Video-based Education Ethnography Project

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Abstract

This article chronicles the development of a video-based ethnography project documenting daily life in a Kansas elementary and a secondary classroom. The project, which took nearly two years of planning, allows a direct link to two classrooms approximately 250 miles away to provide a virtual field experience for undergraduates and a wide array of research possibilities for faculty. Since its first semester in spring 2016, it now enables students to see the daily actions of an elementary teacher and a secondary math teacher in a live classroom setting, and various faculty and graduate student research projects are currently under way.

Introduction

In what began as an "If only" discussion two years ago, College of Education's Department of Curriculum and Instruction at Kansas State University has developed and implemented a video-based ethnography project designed to provide an authentic view of a secondary classroom and an elementary classroom on a daily basis for its pre-service teachers and faculty researchers.

Today, with a few clicks of a mouse, we are able to virtually visit southwestern Kansas classrooms approximately 250 miles away, panning our cameras around the room to focus on high school math students learning a geometry lesson. Or we can make a few different clicks and observe a first-grade classroom in another building in the same school district.

Theoretical Background

Ethnographic research methods (e.g., Geertz, 1973) have been used for decades to explain how various elements of society function. Although ethnography traces its roots to anthropology, it has been effectively employed for many years as a methodology in educational research to gather certain kinds of data that do not submit to quantitative studies (e.g., Wilson, 1977).

A number of landmark ethnographic studies have contributed to educational research (e.g., Heath, 1983), but rapidly changing patterns of communication brought about by new technologies have caused ethnographers to reconsider the nature of ethnographic field research. It is certainly still possible, and in most cases probably still

desirable, for the ethnographer to

gain physical entrance into a community and to live and work within that community to gain and document an insider's knowledge. However, traditional, in-person ethnographic research increasingly includes video ethnography (Pink, 2013), in which researchers are able to electronically capture events and employ ethnographic techniques to analyze the video representation of the community without actually being present within that community.

LeBaron (2008) discusses "video-based ethnography," also referred to as "microethnography," designed to examine "activities as they naturally occur." LeBaron discusses the five key steps in such a project: 1) select a research site; 2) collect data; 3) analyze video data; 4) digitize and transcribe key moments of interaction; and 5) describe and report research findings. Video-based ethnography provides data that can be reviewed in other places and times beyond the context of the community in which it was captured. Arguably, then, ". . . video-based research is more rigorously empirical than traditional ethnography, as claims are grounded in the raw data that audiences and readers can see and scrutinize" (LeBaron, p. 5-8).

A more recent development has been one that focuses on virtual ethnography—in which the researchers employ ethnographic methodologies to better understand the various virtual worlds that exist in online environments (Domínguez, et. al., 2007). This approach involves the study of the Internet and its array of virtual spaces.

The Project

Our project merges video ethnography and virtual ethnography, as we use Internet webcams to conduct ethnographic observations in an educational setting. Through our project, we began capturing the experiences of one teacher and one class at the elementary level and one teacher and one class at the secondary level during the second semester of the 2015-16 school year. The technology, which turns on and off automatically, records one 90-minute class each day in the specific elementary and secondary classrooms. Our research is designed to capture from the first bell of the first class in August through the dismissal of students at the end of the last class period in spring.

This effort connects all three variations of ethnographic research. It merges the traditional ethnographic research approach with the latest available technology to learn more about current teaching experiences in a secondary classroom, with the ultimate goal of helping us better understand contemporary classrooms and ultimately helping us improve pre-service teacher education.

While video recording a classroom throughout the school year and being able to capture those daily events for our research, we also have the potential for observing

that classroom in real time through technology allowing us to see the classroom from a distance—at our university setting. This provides a greater element for the researchers' immediate response to the happenings in the classroom.

One of the key benefits of our project is that it provides a look into a classroom setting unaltered by the physical presence of a researcher, which to some extent could change the dynamics of the classroom—the behavior and interaction of students and the teacher. The video cameras have been placed in the least obtrusive locations in the classrooms to help limit their interference with the classroom environment. While a video camera in a classroom can be disruptive initially, in time its presence should attract minimal attention. This should provide observations of a a fairly normal classroom atmosphere to assist the researchers in collecting authentic data.

We envision this project potentially providing key information regarding teacher/student interaction patterns, student behavior patterns, and documentation of learning events taking place in that classroom—all vital information in the advancement of teacher education programs.

The Process

We began working with school district officials in 2014 by sharing a white paper that detailed our plans and its potential. Subsequent meetings involved determining one middle school or high school classroom we could have virtual access to through the entire school year. Initial discussions included deciding what classrooms to feature and creating research documents such as the Memorandum of Agreement (MOA) to protect the students, the school district, and the university. Once we had written our plan, the meetings began with various attorneys, followed by revisions to those documents, and then more meetings with attorneys. Discussions were also held to determine the specific technology needs for the project to be successful. Our partners reached beyond the two schools and the school district, to include Mediasite and Cytek for our technology efforts, the College of Education for funding and approval, and the university's research panel, as well as its committee on internet security.

We began by seeking a teacher of a core content area: math, English/language arts, science, or social studies. Ideally, we wanted the class size to be between 15 and 30 students, led by a veteran teacher with a minimum of five years of classroom teaching experience. While we initially were considering one secondary classroom, our discussions led us to add an elementary classroom to the project. Through our discussions, we eventually decided on a specific secondary math classroom and a first-grade elementary classroom. The project includes signage regarding the recordings, as well as parents' letters of consent and an approved document through Kansas State University's Institutional Review Board.

Today, two web cams and microphones are mounted permanently in the

classrooms for viewing the environment from two different perspectives. These were established to provide documentation of each teacher's actions, as well as those of their students. The cameras are turned on at the beginning of the selected class, and the recording is concluded at the end of that class. This technology provides a direct link available to the three researchers so we can view the interaction as it is taking place. Likewise, the cameras are recording the interaction for future viewing and analysis.

The Potential

Our faculty and graduate students are already determining potential studies using these videos, including one doctoral pilot study focusing on students' movement in the classroom. Other related studies are being developed by COE faculty.

This project provides numerous possibilities for collecting extensive critical data in our research for improving teacher education. We will see an academic school year's worth of teacher-student interaction.

To be a true ethnographic study, our project needs to address these specific questions: How is a unique culture created in this particular space (specifically, in this case, an elementary classroom and a secondary classroom identified by the hour of the day and the class content and age level)? How is it created/sustained? What is unique about this group right here at this time?

However, these recordings will give concrete evidence regarding a variety of other classroom practices and interactions—small pieces of the classroom make-up that are still worth examining. Among those topics this research could address:

- Classroom management.
- Seating.
- Initiating beginning classroom procedures (lunch count, attendance, etc.).
- Classroom approaches (focusing on beginning, middle, and end activities for successful lessons).
- Classroom environment—how it affects learning.
- Physical layout of a room (traffic patterns, seating arrangements, etc.).
- Student participation levels (regarding engagement, teacher selection, etc.).
- Diversity—gender/race/SES/military connection/language, etc.
- Non-verbals from the teacher.
- Affect on the classroom/learning environment of "seasonal" events through the year (parent/teacher conferences, holidays, spring break, emergency drills, etc.).
- Individual students' changes through the year—maturation.
- Interaction pattern changes through the year among the students.

- Weather—how it affects behavior, etc.
- Representations of content—how do you go about teaching content. Ex: Ideological bias behind how a teacher presents material (ex: Civil War).
- Effective use of classroom minutes; time gaps between activities, starting the class, wrapping up a class, etc. Does instruction go bell to bell?
- End of class—how does it end? Who determines end—teacher, bell, students?
- Impact/influence of current events on teaching time.
- Instructional time lost for announcements, drills, etc. (non-teaching activities/interruptions).
- Uninterrupted time for silent individual reading.
- Uninterrupted time for individual writing.
- Uninterrupted time for students to complete tasks.
- Handling of basic tasks—handing out papers, textbooks, etc.
- Value/use of textbooks in the class.
- Content area literacy approaches used?
- Responses to behavior issues?
- Use of reflection.
- Use of lesson plans.
- Focus on Kansas College and Career Readiness Standards.

We expect to gather an extensive amount of information that will affect our teacher education courses. Kansas State University's Core Teaching Skills class—the students' first methodology course after being admitted to the teacher education program—involves an entry-level examination of the art and science of teaching. Results from our video-based project are already providing support for specific approaches to share with the Core Teaching Skills students, while affecting future course content. The project offers authentic classroom insight into procedures used and best practices implemented in various situations throughout the class. It also provides a look at this interaction by a gradual progression through the school year calendar.

Special Considerations

Such an extensive project leads to a variety of considerations, especially during these times of heightened technological possibilities and security concerns.

Ethical issues

Concerns have been raised about the ethical issues amid projects such as this. Pink (2013) discusses the ethical issues regarding ethnographic research, emphasizing that it is critical in the planning of any such research project and specifying "covert" research. It must be noted that the researchers have not been surprised by this concern. The researchers understand that this project brings with it a vast array of considerations, with ethical issues at the forefront. Our efforts involve recording students and educators who are going about their daily routines at school and should be able to continue without ay worries that their actions will be used against them in some way or trivialized in articles or presentations. Initially when this was presented to district officials, the researchers specifically mentioned that they would take a professional approach to whatever information was gathered and use it in an ethical manner, with respect for all involved. Those involved in this research process have a combined nearly 80 years of teaching experience. Through those years, they have faced ethical decisions on a daily basis in classrooms that ranged from kindergarten through graduate level courses. With a solid amount of classroom teaching experience, the researchers have made day-to-day decisions that hinged on ethical issues, whether it was a concern discussing a student's academic progress with the parent in a grocery store or emailing confidential information to colleagues and administrators. There is a layer of trust that must be built between a teacher and a student and his or her family; the same can be said for such research projects. The researchers and teachers take that role seriously.

Among the chief concerns are how can we protect a student's privacy and how can we treat their behaviors respectfully at all times? Therefore, this research situation falls into those same categories, and the researchers, who see this as a serious extension of those day-to-day decisions, must provide an ethical approach. To emphasize that, only those who understand these elements and are approved through the IRB process will be allowed to use them for research. Additionally, in establishing the agreement with the school district, it was determined that the videos could be shown to students in the education courses. Regarding covert recordings, it must also be noted that parents in these two classrooms (and, thus, their students) are made aware of the recordings and sign a document approving the recordings. If they have any concerns, they are able to switch their children to another classroom providing the same level of content.

This project requires confident teachers who understand that even the mistakes/missteps they make will help improve future teaching—especially through the teacher education program at KSU and through articles and other products of this endeavor.

In an even broader effort, the department chair has determined that the project should ultimately develop into a virtual Professional Development School to provide extensive learning opportunities for our pre-service teachers.

Conclusion

We believe this project has enormous potential—with our teaching of future educators and our research agenda. Additionally, it connects with two major areas that the College of Education and, more specifically, the Department of Curriculum and Instruction, have determined to be essential for our development. This project addresses the objectives of the C&I Scholarship and Research Committee, designed to help the department focus on improving our research endeavors; it coincides with the university's 2025 strategic plan regarding research.

Additionally, the project supports the department's recruitment efforts with benefits that are twofold—to encourage and support student enrollment in the teacher training program, while also improving opportunities for our graduates to take teaching positions in hard-to-fill areas. With the increased visibility of KSU in this specific rural school district, we will be in line to assist more students from that community in choosing a career in teacher education at KSU, while our own students will be more likely to consider teaching in that school district to help lessen the number of unfilled teaching positions.

And, finally, it is important for us to realize that we truly are sitting on the edge of an enormous amount of learning and research opportunities. Professors of our Block 1/A and methods courses are seeing the potential for using the virtual connection in those courses. Ideas being discussed now include seeing lesson plans implemented, observing lessons, and developing reflections of the lessons they view. This can also be used for student teaching, and one doctoral student is planning a dissertation regarding movement in the classroom, in addition to future faculty research. We have no doubt that, as this experience is shared in the college, even more specific projects will emerge.

Works Cited

Domínguez, Daniel; Beaulieu, Anne; Estalella, Adolfo; Gómez, Edgar; Schnettler, Bernt
     & Read, Rosie (2007). Virtual Ethnography. Forum Qualitative Sozialforschung /
     Forum: Qualitative Social Research, 8(3),
     http://nbn-resolving.de/urn:nbn:de:0114-fqs0703E19.

Geertz, C. (1973). The interpretation of cultures: Selected essays. New York: Basic.

Heath, S.B. (1983). Ways with words: Language, life, and work in communities and
     classrooms. Cambridge, United Kingdom: Cambridge University Press.

LeBaron, C.D. 2008). "Video-based methods for research on strategy as practice:
     Looking at people, places, and things." Speech presented at Strategy as
     practice: Methodological challenges, Academy of Management, Anaheim, CA.

Pink, S. (2013). Doing visual ethnography (3rd ed.). London: Sage Publications.

Wilson, S. (1977). The use of ethnographic techniques in educational research. Review
     of Educational Research, Vol. 47 (No. 1), pp. 245-265.