Journal of Mixed Methods Research

Transformative Paradigm : Mixed Methods and Social Justice

Donna M. Mertens

The online version of this article can be found at:

Published by:

$SAGE

Additional services and information for *Journal of Mixed Methods Research* can be found at:

>> Version of Record - Jun 21, 2007

What is This?

Transformative Paradigm

Mixed Methods and Social Justice

Donna M. Mertens
Gallaudet University, Washington, D.C.

The intersection of mixed methods and social justice has implications for the role of the researcher and choices of specific paradigmatic perspectives. The transformative paradigm with its associated philosophical assumptions provides a framework for addressing inequality and injustice in society using culturally competent, mixed methods strategies. The recognition that realities are constructed and shaped by social, political, cultural, economic, and racial/ethnic values indicates that power and privilege are important determinants of which reality will be privileged in a research context. Methodological inferences based on the underlying assumptions of the transformative paradigm reveal the potential strength of combining qualitative and quantitative methods. A qualitative dimension is needed to gather community perspectives at each stage of the research process, while a quantitative dimension provides the opportunity to demonstrate outcomes that have credibility for community members and scholars. Transformative mixed methodologies provide a mechanism for addressing the complexities of research in culturally complex settings that can provide a basis for social change.

Keywords: transformative; mixed methods; marginalized groups; feminist; race based; disability

The intersection of mixed methods and social justice raises questions concerning the underlying assumptions that guide our work, the role of the researcher, and reasons for the conduct of mixed methods research. The basic beliefs of the transformative paradigm (Mertens, 2005, in press) provide an overarching framework for addressing issues of social justice and consequent methodological decisions. The role of the researcher in this context is reframed as one who recognizes inequalities and injustices in society and strives to challenge the status quo, who is a bit of a provocateur with overtones of humility, and who possesses a shared sense of responsibility.

All researchers should be cognizant of the philosophical assumptions that guide their work. However, because of the potential strength of mixed methods research to provide a basis for social change, it is imperative that mixed methods researchers understand their assumptions and the methodological implications of those assumptions. The purpose of this article is to explain the tenets of the transformative paradigm as a framework for addressing social justice issues within the context of mixed methods research. Transformative mixed methods research is needed because research does not necessarily serve the needs of those who have traditionally been excluded from positions of power in the research world, and therefore the potential to further human rights through a research agenda has not been fully realized. The transformative paradigm provides such a framework for examining

212

assumptions that explicitly address power issues, social justice, and cultural complexity throughout the research process.

Issues of Power and Social Justice

The transformative paradigm's central tenet is that power is an issue that must be addressed at each stage of the research process. The development of the research focus represents a crucial decision point early in the research process. Typically, researchers turn to scholarly literature to identify a research problem. However, in transformative mixed methods research, a researcher might make use of a variety of quantitative and qualitative methods to determine the focus of research, with a specific concern for power issues. Important ways of gathering insights under the transformative paradigm include methods of involving community members in the initial discussions of the research focus. This can be done in many ways, such as focus groups, interviews, surveys, and threaded discussions.

Issues of power in research and the potential for transformative mixed methods to address such issues are illustrated by a comment made in a threaded discussion with graduate students at Gallaudet University. I posed this question: Why do we need good mixed methods research, and why is social justice an issue? The students answered this query after reading scholarly literature (e.g., Barnes, 2001; Mertens, 2005) and looking at a cartoon from the "Wizard of Id" series. The cartoon showed the town crier announcing that the results of a new poll were out, and they indicated that the king in the Kingdom of Id had excellent ratings. In the final panel, the king smirks and says, "There is a lot to be said for owning your own station." My students' reactions to the cartoon were profound. The comments of one student provide insights into the importance of considering the source of knowledge we rely on in the design and conduct of research. She wrote,

> There is a desired result or opinion that the commissioner of the study seeks to prove and he sets out to prove it through manipulation of the research. The researcher filters the information through his/her own lens and presents it as though it is valid and reliable. . . . Certainly research takes on many forms, and while the King does well in his opinion polls through manipulation and ownership of the study, the question arises as to who the people are who the research is purported to represent. And . . . what would be the impact on the people affected by the results?
>
>   In the Mertens (2005) text, we see that there is a lack of stakeholder input into the research and that this will unduly influence the results to skew and cater to those in powerful positions. Certainly, this is not the first time that the powerful have undertaken a study to take yet more power from the powerless. The comic strip emphasizes this point powerfully.
>
>   Interestingly enough, just as in real life, the less powerful may not be aware that this manipulation has taken place or feel powerless to address it. In this case, this is a king, not a voted upon president. To me, this underscores how little powerless subjects are enabled to change the results of ill completed research, yet must contend with the results . . . the comic strip suggests that the king is so well liked, he will never have to change the way he behaves in leadership. . . . This comic strip illustrates that we must have valid research so that the king can be forced to look out the window at his subjects rather than at a mirror in arrogance. Without research, we cannot know the true state of affairs for us or for others, and without research; change is impossible. (Risa Briggs, 2004)

This illustrative comment is not meant to suggest that all quantitative surveys are controlled by powers that wish to deceive. However, it does make clear that the use of a single method to determine the need for social change (as in focusing a research study) can yield misleading results. By carefully devising mixed methods to obtain input into the conditions that warrant the conduct of research, opportunities are opened for those whose voices have been traditionally excluded. Hence, the reason we need good mixed methods research is that there are real lives at stake that are being determined by those in power. The voices of those who are disenfranchised on the basis of gender, race/ethnicity, disability, or other characteristics remind us of the issues of power that surround so much in the public sphere, even that supposedly neutral and objective world of research. In my own work, I have witnessed many occasions in which issues of power were used to attempt to obscure the real problems that were facing individuals who are deaf.

A study of sexual abuse in a deaf residential school provides one poignant example (Mertens, 1996; Mertens & McLaughlin, 2004). I was contacted by a consulting firm to collect data for a contract the firm had received from the state department of education. The consulting firm did not mention sexual abuse in our initial communications, but I asked for copies of the request for proposal and the proposal. The first line in the request for proposal stated, "Because of serious allegations of sexual abuse at the residential school for the deaf, an external evaluator should be brought into the school to systematically study the context of the school." When I mentioned this to the contact person at the consulting firm, it was acknowledged as a problem, but it was suggested that we could address it by using a survey to ask if the curriculum included sex education and if the students could lock their doors at night. I indicated that I thought the problem was more complex than that, but I was willing to go to the school and discuss the evaluation project with the school officials.

On my arrival, I met with the four men who constituted the upper management of the school. For about 30 minutes, they talked about the need to look at the curriculum and the administrative structure. They did not mention the topic of sexual abuse. So I raised the topic by saying,

> I am a bit confused. I have been here for about a half hour, and no one has yet mentioned the issue of sexual abuse which is the basis for the State Department of Education requirement of an external evaluation.

After some chair scraping and coughing, one school administrator said, "That happened last year and I am sure if you ask people they will say that they just want to move on." The administrators were correct that the incidents that resulted in the termination of the superintendent's contract and the jailing of two staff members had happened in the spring of the year, and I was there in the fall. I assured them that it was indeed quite possible that some people would say that they would prefer to move on, but it was important for me to ask a wide range of people two questions: What were the factors that allowed the sexual abuse to happen? And what would need to be changed in order to reduce the probability that it would recur? I found that there were many answers to these questions, one of which was a desire to not talk about it and move on. However, allowing those with power to frame the questions and methods would have resulted in a continuation of an overall

context that had permitted many young deaf people to be seriously psychologically and physically hurt. I did use quantitative surveys to examine a variety of issues of interest to the administration, but I used qualitative methods to address issues related to sexual abuse to provide data that could be used to specifically address that issue. The combination of methods allowed me to provide a broad spectrum of insights and recommendations for the overall functioning of the school. Mixed methods provided an avenue to obtaining data that represented a variety of perspectives, in form and content.

Research Paradigms

A paradigm provides a tool to identify one's own worldview or, in research terminology, identify one's paradigm: a metaphysical construct associated with specific philosophical assumptions that describes one's worldview. There are four sets of philosophical assumptions that are most relevant to defining a paradigm in a research context (Guba & Lincoln, 2005).

The ontological assumption is concerned with the nature of reality. Ontologically speaking, how do we know that something is real? I do not mean a table or a computer that I can touch. I mean the realities that we know at a conceptual level; for example, when is access real? When is an environment least restrictive? When is literacy real? In the ontological sense, one has an assumption about what is real when one decides what type of evidence one will accept that someone is indeed literate, or any other conceptual characteristic.

The epistemological assumption is concerned with the relationship between the knower and the would-be-known. Epistemological questions include, If I am to really know if something is real, how do I need to relate to the people from whom I am collecting data? So the knower is the researcher, and the would-be-knowns are participants in the study. Should I be close to the participants so that I can really understand their experiences, or should I maintain distance between myself and the participants so that I can be ''neutral''? This question of course raises the definition of objectivity as it is operationalized in a research context.

The methodological assumption relates to the appropriate approach to systematic inquiry. Methodologically, I have choices to make that go beyond quantitative, qualitative, or mixed methods, to how I collect data about the reality of human experiences in such a way that I can feel confident that I have indeed captured that reality.

The axiological assumption relates to the nature of ethics. Axiologically, on what basis do I define ethical theory and practice in research? What is considered ethical or moral behavior? How do I address issues of ethics when conducting research in culturally complex communities? How do I address ethical dilemmas that arise in the research context?

The Transformative Paradigm of Research

The four basic beliefs associated with the transformative paradigm are displayed in Table 1.

Table 1
Basic Beliefs of the Transformative Paradigm

Ontology: There are multiple realities that are socially constructed, but it is necessary to be explicit about the social, political, cultural, economic, ethnic, racial, gender, age, and disability values that define realities. Different realities can emerge because different levels of unearned privilege are associated with characteristics of participants and researchers. Transformative researchers need to be aware of societal values and privileges in determining the reality that holds potential for social transformation and increased social justice.

Epistemology: To know realities, it is necessary to have an interactive link between the researcher and the participants in a study. Knowledge is socially and historically located within a complex cultural context. Respect for culture and awareness of power relations is critical.

Methodology: A researcher can choose quantitative or qualitative or mixed methods, but there should be an interactive link between the researcher and the participants in the definition of the problem, methods should be adjusted to accommodate cultural complexity, power issues should be explicitly addressed, and issues of discrimination and oppression should be recognized.

Axiology: Three basic principles underlie regulatory ethics in research: respect, beneficence, and justice. The transformative axiological assumption pushes these principles on several fronts. Respect is critically examined in terms of the cultural norms of interaction within a community and across communities. Beneficence is defined in terms of the promotion of human rights and an increase in social justice. An explicit connection is made between the process and outcomes of research and furtherance of a social justice agenda.

Transformative Ontological Assumption

The ontological assumption of the transformative paradigm holds that reality is socially constructed, but it does so with a conscious awareness that certain individuals occupy a position of greater power and that individuals with other characteristics may be associated with a higher likelihood of exclusion from decisions about the definition of the research focus, questions, and other methodological aspects of the inquiry. As one of my students wrote,

> In some school systems, those who are Deaf are usually accompanied with the label communication disordered because many Deaf are in speech therapy. In the school system's view, since we can't speak clearly, we have a communication disorder. That is a strange label since there are other ways to communicate with other human beings. We could write on a paper, gesture, or use some other communication system. The hearing administrators who run the school system have a very limited view of communication. I guess it is only fair to label the hearing manually disordered since they cannot sign clearly. (Matt Laucka, September 2004)

The transformative paradigm's ontological assumption poses these questions: How is reality defined? By whom? Whose reality is given privilege? What are the social justice implications of accepting reality that has not been subjected to a critical analysis on the basis of power differentials? How can mixed methods shed additional light on the capture and interpretation of reality?

An example of ontological power that resulted in inaccurate understandings in Botswana regarding HIV/AIDS prevention illustrates this point. Chilisa (2005) critiqued a needs assessment that served as the basis for the development of an HIV/AIDS

prevention program in Botswana. The needs sensing preceded program development and consisted of a literature review and a standardized survey. Chilisa provided an example of an ontological tension that arose when indigenous knowledge was ignored by the lead researchers and the program development team. For instance, the literature review included the statement ''A high acceptance of multiple sexual partners both before marriage and after marriage is a feature of Botswana society'' (p. 676). Working from a transformative framework, Chilisa recognized that realities are constructed and shaped by social, political, cultural, economic, and ethnic values and that power is an important determinant of which reality will be privileged. When she saw this statement in the literature review regarding the sexual promiscuity of people in Botswana, she notified the European team members that these statements were in conflict with her knowledge of the norms of the society. In response, the First World evaluators stated that they would not change the statement but that they would add additional literature citations to support it. Chilisa asked, ''Which literature, generated by which researchers and using which research frameworks? . . . What if the researched do not own a description of the self that they are supposed to have constructed?'' (p. 677). This example illustrates the depiction of reality when viewed from a transformative stance with that of a team of researchers who choose to ignore the cultural complexity inherent in indigenous voices and realities. Tensions arise when researchers choose to ignore the assumptions of the transformative paradigm that accurate reflections of stakeholders' understandings need to be obtained in ways that facilitate the involvement of the participant community with recognition of and responsiveness to appropriate dimensions of diversity.

Chilisa (2005) made four critical points:

1. In Botswana, important dimensions of diversity include the multiethnic nature of the population, with most of the people speaking 1 of 25 ethnic languages.
2. The highest rate of HIV/AIDS infection is among the most vulnerable populations in Botswana: those who are living in poverty with less privilege and less education.
3. The highest mortality rates were found among industrial class workers (women and girls especially), who earn the lowest wages and have the lowest education in comparison with the more economically privileged classes.
4. The meaning of HIV/AIDS (revealed in focus groups conducted by Chilisa and her African colleagues) differs from First World definitions. People in Botswana have three meanings for what westerners call HIV/AIDS that vary depending on the age at which one is infected and the mode of transmission.

Through the use of mixed methods, Chilisa provided a critical analysis of the framing of the research focus and interventions that illuminated critical errors in the research study. She used quantitative demographic and epidemiological data to describe the audience most in need of the intervention, and she used qualitative data from focus groups to obtain information regarding the meaning of HIV/AIDS in the Botswana culture. Thus, her mixed methods revealed not only that the intervention targeted the wrong group (English-speaking and English-reading individuals) but that it was not conceptually relevant to the most vulnerable people's understandings of the disease.

Transformative Epistemological Assumption

The epistemological assumption brings up the notion of the relationship between researchers and participants. In the transformative paradigm, the issues of understanding the culture and building trust are paramount. As one of my students wrote,

> There is an energy created from people giving their opinions, but there is also a common downside as well. Many times, people ask for feedback simply for the sake of asking. It is more of a public relations tool in this sense, with the decision being reserved for those with administrative power. If this is the case, which happens often, it will actually undermine the energy created as people feel used and judge their time in giving the feedback worthless. This causes a lack of trust in the process of feedback in general (though they may leave the company they may not trust the process again at their new organization) and lack of desire to participate in any other feedback giving sessions because their ideas are never implemented. Therefore, if a researcher intends to solicit this information, they must implement some of the strategies suggested, or a larger mess will be left behind than when they started. (Risa Briggs, 2004)

The transformative paradigm's epistemological assumption leads to a cyclical model of research that includes the establishment of partnerships between researchers and community members, including the recognition of power differences and building trust through the use of culturally competent practices (see Figure 1).
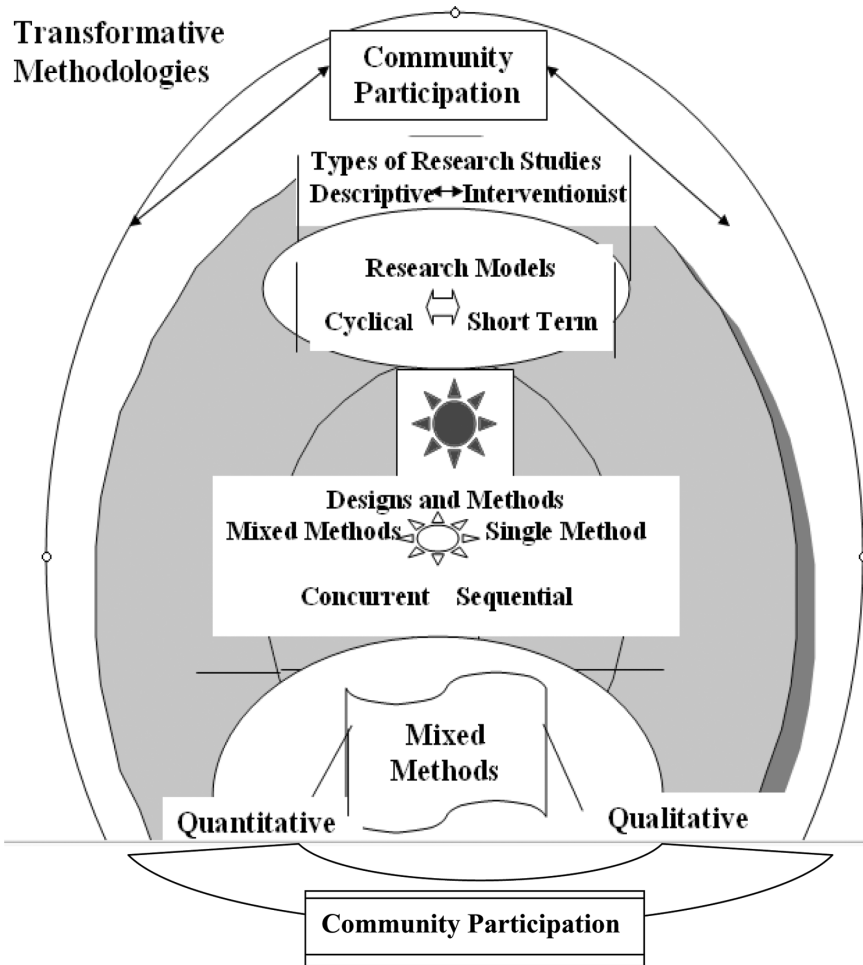
Mixed methods are a critical part of moving through a cyclical transformative research model. Community participation is needed at the beginning, throughout, and at the end of each research study. The goal is to have research that contributes to sustainable change in a community, hence the need to have a cyclical and mixed methods approach.

For example, Silka (2005) reported that many researchers want to conduct studies on the Laotian community in Massachusetts, possibly for reasons based in honest concern for their welfare. Teams of researchers showed up to investigate the problems of the Laotian people, gathered their data, wrote their reports, and departed. However, they departed with the result that conditions did not change for the Laotian community. When other groups of researchers arrived and wanted to repeat the process, the Laotian people were understandably disillusioned about the benefits to them from participating in research.

Together with Silka (2005) and her colleagues, they devised a cyclical, mixed methods model for research that would allow community members to discuss with researchers the need for research, the development of interventions, data collection options, and plans for future research on the basis of the outcomes of the research study at hand. They collected data by means of quantitative literacy assessments and qualitative data on cultural customs for productive employment. Through this mixed methods approach, they were able to document a low literacy level, specifically with regard to written English, and that the Laotians supported themselves by catching fish at night. This alerted the community leaders to significant problems and potential interventions. The lake in which the Laotians were fishing was polluted; the signs that restricted fishing in the lake for reasons of pollution were written in English. Thus, not only did the Laotians not see the signs but had they been able to see them, they could not have read them. This led to interventions related to literacy programs, a fishing festival that highlighted safe practices, and an environmental

Figure 1
Cyclical Model For Transformative Research

Transformative
Methodologies

Community
Participation

Types of Research Studies
Descriptive ↔ Interventionist

Research Models

Cyclical ⟷ Short Term

Designs and Methods
Mixed Methods ⟷ Single Method

Concurrent   Sequential

Mixed
Methods

Quantitative   Qualitative

Community Participation

Source: Mertens (in press).

intervention to clean up the lake and corresponding research to examine the effects of these interventions.

Transformative Methodological Assumption

Methodologically, the transformative paradigm not only leads us to reframe the understanding of our worldviews but also to understand that subsequent methodological decisions need to be reframed as well (Mertens, 2005). This reframing of methodological decisions leads to an inclination to use mixed methods with a conscious awareness of the benefits of involving community members in the data collection decisions with a depth of

understanding of the cultural issues involved, the building of trust to obtain valid data, the modifications that may be necessary to collect valid data from various groups, and the need to tie the data collected to social action. These data collection decisions are complex and require an awareness of the cultural values and practices in the specific population of interest.

As discussed in the section on epistemology, the cyclical model of research is situated in the dynamic hands of community participation that allows for community participation in the inquiry process at all levels. A central element is the revisiting of program processes and outcomes so that modifications can be made and implemented to better match the community's needs. Mixed methods allow for the collection of different types of data for different purposes.

Participatory methods. Participatory action research is an approach that is potentially commensurate with culturally competent, transformative methodologies. Participatory methods in and of themselves are not sufficient to warrant the label of transformative work. As Whitmore (1998) noted, participatory inquiries can be framed in either a practical or a transformative way. Practical participation is characterized by the involvement of participants such as program directors and staff. Transformative participatory inquiries are commensurate with the principles of the transformative paradigm, as illustrated in this quotation:

> Depth of understanding culture is not necessarily missing from participatory approaches, but it's not necessarily there. Participatory [evaluation] is more amenable to the manifestation of cultural competence in an evaluation setting, but I think that in and of itself it doesn't qualify. When people use the words "participatory" and "empowerment," not a lot of people get below the surface of talking about, well, what does that mean in terms of having a true understanding of the group you are working with? What does it mean in terms of appropriate ways that are considered to be culturally comfortable to establishing the questions for collection of data? What are the variations within that group? I do think there is danger in thinking I can take a strategy and just walk into a group and use a cookbook approach on how to do participatory or how to do empowerment without thinking about what does it mean that I am the researcher or evaluator in this process? There needs to be that sensitivity to the way you interact and how you engage people in a respectful way. (Mertens, quoted in Endo, Joh, & Yu, 2003, p. 9)

Participation can be built into a project in ways that do or do not reflect cultural competency.

Sampling. In methodological terms, sampling needs to be reframed to reveal the dangers of the myth of homogeneity, to understand which dimensions of diversity are important in a specific context, to avoid additional damage to populations by using labels such as *at risk* that can be demeaning and self-defeating, and to recognize the barriers that exist to being part of a group whose data can contribute to more ethical and accurate findings. Barriers are contextually based but can include differences in language, access to transportation and child care, and meeting times that may not conform to the nonmainstream work schedule. Mixed methods provide a strategy for addressing the diverse needs of community members. Some languages are more amenable to quantitative survey formats than

others. If a language has no written form, qualitative data collection can be used to capture important perspectives.

People with low-incidence disabilities provide one example of a culturally complex community in which heterogeneity on multiple dimensions needs to be considered. This group includes people who are deaf, blind, or in need of significant social and educational supports. If we add the dimension of social and cultural diversity to the low-incidence disability population, we see many other issues that would affect the outcomes of research. People who are deaf, are blind, or have disabilities that require significant social and educational supports differ on those dimensions as well as many others, including sex, race/ethnicity, home language, communication preferences, and the presence of additional disabilities, to name a few.

Gerner de Garcia (2004) directed the project *Literacy for Latino Deaf and Hard of Hearing English Language Learners: Building the Knowledge Base*. The goal of the project was "to create a scientific review of relevant research literature in deafness, special education, and the education of hearing English Language Learners, as well as Latino children and their families" (p. 7). Her conclusions revealed that many Latino families seek professional help with their deaf children, but schools often lack staff members with the linguistic and cultural skills to make parent participation a reality. Meadow-Orlans, Mertens, and Sass-Lehrer (2003) reached similar conclusions in a national study that focused on parents' early experiences with their deaf and hard-of-hearing children. In that study, the researchers attempted to disaggregate parent experiences on the basis of a number of characteristics, such as if the child was deaf or hard of hearing, was from a racial/ethnic minority group, or had a disability in addition to a hearing loss, or if the child's parents were deaf.

Challenges. Methodological challenges beyond sampling are associated with research with low-incidence disability groups. Ferrell et al. (2004) identified a number of complexities in the application of empirical methods associated with the use of control groups determined by random assignment that seemed to contradict the underlying logic of individual education plans (IEPs). IEPs are one of the legislatively mandated tools designed to identify appropriate accommodations and educational strategies for people with low-incidence disabilities. IEPs have in their name the word *individual*, thus indicating that a person requires a unique program to receive early intervention services or a free appropriate public education. Given the individual nature of such a person's needs, how can his or her "treatment" be determined by random assignment? How can he or she be placed in a control group, which means that he or she will be denied the carefully identified services that constitute the IEP? What are the ethical implications of random assignment when a child's case has been carefully studied to determine strengths and areas in need of improvement and a small number of personnel with highly specialized skills and knowledge determine what is appropriate for this child?

Other challenges arise because of the need to use multiple measurements, observations, and ongoing assessments for this population on the basis of collecting and analyzing both quantitative and qualitative data. Although many good instruments have been developed to use in educational settings, their appropriateness for people with low-incidence disabilities must be determined on a case-by-case basis.

The highly idiosyncratic nature of low-incidence populations also introduces challenges related to rigorous data analysis because of the possibility of small samples and restricted or highly variable ranges. The uniqueness of the population also creates problems with attempts to replicate findings. Replication makes an assumption that similar people in similar circumstances can be used to demonstrate the generalizability of results. This assumption may not be met in such a population. Mixed methods designs and data collection strategies provide strategies for accurately portraying the experiences of people with low-incidence disabilities, as well as for other culturally complex populations.

Transformative Axiological Assumption

The challenges that donor agencies, service providers, and researchers face around the world suggest that basing practice and policies on a social justice theory of ethics will allow the community to redress inequalities by giving precedence, or at least equal weight, to the voices of the least advantaged groups in society, who may not have sufficient power for accurate representation among stakeholder groups. Simons (2006) identified two theories of ethics that are commensurate with the transformative axiological assumption. Rights-based theories justify their actions on the basis that every person must be treated with dignity and respect and that the avoidance of harm must be the primary principle. The social justice theory of ethics takes the rights-based theory to a group or societal level (House, 1993), leading to an awareness of the need to redress inequalities by giving precedence, or at least equal weight, to the voices of the least advantaged groups in society. The implicit goal is the inclusion of those who may not have sufficient power for the accurate representation of their viewpoints but also to empower the less advantaged in terms of being able to take an active agent role in social change. For example,

> In countries where the written text was produced by the First World researchers, how much of it is validating invalidity and perpetuating stereotypes about the "other"? Ethics in research should thus include creating space for other knowledge systems. This should include using local knowledge as archival sources to identify research problems and to legitimize research findings. (Chilisa, 2005, p. 678)

The needs assessment data collected in Botswana did not accurately reflect the indigenous realities of HIV/AIDS, nor were they responsive to the cultural complexity of the stakeholders. However, the data were used as a basis for a prevention program that looked at the Africans as a homogeneous, universal mass among whom context-specific differences such as occupation, education, literacy levels, language, and social class were ignored. The program people designed a prevention program on the basis of the needs assessment data, but they made the assumption that everyone was middle class and could therefore read English. An educational campaign was developed that used billboards with text such as "Don't be stupid, condomise" and "Are you careless, ignorant and stupid?" "The lack of representation of appropriate stakeholders in the determination of communication strategies resulted in messages that were offensive, degrading, and written from the perspective of a superior who casts the recipients of the message as ignorant" (Chilisa, 2005, p. 673). The consequence of this is to delay progress in combating HIV/AIDS for the most vulnerable populations.

Chilisa (2005) recommended that the point of reference for legitimating research find-ings should be on the basis of an accumulated body of knowledge that is created by the people affected by the program. It is incumbent on researchers to interact with all stake-holder groups, including less powerful stakeholders, to determine the local meanings attached to experiences. Mixed methods allow researchers to adapt to local conditions and languages. Researchers need to work from an ethics protocol that insists that the local lan-guage is used throughout the process of the design of a study, the development and imple-mentation of the intervention, and the presentation of the findings, especially when less powerful stakeholders are not familiar with English. In addition, theories, models, and practices should be embedded in the indigenous knowledge systems and worldviews. For example, knowledge of the diverse ways of processing and producing knowledge in Botswana is situated in the proverbs, folklore, songs, and myths of that society. As Chilisa noted, the consequences of ignoring the multiple realities, especially those realities as they are perceived by the less powerful, is death. This example from Botswana illustrates the importance of cultural competency and the use of mixed methods to accurately reflect the needs of stakeholders in culturally complex communities.

Contrast the approach based on survey data and culturally insensitive interventions in the Botswana study with the Talent Development model of school reform, an example of a cyclical evaluation conducted from a transformative stance with specific attention to dimensions of race/ethnicity because it is designed to enhance the educational experiences of students in urban schools, the majority of whom are from racial/ethnic minority groups (Boykin, 2000). This model was developed by the Center for Research on the Education of Students Placed at Risk, a collaborative effort between Howard University and Johns Hopkins University, as an alternative to educational reform approaches that ignore contex-tual and cultural issues. With an overtly transformative agenda, the evaluation of Talent Development interventions incorporates both scientific methodological and political-acti-vist criteria (Thomas, 2004). The transformative evaluation was designed to provide infor-mation to enlighten and empower those who have been oppressed by or marginalized in school systems. A key element in the quality of the evaluation is the engagement of stake-holders who may have had negative or even traumatic occurrences with the school system in their youth. Evaluators demonstrate respect for stakeholders and create opportunities for those who have traditionally had less powerful roles in discussions of urban school reform to have their voices heard. The evaluators facilitate authentic engagement by holding multiple meetings along with the field implementers and key stakeholder groups with the intention of obtaining genuine buy-in by these groups. To the extent possible, stakeholder suggestions are incorporated into the Talent Development activities and the evaluation.

The intervention in a Talent Development school is an evolving entity that is developed through a co-constructive process involving the evaluators, school staff members, parents, and students (Thomas, 2004). Thomas (2004) described this process as a challenge to the conventional role of an evaluator, such that the boundary between evaluator and program designer is blurred. Talent Development evaluators can be involved in the decision making about the intervention because they have in-depth knowledge of the setting and participants, and they share the responsibility of program development, implementation, and evaluation with the program designers and implementers.

Talent Development evaluators also place a premium on cultural competence in the context of urban schools. To that end, they seek evaluators of color or from underrepresented groups. When this is not possible, evaluators are required to obtain a fundamental understanding of the cultural norms and experiences of the stakeholders by means of building relationships with key informants, interpreters, or critical friends to the evaluation. Talent Development evaluators are encouraged to engage in ongoing self-reflection and to immerse themselves in the life streams of urban schools through attendance at meetings, informal discussions, and attendance at school functions such as fundraisers or parent information nights. These are strategies that increase stakeholders' access to the evaluators and program implementers, with the goal being improved school performance for those who are placed at risk.

Conclusion

The transformative paradigm raises issues related to ontology, whose reality is privileged, and how mixed methods can be used to come to a deeper understanding of relevant dimensions of diversity and the role of power differentials in the definition of reality. The transformative paradigm raises epistemological questions regarding the nature of the relationship between researchers and communities and ways of forming partnerships and building trust. Methodologically, mixed methods are preferred for working toward increased social justice because they allow for the qualitative dialogue needed throughout the research cycle, as well as the collection of quantitative data as appropriate.

Mixed methods within the transformative paradigm are crucial to obtaining an understanding of reality as it is experienced in culturally complex communities. The research studies cited earlier provide insights into the power of using quantitative data, such as demographic, epidemiological, and literacy assessments, in conjunction with qualitative data to come to understand community members' realities. The epistemological assumption requires the development of a trusting partnership between researchers and communities. Mixed methods again provide an avenue to enhance the trust, because researchers are responsive to the needs of communities, and communities witness the power in both qualitative and quantitative data. A cyclical model of mixed methods research is proposed as a way of involving the community in research decisions and the collection of data that can be used for social justice purposes. The transformative paradigm does not provide simple instructions on how to conduct mixed methods research, but it does provide a framework that is useful for raising questions about the assumptions that underlie research and the contribution of research to enhancing human rights.

References

Barnes, C. (2001). *"Emancipatory" disability research: Project or process?* Retrieved August 26, 2003, from http://www.leeds.ac.uk/disability-studies/archiveuk/Barnes/glasgow%201ecture.pdf

Boykin, A. W. (2000). The Talent Development model of schooling: Placing students at promise for academic success. *Journal of Education for Students Placed at Risk*, *5*(1/2), 3-25.

Chilisa, B. (2005). Educational research within postcolonial Africa: A critique of HIV/AIDS research in Botswana. *International Journal of Qualitative Studies in Education*, *18*, 659-684.

Endo, T., Joh, J., & Yu, H. C. (2003). *Voices from the field: Health and evaluation leaders on multicultural evaluation, August 4, 2003*. Oakland, CA: Social Policy Research Associates.

Ferrell, K. A., Luckner, J. L., Jackson, L., Correa, S. M., Muir, S. G., Howell, J. J., et al. (2004, September). *All learners, all the time: Including students with low-incidence disabilities*. Paper presented at the 2004 Council for Exceptional Children Annual Convention, New Orleans.

Gerner de Garcia, B. (2004, Spring). Literacy for Latino deaf students: A socio-cultural approach. *Research at Gallaudet Newsletter*, p. 7.

Guba, E. G., & Lincoln, Y. S. (2005). Paradigmatic controversies, contradictions, and emerging confluences. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (3rd ed., pp. 191-216). Thousand Oaks, CA: Sage.

House, E. (1993). *Professional evaluation: Social impact and political consequences*. Newbury Park, CA: Sage

Meadow-Orlans, K. P., Mertens, D., & Sass-Lehrer, M. (2003). *Parents and their deaf children: The early years*. Washington, DC: Gallaudet University Press.

Mertens, D. M. (1996). Breaking the silence about sexual abuse of deaf youth. *American Annals of the Deaf*, *141*(5), 352-358.

Mertens, D. M. (2005). *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative and mixed methods* (2nd ed.). Thousand Oaks, CA: Sage.

Mertens, D. M. (in press). *Transformative research and evaluation*. New York: Guilford.

Mertens, D. M., & McLaughlin, J. (2004). *Research and evaluation methods in special education*. Thousand Oaks, CA: Corwin.

Silka, L. (2005, August). *Building culturally competent research partnerships*. Paper presented at the annual meeting of the American Psychological Association, Washington, DC.

Simons, H. (2006). Ethics in evaluation. In I. Shaw, J. Greene, & M. Mark (Eds.), *Handbook of evaluation: Policies, programs and practices* (pp. 243-265). London: Sage Ltd.

Thomas, V. G. (2004). Building a contextually responsive evaluation framework: Lessons from working with urban school interventions. In V. G. Thomas & F. I. Stevens, (Eds.), *Co-constructing a contextually responsive evaluation framework* (*New directions for evaluation*, No. 101, pp. 3-24). San Francisco, CA: John Wiley.

Whitmore, E. (Ed.). (1998). Understanding and practicing participatory evaluation (*New directions in evaluation*, No. 80). San Francisco, CA: Jossey-Bass.