization and its members are mutually connected by the enterprise of the organization and they share in the successes and are mutually engaged in problem solving (Wenger, 1998).

Currently there exists a unique opportunity to marry new technologies and old storytelling rituals. Digital skills are now central to work and life, and multimedia technologies offer rich, diverse, and accessible avenues for self-expression. Digital storytelling may allow an organization to become self-correcting, anticipate problems, and seek innovative and sustainable solutions. However, digital storytelling as an end product does not help organizations learn. Rather, it is the process of engaging the organization and its members that is important. The process allows participants to be reflective, appreciative of others, and engaged in the goals of the organization. This is living what Argyris and Schon (1996) call Model II thinking and learning practices. Digital storytelling is one tool that provides an avenue for voices, virtually speaking.

References


