

CREATIVE QUALITATIVE INQUIRY: INNOVATIVE GRADUATE LEVEL PEDAGOGIES SHAPED BY EDUCATIONAL TECHNOLOGIES

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ABSTRACT

This article describes and analyzes the experiences of two tenured university professors at two different US universities located in the Midwest as they collaborate to design and carry-out innovative pedagogies related to teaching doctoral-level qualitative research methods courses. One of the primary elements of the innovations under examination is the form and function of educational technologies (ETs). ETs are understood to be tools for data collection, data analysis and data display, as well as conceptual conduits for understanding socially constructed knowledge. The authors also argue that ETs have epistemological histories (and futures) and innovative pedagogies for graduate education ought to include robust experimentation with multi-genre/multi-modal texts (Bakhtin, 1981; Bochner and Ellis, 2002; Janesick, 2010; Willis, 2008) that use ETs. Blogs that include audio and visual data representations, social media tools for communication and collaboration, as well iPad and iPhone technologies are all ripe for experimentation as they relate to creative qualitative inquiry (CQI) and the creation of new innovative pedagogies.

Keywords: Qualitative Inquiry, Innovative Pedagogies, Graduate Education, Multi-Modal Texts, Multi-Genre Texts.

INTRODUCTION

This article describes and analyzes the experiences of two tenured university professors at two different US universities located in the Midwest as they collaborate to design and carry-out innovative pedagogies related to teaching doctoral-level qualitative research methods courses. One of the primary elements of the innovations under examination is the form and function of educational technologies (ETs). ETs are understood to be tools for data collection, data analysis and data display, as well as conceptual conduits for understanding socially constructed knowledge. The authors argue that ETs have epistemological histories (and futures) and innovative pedagogies for graduate education ought to include robust experimentation with multi-genre/multi-modal texts (Bakhtin, 1981; Bochner and Ellis, 2002; Janesick, 2010; Willis, 2008) that use ETs.

Blogs that include audio and visual data representations, social media tools for communication and collaboration, such as Facebook and Twitter, eBlogger and SurveyMonkey as well iPad and iPhone technologies are all ripe for experimentation as they relate to creative

qualitative inquiry (CQI) and the creation of new innovative pedagogies.

As Jurgensen and Ray (2011) point out, we have always been 'cyborgs'; or people who live in tandem with technology, yet finding ways to harness the opportunities for more creative inquiry are in a state of continual experimentation. Faculty members in higher education have a unique opportunity to experiment with these technologies (Ormiston, 2011; Hewitt, A., S. Spencer, D. Mirliss, and Twal, R., 2009) and, in our case, to engage students in learning new ways to incorporate ETs into qualitative research designs, data collection, data analysis and data display. We must acknowledge, however, that the use of technology has sometimes been met with skepticism by some qualitative researchers, including us at times. In most cases, it has been a healthy skepticism in the qualitative research community. Software programs have evolved over time as tools to try to address time and task demands related to data collection and analysis, such as NVivo (http://www.qsrinternational.com/products_nvivo.aspx) or Ethnograph (<http://qualisresearch.com/>) or AtlasTI (<http://www.atlasti.com/>). Each have been publicized as

ways to improve upon the old 'cut 'n' paste' method of thematic data analysis. However, more importantly, they have also promised to quantify qualitative research or to make it more rigorous and scientific. Many found this last point was unappealing and argued that it ran counter to the qualitative research paradigm that is not interested in the quantification of data, and balked at the pedestrian understanding of rigor and a singular scientific method. Qualitative researchers, who work primarily with word data and different forms of visual data (such as still photos, videos, and material artifacts) are interested in creating narratives that place the experiences and voices of their participants at the center of an artfully crafted research report. This arrangement of the data has some epistemological understandings attached, namely that knowledge is socially constructed and malleable, not static and absolute. Qualitative researchers are not necessarily interested in how many times (quantifying) a word or phrase is used by a single participant or by many participants, but rather they are interested in the context within which words or phrases are used and the overall meaning the participant(s) give to the word or phrase. Qualitative researchers have, at times, been leery of technology when it has been used to mute or erase individual voices by lumping them together into a countable pattern which they believe strips the data of the contextualized meaning. However, this understanding of technology and its place in qualitative research is limited. With the advent, and continual evolution, of ETs, the authors as qualitative researchers have many more opportunities than limitations when considering their usefulness. The authors incorporate these understandings within the graduate qualitative research methods courses they teach and provide examples and opportunities for students to experiment with ETs as they encourage these novice researchers to embrace ETs as ways to advance research creativity. Here the researchers provide examples of ETs they have used in qualitative research and provide some ways that faculty who are qualitative researchers or teaching qualitative research may do the same. The inclusion of ETs is an example of creative qualitative inquiry that leads to building innovative pedagogies for graduate education (Cowan, 1998).

The uses of blogs for qualitative research

In qualitative research, blogs are versatile tools that can be used in a variety of ways (Glogoff, 2005). They represent a form of educational technology that helps to create a robust communication environment. Technological tools such as e-blogger (<http://www.blogger.com>) have made it easy for faculty to create blogs where students can post their thoughts and track their own learning and the learning of their peers. For example, please visit our Qualitative Research Conversations blog at (<http://qrconversations.blogspot.com/>). Blogs can be used as a place for faculty to post assignments for their students and to weave in a whole host of multi-genre materials to act as well-placed prompts for the students to respond to. This allows for graduate student learning environment that is both highly responsive to the overall course design (pre-set goals and objectives of the course) and the more immediate learning needs of the students as they encounter the course design. The faculty can populate the blog with timely information, advice, and materials etc., to help extend and sharpen the students' thinking and skill development. This graduate level pedagogy, which is highly responsive to evolving learning needs, requires continual self-assessment and simultaneously assessment of one's peers. This allows for a more visible tracking of the evolution of one's learning in the context of the other learners sharing the learning environment. ETs help to establish an engaged learning environment whereby peer scrutiny and an element of public accountability puts such assignments in the realm of authentic tasks or assessments. Authentic assessment (Wiggins, 1990) including versions that use multimedia via ETs (Herrington and Herrington, 1998), situate the faculty not exclusively as evaluators of student work but rather as co-navigators of a shared learning adventure. When employing innovative pedagogical strategies that include authentic assessment we partner with graduate students to jointly create new knowledge, as well as to provide formative assessment and summative evaluation of their work. ETs allow for a more dynamic and meaningful set of exchanges when designing and using authentic assessment principles.

The use of blogs for data gathering and analysis

Blogs are often used as digital diaries or personal diaries by research study participants and are often considered part of the public domain. Blogs by participants may be used as a tool for data gathering that highlights the various positionalities of participants. In using blogs as data, there is the potential to conduct a meta-analysis in order to examine not only the content of the blog but also the multi-vocal context within which the blog content is being constructed. This examination allows us to look at what the blog reveals about the participants' construction of 'self'. Questions such as what they choose to make public, the avatars they use in online blogging and to what extent their online persona blur with their offline lives are all points that make data complex and rich. Interrogating and locating the self in the context of this electronically-generated data offers qualitative researchers a rich (electronic) field ripe for investigation. Blogs offer several ways to both complicate the notion of self as well as explicate it. Students can also use blogs to compare notes about the process of qualitative research. They can discuss where they locate themselves and reflect on their own prior assumptions with regard to research contexts and participants. Additionally, Blogs provide the platform for the use of other ETs relevant for CQI as well. Participatory visual methods are a case in point.

The use of participatory visual methods

Perhaps one of the most important philosophical developments that have accompanied the advancement of certain ETs is the appearance of the prosumer (Jurgensen & Ray, 2011); consumers who also produce what they consume. ETs have modified the way data can be gathered in qualitative research. Qualitative research traditionally relies on two major methods of data collection: observations and interviews. With the advent of e-technologies, we can add a vast number of ways to gather qualitative data for research, including a whole array of visual and auditory data. Participatory visual methods (PVMs), such as photovoice (Wang and Burris, 1997), picturevoice (Lorenz and Kolb, 2009), photo novella (Wang and Burris, 1994), paintvoice (Yonas M, Jones N, Eng E, Vines A, Aronson RE, Griffith DM, White B, DuBose M., 2006)

and comicvoice (Baird, 2010), are relatively new qualitative research data collection methods. These PVMs each require a form of ET that situates the qualitative researcher and their participants in a dialogic relationship. Photovoice, for example, is a tool by which qualitative researchers can facilitate the data gathering process to reflect the voices of participants in an authentic way. Participants are usually given a camera and asked to record moments, spaces or pictures that are important to them within a given context. These PVMs can easily be used as pedagogic tools when teaching a graduate course in qualitative research methods. There are increasingly more examples of qualitative studies effectively using PVMs (Bochner and Ellis, 2002). Creative qualitative inquiry is advanced by ETs that help students experiment with arranging, rearranging, and deriving meaning from the various ways to represent data.

The pedagogic uses of social media, iPad/iPhone technologies and SurveyMonkey

Social media tools, such as Facebook and Twitter, can be used to teach reflection (Helvie-Mason, 2011a); hold virtual office hours where teaching/advising can be extended (Helvie-Mason, 2011b, Edwards J. & Helvie-Mason, 2010). encourage reflexivity among qualitative researchers (Alvesson and Skoldberg, 2009), as well as generate effective communication and collaboration strategies among graduate students learning about CQI and their faculty mentors. Free web-based, ten-item survey tools, such as SurveyMonkey (<http://www.surveymonkey.com>), can help with word data collection and analysis through open-ended questions and/or prompts to generate a transcript. Additionally, the creation and use of concept maps (Novak and Canas, 2006) using ETs can greatly enhance qualitative data analysis. And most recently, new experimentation is now underway for innovative pedagogies using the ETs embedded in iPhones and iPads (Beddall-Hill, N., Jabbar, and Al Shehri, 2011; Duke Global Health Institute, 2011a; 2011b; Beetham and Sharpe, 2007).

Virtual realities technologies and multiuser virtual environments

Virtual reality technologies (VRTs) and multiuser virtual

environments (MUVes) offer additional opportunities to experiment with constructions of identity, often at the heart of arranging qualitative data into a narrative presentation. These ETs offer the possibility of reinventing oneself (Turtle, 1995) and for experimenting with the multi-vocal nature of human experiences. For example, students may choose to create an avatar or an 'other' self online and experiment with the 'virtual' self and reality. The difficulty with this idea is that the virtual self and virtual reality are considered separate from the real self and the real world; a point rejected by scholars such as Wittel (2000;2001) who argued that virtual spaces are not separate and isolated, they are mediated communities while others examine VRTs and MUVes, such as Second Life (2L), for the potential they hold for helping develop and mediate creative tensions (Evans, Mulvihill & Brooks, 2008). These mediums can be creative platforms for multi-genre experimentation for CQL including new ways to display performance ethnographies (Denzin, 2003; McBride, 2008).

Multi-genre texts and Creative Qualitative Inquiry

The creation and use of multi-genre texts (Barthes, 1981) is the culminating example of how faculty can use different forms of innovative e-pedagogies that have implications for teaching qualitative research methods courses to graduate students. Multimodal ethnography (Dicks, Soyinka, and Coffey, 2006) will increasingly require qualitative researcher to create more sophisticated multimodal and multi-genre texts in order to more effectively capture and display qualitative data. (Dicks, et. al. 2006). Multimodal texts offer qualitative researchers a framework to seamlessly arrange visual, auditory, and aesthetic data/artifacts on a single palette that allow for the data to interact and create new levels of meaning. (Hurdley and Dicks, 2011; Hurdley, 2007; Iedema, 2003). And as the methodologies surrounding the use of ETs with multimodal ethnography (Dicks, et. al. 2006) continue to grow, so will our need to develop more sophisticated graduate level pedagogies to ready our students, as novice qualitative researchers, to make the best uses of educational technologies.

Conclusion

In conclusion, the authors hope that this overview of how

educational technologies are positively impacting the range of innovative pedagogies faculty can use for graduate level education will encourage more experimentation by both faculty and graduate students. As Davidson and di Gregorio remind us, we will have a continual need for an ongoing dialogue about the role educational technologies will play in shaping qualitative research methods, (Davidson and di Gregorio, 2011). As the authors continue the process of learning about the intersections between educational technologies and creative qualitative inquiry it is the authors hope that the fullest range of mediums may be used when creating, distributing and using new knowledge in order to bring greater benefit to all.

References

- [1]. Alvesson, M. & Skoldberg, K. (2009). *Reflexive Methodology: New Vistas for Qualitative Research*. Second Edition, Sage Publications, Ltd.
- [2]. Baird, J. (2010). Comicvoice: Community education through sequential art., conference paper, Pop Culture Association - American Culture Association, St. Louis, MO.
- [3]. Bakhtin, M. M. (1981). *The dialogic imagination: Four essays*. In M. Holquist (Ed.). Austin, Texas: University of Texas Press.
- [4]. Barthes, R. (1981). Theory of the text. In R. Young (Ed.), *Untying the text* (pp. 31-47). London: Routledge.
- [5]. Beddall-Hill, N., Jabbar, Abdul, & Al Shehri, Saleh (2011). Social Mobile Devices as Tools for Qualitative Research in Education: iPhones and iPads in Ethnography, Interviewing, and Design-Based Research, *Journal of the Research Center for Educational Technology (RCET)* Vol. 7, No. 1, Spring 2011.
- [6]. Beetham, H., & Sharpe, R. (2007). *Rethinking pedagogy for a digital age: Designing and delivering e-learning*. Abingdon, Oxon: Routledge.
- [7]. Bochner & Ellis, eds.,(2002). *Ethnographically Speaking: Autoethnography, Literature, and Aesthetics*: AltaMira Press.
- [8]. Cowan, J. (1998). *On Becoming an Innovative University Teacher: Reflection in Action*, Philadelphia, PA: SRHE and Open U. Press.

- [9]. Davidson, J. & di Gregorio, S. (2011). Qualitative research and technology: in the midst of a revolution, In Denzin and Lincoln, ed.s, *The SAGE handbook for qualitative research*. SagePublications, Inc.
- [10]. Denzin, N. K. (2003). *Performance Ethnography*. London. Sage Publications, Ltd.
- [11]. Dicks, B., Soyinka, B., & Coffey, A. (2006). Multimodal ethnography. *Qualitative Research* 6(1), 77–96. Retrieved October 22, 2011. <http://www.web.media.mit.edu/Dicks,%20Multimodal%20ethnography.pdf>.
- [12]. Duke Global Health Institute, (2011a). <http://globalhealth.duke.edu/news-events/global-health-news-at-duke/new-dghi-pilot-project-to-use-ipad-technology-as-field-research-tool> Retrieved October 22, 2011.
- [13]. Duke Global Health Institute, (2011b). http://www.globalhealth.duke.edu/news/2011/ELI2011_iPadKeynote.pdf Retrieved October 22, 2011.
- [14]. Edwards, J. & Helvie-Mason, L. (March 2010). Technology and Instructional Communication: Student Usage and Perceptions of Virtual Office Hours *Journal of Online Learning and Teaching*, Vol. 6, No. 1. Retrieved October 18, 2011 from http://jolt.merlot.org/vol6_no1/edwards_0310.htm.
- [15]. Evans, N., T. Mulvihill & N. Brooks, (2008). *Mediating the tensions of online learning with Second Life*. *Innovate* 4 (6). Retrieved October 18, 2011 from: http://www.innovateonline.info/pdf/vol4_issue6/Mediating_the_Tensions_of_Online_Learning_with_Second_Life_.pdf.
- [16]. Glogoff, S. (2005). Instructional blogging: Promoting interactivity, student-centered learning, and peer input. *Innovate* 1 (5). Retrieved October 18, 2011 from: http://www.innovateonline.info/pdf/vol1_issue5/Instructional_Blogging_-_Promoting_Interactivity,_Student-Centered_Learning,_and_Peer_Input.pdf.
- [17]. Helvie-Mason, L. (2011a). "Twitter and Student Reflection" Blog post <http://www.comhighered.com/2011/04/twitter-and-student-reflection.html>.
- [18]. Helvie-Mason, L. (2011b). Facebook, "Friending," and Faculty–Student Communication, in Charles Wankel (ed.) *Teaching Arts and Science with the New Social Media (Cutting-edge Technologies in Higher Education, Volume* 3), Emerald Group Publishing Limited, pp.61–87.
- [19]. Herrington, J., & Herrington, A. (1998). Authentic assessment and multimedia: How university students respond to a model of authentic assessment. *Higher Education Research and Development*, 17(3), 305–322.
- [20]. Hewitt, A., S. Spencer, D. Mirliss, & Twal, R. (2009). Preparing graduate students for virtual world simulations: Exploring the potential of an emerging technology. *Innovate* 5(6). Retrieved July 29, 2011 from http://www.innovateonline.info/pdf/vol5_issue6/Preparing_Graduate_Students_for_Virtual_World_Simulations_-_Exploring_the_Potential_of_an_Emerging_Technology.pdf.
- [21]. Hurdley, R. & Dicks, B. (2011). In-between practice: Working in the 'third-space' of sensory and multimodal methodology. *Qualitative Research*, 11 (3), pp. 277 – 292.
- [22]. Hurdley, R. (2007). Focal points: Framing material culture and visual data, *Qualitative Research*, 7 (3), pp. 355–374.
- [23]. Ledema, R. (2003). 'Multimodality, Resemiotization: Extending the Analysis of Discourse as Multi-semiotic Practice', *Visual Communication* 2(1): 29–57.
- [24]. Janesick, V. J. (2010). *Oral history for the qualitative researcher: Choreographing the story*. New York: Guilford Press.
- [25]. Jurgensen and Ray (2011). About Cyborgology. Retrieved October 18, 2011 from <http://thesocietypages.org/cyborgology/>
- [26]. Lorenz, LS and Kolb, B. (2009). Involving the public through participatory visual research methods. *Health Expectations*, Volume 12, Issue 3, pp. 262–274.
- [27]. McBride, N. (2008). Using performance ethnography to explore the human aspects of software quality, *Information Technology & People*, Vol. 21 Issue: 1, pp.91 – 111.
- [28]. Novak, J.D. & Cañas, A.J. (2006). "The Theory Underlying Concept Maps and How To Construct and Use Them", Institute for Human and Machine Cognition. Retrieved October 21, 2011.
- [29]. Ormiston, Meg (2011). *Creating a Digital-Rich Classroom: Teaching & Learning in a Web 2.0 World*. Solution Tree Press.

- [30]. Turkle, S. (1995). *Life on the Screen: Identity in the Age of the Internet*. New York: Simon & Schuster.
- [31]. Wang, C., & Burris, M. A. (1994). Empowerment through Photo Novella: Portraits of Participation. *Health Education & Behavior*, 21(2), 171-186.
- [32]. Wang, C., & Burris, M. A. (1997). Photovoice: Concept, Methodology, and Use for Participatory Needs Assessment, *Health Education Behavior* June 1997 24: 369-387.
- [33]. Wiggins, Grant. (1990). The case for authentic assessment. *Practical Assessment, Research & Evaluation*, 2(2). Retrieved October 18, 2011 from <http://PAREonline.net/getvn.asp?v=2&n=2>.
- [34]. Willis, J. (2008). *Qualitative Research Methods in Education and Educational Technology*. Information Age Publishing.
- [35]. Wittel, Andreas. (2000). Ethnography on the Move: From Field to Net to Internet. *Forum: Qualitative Social Research*, 1(1), Art. 21, <http://nbn-resolving.de/urn:nbn:de:0114-fqs0001213>.
- [36]. Wittel, A. (2001). Towards a Network Sociality. *Theory, Culture and Society* 18(6):51-76.
- [37]. Yonas M, Jones N, Eng E, Vines A, Aronson RE, Griffith DM, White B, DuBose M. (2006). The art and science of integrating undoing racism with CBPR: Challenges of pursuing NIH funding to investigate cancer care and racial equity. *Journal of Urban Health*, 83(6):1004-1012.

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