

Transformative Mixed Methods Research Donna M. Mertens Qualitative Inquiry 2010 16: 469 originally published online 23 March 2010 DOI: 10.1177/1077800410364612

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What is This?

Transformative Mixed Methods Research

Donna M. Mertens¹

Abstract

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Paradigms serve as metaphysical frameworks that guide researchers in the identification and clarification of their beliefs with regard to ethics, reality, knowledge, and methodology. The transformative paradigm is explained and illustrated as a framework for researchers who place a priority on social justice and the furtherance of human rights. The basic belief systems associated with this paradigm are explained and illustrated by examples of research that is commensurate with the transformative paradigm.

Keywords

transformative, mixed methods, deaf, African, social justice

I begin most days of my life with a cup of coffee and the *Washington Post*. Without fail, there are headlines in the newspaper that bring to my attention complex social issues related to violence, refugees, and immigration, and lack of progress for specific populations in terms of education, health care, and employment. With the eye of a researcher, I glance over the headlines and wonder . . . What is the role of the researcher in terms of contributing to the resolution of long-standing social problems? I also wonder about issues related to social justice that do not make the newspapers, such as those associated with low-incidence disability groups.

Having consciously been a researcher and concerned with social justice since I was in elementary school, and being considerably older now, I have had much time to reflect on this challenging dilemma. My professional work as a researcher began at the University of Kentucky in the College of Medicine. At that time, I had a concern about who was being selected as medical students and whether an overemphasis on selection on the basis of high undergraduate grades and MCAT scores in science might lead to doctors who did not have the necessary "people skills" to relate to the complex contexts from which their patients came. From there, I worked with the Appalachian Regional Commission evaluating a 13-state project along the Appalachian mountain chain that is renowned for its isolation and poverty to provide continuing education to educators, doctors, farmers, social workers, fire fighters, and early intervention specialists. Then, I was a policy analyst at Ohio State University in the National Center for Research in Vocational Education. During that time, I was tasked with providing research-based evidence to the U.S. Congress on the effectiveness of vocational education. However, I was constrained by the legislative provisions that funded the center to use extant data; in other words, I had access to large-scale studies that had been conducted elsewhere, but I was not able to visit or collect data personally. My research at that time focused on inequities in the education system on the basis of gender, race, ethnicity, geographic location (urban/rural), and disabilities.

I suppose all the constraints under which I worked had a purpose in that it left me with a sense of frustration that was sufficient to motivate me to seek employment in a setting in which I could attempt to establish a relationship with people who had been kept at the margins of society, to figure out a better way to conduct research that reflected their experiences and had a hope of making changes that were substantive in terms of furthering human rights and social justice.

That is how I found myself applying for a job at Gallaudet University in 1983 as an assistant professor of research and evaluation methods. Gallaudet is a unique university in that it is the only university in the world with the mission of serving deaf students and requires faculty to be proficient in American Sign Language (ASL), to facilitate direct communication between faculty and students. The fact that I had

Corresponding Author:

Donna M. Mertens, Department of Educational Foundations & Research, Gallaudet University, 4600 Marie St., Beltsville, MD 20705 E-mail: donna.mertens@gallaudet.edu

Gallaudet University

never met a deaf person before applying for the position did not deter me. I welcomed the opportunity to learn a new language and culture to test my emerging hypothesis that close involvement with members of a community would both serve as a means to enhancing social justice through research and as a means to developing approaches to research that would have similar applicability to marginalized groups beyond the deaf community. On the basis of my learnings from the deaf community and other marginalized peoples across the world, I make the argument that the transformative paradigm provides one framework that allows researchers to consciously situate their work as a response to the inequities in society with a goal of enhancing social justice.

Paradigms

I owe a great debt of gratitude to Egon Guba, Yvonna Lincoln, and Norm Denzin for their work in developing the concept of paradigm as an organizing metaphysical framework to enable researchers to examine the underlying belief systems that guide their work (Denzin & Lincoln, 2005; Guba & Lincoln, 2005). They identified four basic belief systems that constitute a paradigmatic viewpoint:

- Axiology (the nature of ethics),
- Ontology (the nature of reality),
- Epistemology (the nature of knowledge and the relationship between the knower and that which would be known),
- Methodology (the appropriate approach to systematic inquiry).

Guba, Lincoln, and Denzin's work focuses most directly on defining the belief systems that underlie the constructivist paradigm. More recently they have brought the lens of social justice to that paradigm. However, it is possible for researchers to situate themselves within the constructivist paradigm and not address issues of social justice. It is also possible to address issues of social justice from a set of belief systems that differs from those explicated for the constructivist paradigm. Hence, I set forth the belief systems that underlie the transformative paradigm and their implications for methodological choices herein. I integrate an example of transformative mixed methods into this philosophical discussion.

Transformative Paradigm

Quite briefly, the transformative paradigm is a framework of belief systems that directly engages members of culturally diverse groups with a focus on increased social justice (Mertens, 2009, 2010; Mertens, Harris, & Holmes, 2009). The axiological belief is of primary importance in the transformative paradigm and drives the formulation of the three other belief systems (ontology, epistemology, and methodology). The fundamental principles of the transformative axiological assumption are enhancement of social justice, furtherance of human rights, and respect for cultural norms. These are not unproblematic ethical principles for researchers.

It is possible for researchers to approach their work without consideration of social justice issues. For example, a faculty member asked me to gather evidence of the effectiveness of a teacher preparation program that was designed to prepare teachers of color and/or who are deaf to teach students who are deaf and who have a disability (such as emotional disturbance, severe physical disabilities). The faculty member had the idea that this was a requirement of the granting agency and the program was coming to an end; hence, he had a vision of a somewhat minimalist effort to satisfy the agency. However, he asked me to develop a plan to determine the effectiveness of the program. In accord with my axiological belief system and with awareness of the complexities that are associated with cultural norms, language, and power differentials, I explained that I would accept the request if we could address these ethical issues in a way that would contribute to social transformation. The faculty member agreed.

The axiological assumption of the transformative paradigm was operationalized by my informing the faculty member of my belief system and the sketching of a plan to collect data that was consistent with those beliefs. This entailed the establishment of a research team that was reflective of the cultural complexity of the deaf community. On the basis of my understanding of the historical legacy of power differentials in the world of deafness and deaf people's experiences of oppression at the hands of some hearing people who saw them as less than hearing (called audism), I assembled a team of researchers who reflected important dimensions of diversity in that community. This included three deaf researchers, two of whom considered themselves to be culturally deaf (they were born deaf and grew up using ASL and identified with the deaf community); the third member of the team was also deaf, but she grew up using her voice and lip reading and had a cochlear implant that allowed her to function in the hearing world. I am a hearing person who has worked in the deaf community for 26 years and am proficient in ASL.

The transformative ontological assumption recognizes that there are many versions of what is considered to be real and is cognizant of the constructivists' discussion of the social construction of multiple realities. Yet it diverges from this belief in that it holds that there is one reality about which there are multiple opinions. And here, it leads to epistemological implications. The transformative ontological assumption that there is one reality leads us to delve deeply into understanding factors that lead us to accept one version of reality over another. We are led to ask questions such as, "Whose reality is privileged in this context?" "What is the mechanism for challenging perceived realities that sustain an oppressive system?" "What are the consequences in terms of who is hurt if we accept multiple versions of reality or if we accept the "wrong/privileged' version?"

This also leads to the necessity to interrogate unearned privileges on the basis of such dimensions as gender, race and ethnicity, disability, socioeconomic status, age, religion, or sexual orientation. These are not the only dimensions of diversity that are used as a basis for discrimination and oppression, as the bases of social inequities and injustices are contextually dependent. For example, in my recent work in Brazil related to issues that influence access to services for HIV/AIDS treatment and prevention, the participants noted that if clients were drunk, homeless, or smelled bad, they were more often denied access. In addition, if the clients were living in the favelas (slums) in which frequent shootings occurred, those clients had to find a way to leave that neighborhood to get services. The service providers are operating with a need for self-preservation and a consciousness that if they are shot, they can no longer provide the services. Hence, the tension is created and needs to be acknowledged that lack of access to services may not be a direct result of discrimination by service providers, but a result of oppressive social conditions in that context that result in lack of access to services. This is but one of the many complexities that surface when researchers situate their work in the transformative paradigm.

In the teacher preparation example, multiple realities surfaced as to the experiences for which the graduates were prepared. Is it possible that the new teachers will enter classrooms in which they have students who use ASL and have severe physical or mental disabilities and whose home language is English? Will the teachers enter schools systems in which they are seen as an integral part of the educational process and supported by the administration of those schools? If these are accepted as the privileged realities, then this has implications for the type of training that the teacher candidates receive and their competencies once they are in their own classrooms. Yet comments from the program graduates lead to a different understanding of the reality they encountered in their classrooms, as illustrated by these comments:

It's almost like multiple disabilities/special needs section is totally separate, an island opposed to the regular deaf school. I hate the separation. I've worked there 2 years, and many teachers at the regular deaf school building look at me as if I'm a visitor. When I tell them I've been teaching here for 2 years, they look at me in awe. (Graduate, field notes, May 2007)

When I graduated, I thought I was ready to teach. Then the principal gave me my list of students and my classroom and just washed his hands of me. You're on your own. The principal did not require me to submit weekly plans like other teachers because he thought I'd only be teaching sign language. But I told him, I'm here to really teach. We (my students and I) were not invited to field day or assemblies. That first year really hit me—what a challenge and a WOW at the same time. So I changed schools, and this one is definitely better. Now I'm in a school where people believe that deaf students can learn. (Graduate, field notes, May 2007)

We have already strayed into epistemological territory. More explicitly, the transformative epistemological assumption raises questions such as, "What should my relationship as a researcher be with the people in the study?" "How should I interact with the people in the study?" "Should I be distant and removed so as to prevent bias or should I be close and involved so as to prevent bias?" "What makes it better so I can determine what is real in this context?" "If I am to genuinely know the reality of something, how do I need to relate to the people from whom I am collecting data?" These questions raise the issue of cultural competency in the community in which I conduct my research. How can I understand the dimensions of diversity that are relevant in this specific context?

In the teacher preparation example, the dimensions of diversity that surfaced and needed to be considered include communication and language of the teachers, as well as their own ethnicity and race and hearing status. In addition, the characteristics of their students reveal important dimensions of diversity in terms of home languages, types of disabilities, use of multiple communication modes used in the classrooms, and diversity of settings into which the teachers moved and their roles within that context. Comments from the program graduates shed light on the importance of these dimensions of diversity:

When the home language is Spanish and the kid has very limited language and no sign, no English. Now I have a student who is deaf with another disability from another country. (Graduate, interview, May 2007)

But what about the kids who come from Ecuador and don't read or sign? And schools want to know what to do with the autistic kids. What are we going to do with these kids? (faculty member, June 2007)

They use three different methods of communication: sign, oral, and cued speech. I tried to explain in sign, but the other kids don't understand. I learned cued speech—it took me a long time, but it is required for two students. (Graduate, field notes, May 2007)

My students are under 5 years old, and they come with zero language and their behavior is awful. They can't sit for even a minute. Kids come with temper tantrums and run out of the school building. I have to teach these kids language; I see them start to learn to behave and interact with others. My biggest challenge is seeing three kids run out of school at the same time. Which one do I run after? One kid got into the storm drain. I'm only one teacher and I have an assistant, but that means there is still one kid we can't chase after at the same time as the other two. (Graduate, interview, May 2007)

The transformative belief systems discussed thus far lead to methodological beliefs about appropriate ways to gather data about the reality of a concept in such a way that we have confidence that we have indeed captured the reality in an ethical manner and that has potential to lead to the enhancement of social justice. What are the best methods for collected data? Numbers, so I can be objective? Words and pictures, so I can get a deep understanding? Mixed methods so I get both? How do I use these methods to get the "real picture"? The transformative methodological belief system incorporates the explicit address of issues of power in terms of interrogating both the research methods themselves and the interventions that may or may not be in the control of the researcher (Mertens, 2007, 2009).

For example, Chilisa (2005) reported her experiences as a researcher who did not have control over an intervention designed to reduce the spread of HIV/AIDS in Africa. She situated herself within a transformative stance to explicitly interrogate the intervention as it was based on misunderstandings about the culture and language in Botswana, especially as it related to power inequities between the oppressor culture and the colonized, as well as between men and women in that country. The intervention consisted of billboards that were posted around the country that were written in English and contained messages such as, "Don't be stupid, condomize. Are you careless, ignorant, and stupid?" Chilisa did not limit herself to collection of data on the effectiveness of this intervention; rather, she interrogated the power inequities that allowed this intervention to proceed. Chilisa pointed out that Botswana is a culturally complex country in which many languages are spoken. English is the language of the elite and the colonizers, and hence is not comprehensible to many of the people who are most at risk of contracting HIV/AIDS. In addition, the messages on the billboards are insulting and ignore the power dynamics between the sexes in Botswana. They imply that a woman has the power to tell a man to use a condom. This is not the case; hence, an important part of the research methodology was the critical analysis of the power relationships around the development, nature, and implementation of the intervention.

The transformative methodological belief system supports the use of a cyclical model in which community members are brought into the research process from the beginning and throughout the process in a variety of roles. For example, in the teacher preparation study, the research team that was constituted to reflect the diversity found in the community of teachers in deaf education met to consider the focus of the research and appropriate methods to conduct that research. The basic data collection plan included the following:

- Participant observation at a reflective seminar that the teacher preparation program hosted for its graduates (observation and document review).
- Interviews with the graduates who attended the seminar. The questions for the interviews were derived from the data gathered during the observations and document reviews. The researchers who are deaf and ASL users interviewed the graduates who were deaf and ASL users; one of the researchers conducted the interview while the other one took notes. The researcher with the cochlear implant and I conducted the interviews with the hearing graduates and used the same teaming system to interview and take notes.
- The research team met and discussed the data collected from the observations, document reviews, and interviews. On the basis of this discussion, we developed an online survey that allowed us to collect both quantitative and qualitative data from the program graduates who were not able to attend the seminar. Thus, we were able to get a broader perspective on the conditions in which the graduates were teaching and their experiences.
- The team conducted both qualitative and quantitative analysis of the data and used this as a basis for conducting interviews with the university faculty and the cooperating school staff members. The words of the graduates and quantitative data from the survey were used as triggers for discussion in the faculty and school staff interviews.

This sequence of methodological decisions illustrates the cyclical nature of a transformative mixed methods approach to research. The issues of the diversity of the students that the graduates encountered and their frustration with being marginalized by their school administrations were shared with faculty and school staff. In addition, the following data were also shared:

Mentoring for Project SUCCESS students was achieved during the time that they were students at Gallaudet. However, when they graduated and started teaching, only a few reported having a mentor from Gallaudet (13%). About half reported having a mentor in their own school during their first year of teaching (47%).

For me in a mainstream school they wanted to give me a mentor but they couldn't figure out who to give me. After several months, they finally gave me someone at my school, but she was not a good fit. If I'd had a mentor from Gallaudet, even if it was a second-year teacher from Gallaudet who could be my mentor, that would be better. (Graduate, interview, May 2007)

The responses of the faculty and school staff to these data constitute another part of the cycle of transformative methodology and serve to illustrate the potential for social change when this approach is used. One faculty member responded:

I would have liked to see a mentoring-type relationship that would pair them with a teacher the first year and develop a mentorship—even if it was for first and second year of teaching. That would really help especially for the first year of teaching. That would have been another piece that would have been really nice. The students need to be able to remain in contact with each other. When I graduated, I was by myself. I would never want another person to have that experience themselves. We should also teach them that it is their responsibility to mentor younger teachers. (Faculty member, June 2007)

This faculty member took it upon herself to approach the department of education to propose the establishment of an online seminar in the fall of 2007. The seminar was designed to provide a forum for program participants in their internships to communicate with faculty and each other as a means to accessing mentor support. The seminar was conducted asynchronously through the Blackboard system that the students could access remotely. Word of mouth (or sign of hands) spread the benefits of participating in the seminar. This resulted in requests to expand the seminar beyond the interns in the multiple disabilities program to all students and graduates of that program, and quite quickly to all students and graduates in the education department, regardless of the program in which they were enrolled.

Although I would like to report a fairy-tale ending, the real world intervenes and adds challenges. The funding for the multiple-disabilities program ended; the faculty who had been involved accepted assignments elsewhere. Personnel changes occurred in the upper-level administration at the university. However, all is not lost. The research team informed the current faculty and staff of their findings and the dean has made a commitment to integrating changes into the program that are responsive to the issues raised by this research.

In addition, the research team made a presentation at the annual meeting of the Association of College Educators for Deaf and Hard of Hearing (ACE-DHH) at which representatives of universities and colleges with teacher preparation

programs for teachers of deaf and hard of hearing students heard (and/or saw) the results of this research (Mertens, Holmes, & Harris, 2008). This generated discussion among those participants (including the new personnel who were responsible for teacher preparation at the home university) about the relevance of the issues uncovered in this study and strategies to address them. The participants agreed that they faced similar issues and that there is a need to be more conscious of the preparation of teachers that reflect the reality they encounter when they enter their classrooms upon graduation. The reality is that an increasing number of students who are deaf or hard of hearing also have a disability that requires accommodation beyond either sign language or speech and hearing training. The students are also increasingly coming from homes where the home language is not English. Graduates need to be prepared to address these dimensions of diversity as well as to challenge the low expectations and marginalization for deaf and hard-of-hearing students in the schools in which they teach.

Conclusions

The transformative paradigm serves as an umbrella for research theories and approaches that place priority on social justice and human rights. In my own work, the transformative paradigm provides me with guidance in terms of clarification of ethics and values and consequent decisions that are related to ontology, epistemology, and methodology. Within this framework, I have worked with many groups within and outside of the disability and deafness communities, such as research with Bedouin families in Israel; health providers who work in the *favelas* (slums) of Brazil who prevent and treat HIV/AIDS, tuberculosis, leprosy, and malaria; and United Nations UNI-FEM staff who conduct research and evaluation on the Millennium Goals that define priorities for women across Africa (violence prevention, participation in governance, economic development, and HIV/AIDS prevention and treatment).

Chilisa (2005) also uses the transformative framework in her projects across Botswana in HIV/AIDS prevention. Sweetman, Badiee, and Creswell (2009) reviewed more than 270 articles that used the transformative paradigm, 42 of which used mixed methods.

In *Transformative Research and Evaluation* (Mertens, 2009), I cite the following works as examples of research that incorporate the transformative spirit (if not explicitly the transformative paradigm) that demonstrate its breadth of applicability across disciplines and methods in many communities that have been pushed to the margins:

- Environmental health in Laotian immigrant communities (Silka, 2005);
- The talent development model for education of African American students (Thomas, 2004);

- Research to support peace efforts in Northern Ireland (Irwin, 2005);
- Health services for lesbian, gay, bisexual, and transgender youth (Amsden & VanWynsberghe, 2005);
- Mental health services for Native American Indians (Duran & Duran, 2000);
- Appropriate breast-cancer-screening services for women from multiple ethnic groups (Chiu, 2003);
- Cultural conflicts in reactions to the death of a child between the dominant and Maori populations (Clarke & McCreanor, 2006).

Some researchers believe that because they do not work with people with disabilities, African Americans, Latinos, postcolonial and/or indigenous peoples, deaf people, or feminists that the transformative paradigm does not have relevance for them. I make the argument that the transformative paradigm has relevance for people who experience discrimination and oppression on whatever basis, including (but not limited to) race and ethnicity, disability, immigrant status, political conflicts, sexual orientation, poverty, gender, age, or the multitude of other characteristics that are associated with less access to social justice. In addition, the transformative paradigm is applicable to the study of the power structures that perpetuate social inequities. Finally, indigenous peoples and scholars from marginalized communities have much to teach us about respect for culture and the generation of knowledge for social change. Hence, there is not a single context of social inquiry in which the transformative paradigm would not have the potential to raise issues of social justice and human rights (Mertens, 2009, p. 4).

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interests with respect to the authorship and/or publication of this article.

Funding

The author(s) received no financial support for the research and/or authorship of this article.

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Bio

Donna M. Mertens is a professor at Gallaudet University in Washington, D.C., where she teaches research and evaluation methods, including quantitative, qualitative, and mixed methods to students across the disciplines of education, administration, linguistics, social work, psychology, and international development.