

Solving ethical dilemmas with children: Empowering classroom research

Résoudre des dilemmes éthiques avec des enfants: donner plus de force aux recherches en classe

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Article abstract

This article identifies and discusses ethical dilemmas inherent when undertaking research with children or other vulnerable populations: power relations, risks and benefits, and informed consent and confidentiality (Maguire, 2005). Ethical dilemmas often arise when researchers attempt to merge the interests of their research and the interests of their child participants. Classroom ethnography is offered as one example of how research can be conducted with children in a way that minimizes these ethical dilemmas. A case study is described in order to exemplify specifically how children respond when fully valued as speaking personalities and co-investigators. Conducted over a period of eight months, the inquiry and its participants moved through five phases that included initiating, exploring, implementing, adopting, and reflecting. Results suggest that legitimate consent, minimized risk, maximized benefit, and shared power through ownership, choice, and social action are of paramount importance when researching *with* children or any other vulnerable population.

SOLVING ETHICAL DILEMMAS WITH CHILDREN: EMPOWERING CLASSROOM RESEARCH

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ABSTRACT. This article identifies and discusses ethical dilemmas inherent when undertaking research with children or other vulnerable populations: power relations, risks and benefits, and informed consent and confidentiality (Maguire, 2005). Ethical dilemmas often arise when researchers attempt to merge the interests of their research and the interests of their child participants. Classroom ethnography is offered as one example of how research can be conducted with children in a way that minimizes these ethical dilemmas. A case study is described in order to exemplify specifically how children respond when fully valued as speaking personalities and co-investigators. Conducted over a period of eight months, the inquiry and its participants moved through five phases that included initiating, exploring, implementing, adopting, and reflecting. Results suggest that legitimate consent, minimized risk, maximized benefit, and shared power through ownership, choice, and social action are of paramount importance when researching *with* children or any other vulnerable population.

**RÉSOLUTION DES DILEMMES ÉTHIQUES AVEC DES ENFANTS :
DONNER PLUS DE FORCE AUX RECHERCHES EN CLASSE**

RÉSUMÉ. Cet article identifie et explore les dilemmes éthiques potentiels dans un contexte de recherches effectuées auprès d'enfants ou d'autres populations vulnérables : relations de pouvoir, risques et bénéfices ainsi que consentement éclairé et confidentialité (Maguire, 2005). Des dilemmes éthiques font souvent surface lorsque les chercheurs tentent de concilier les intérêts de la recherche avec ceux des enfants participants. L'ethnographie d'une classe illustre une manière dont une recherche peut être menée auprès d'enfants en minimisant les dilemmes éthiques. Une analyse de cas est détaillée afin de montrer précisément comment les enfants répondent lorsqu'ils ont pleinement la parole ou agissent comme co-chercheurs. Pilotée sur une période de huit mois, l'enquête et ses participants ont passé par cinq phases distinctes : l'initiation, l'exploration, l'implémentation, l'adoption et la réflexion. Les résultats indiquent qu'un consentement valide, des risques réduits, des bénéfices maximisés et un pouvoir partagé – par l'appropriation, les choix et l'action sociale – sont d'une importance cruciale lorsque des recherches sont menées *avec* des enfants ou d'autres populations vulnérables.

THE ETHICAL DILEMMA: RESEARCH WITH, ON, OR ABOUT CHILDREN?

Children are a valuable, but vulnerable, research population. Vulnerable groups of people include those at risk due to the following factors: personal characteristics such as dependence, health, gender, age, cognitive capacity, and ability to communicate effectively; social, cultural, economic, or political circumstances; and/or research practices that privilege the view and authority of the researcher (Dorsey & Murdaugh, 2003; Wilson & Neville, 2009). By this definition, children in classrooms are vulnerable for many reasons: first, they are children subject to the perceived control and power of adults, in this case, researchers; second, they may be limited by their cognitive capacity and ability to communicate; and third, they are subject to the formal authority of an institutionalized school system where the research is being conducted.

Far from being passive recipients of information, children strive to understand the political, social, and cultural contexts in which they develop. They “formulate their own opinions about their situations, opinions that are often outspoken, idiosyncratic, and even blunt” (Berman, 2003, p. 106); they do not simply “echo ideas and beliefs that are passed on to them by their parents and other adults whom they encounter” (Coles, as cited in Berman, 2003, p. 106). As such, they are valuable, reliable, and interesting informants of their worlds. Because they are more than capable of arriving “at their own conclusions and meanings, which may or may not be congruent with those of the adults in their lives” (Coles, as cited in Berman, 2003, p. 106), they require “special considerations and accommodations to ensure that ethical standards are maintained” (Mkandawire-Valhmu, Rice, & Bathum, 2009, p. 1726) and their voices are heard.

As researchers, we must look critically at the way research projects are constructed and developed, the way we engage with children, whether our research is conducted in keeping with the highest possible ethical standards, and whether it is carried out in an acceptable and appropriate manner both to the researcher and to the children involved (Mkandawire-Valhmu, et al., 2009; Wilson & Neville, 2009). Smith and Taylor (2003) argued that a child’s willingness to speak and be heard is “not so much one of the child’s ability to provide information, as it is of the adult’s competence to elicit (or observe) it in the context of a trusting, supportive and reciprocal relationship” (p. 213).

The ethical dilemma emerges when researchers have to make difficult decisions between their own aspirations for their research project and the needs of the children involved in the study. Research with children as research collaborators or co-investigators runs the risk of being derailed, leaving the researcher’s question unanswered. Researchers who engage in classroom research subject themselves to the day-to-day activities of the classroom, where things don’t always go as planned. School life and children can be unpredictable, and it is often impossible to firmly determine such things as timelines and schedules.

Researchers, though, should not be deterred, as collaborative research with children may very well yield rich stories.

A reciprocal relationship is absolutely fundamental in order to address the ethical dilemmas inherent in the researcher-child participant relationship and is best built on a foundation of collaboration, critical thinking, problem-solving, and decision-making. Such a collaborative foundation might be most fruitfully achieved through a qualitative approach. Describing the approach of the qualitative researcher, Ely, Vinz, Downing, and Anzul (1997) stated that “qualitative researchers are interested in telling, and are often consumed by the need to present their stories of research as an ongoing journey” (p. 52); here, I would argue that these are the same needs we see in children, needs that are often ignored by researchers.

When conducting research with children, researchers should be reflexive, asking questions such as the following: Can children be engaged as co-researchers, telling and presenting their own stories as an ongoing journey? How do we balance the needs of the researcher with the needs of the participant? How do we ensure that the child is a speaking personality (Maguire, 2005)? And how do we ensure that the voices of children are heard and responded to in a way that allows them to be engaged fully in the research process, rather than merely objects of study? What are the ethics of doing research *with* children as opposed to *on* or *about* them? More specifically, who should be directing the research? Who should be in control? Is it possible to establish a design and adhere to timelines, and still respect and value the needs of children in a classroom? What is the role of the researcher when engaged in research with children, particularly classroom ethnographies? What is the most effective role for children in research? How do we deal with issues of consent and participation? To whom does the responsibility for consent belong?

The remainder of this paper makes a case for ethnography as a possible solution to ethical dilemmas encountered by researchers working with children. A case study of my own research is then offered as a practical example of how I was able to employ a qualitative methodology in such a way that satisfied not only my research objectives, but also benefitted the children involved in the study. Finally, in the conclusion, lessons learned along the way and implications for future research are discussed.

SOLVING THE ETHICAL DILEMMA: ETHNOGRAPHIES WITH CHILDREN

Ethnographies provide the landscapes and the details of worlds. They aim to discover, understand, and describe human behaviour holistically, as it occurs naturally within social and cultural contexts. In so doing, ethnographers can look for patterns and themes that ethnographic consumers can take away and use to enhance their own understandings of similar actions and contexts.... [An ethnography] is appropriate for questions that ask why, how, what is happening, and what does it look like? (Purcell-Gates, 2004, p. 95)

Ethnography is particularly useful with children as it allows them “to be seen as competent informants about and interpreters of their own lives and the lives of others and is an approach to childhood research which can employ children’s own accounts centrally within the analysis” (James, 2001, p. 250). In order to do this, however, it is necessary for researchers to find ways of being in the classroom that allow for shared power, which makes classroom ethnographies no different from cultural ethnographies.

Classroom ethnography refers to the application of ethnographic and socio-linguistic or discourse analytic research methods to the study of behaviour, activities, interaction, and discourse in formal and semi-formal educational settings such as school classrooms... [it] emphasizes the sociocultural nature of teaching and learning processes, incorporates participants’ perspectives on their own behaviour, and offers a holistic analysis sensitive to levels of context in which interactions and classrooms are situated. (Watson-Gegeo, 1997, p. 135)

While many researchers have studied educational change from an institutional or teacher perspective, few have looked at how inquiries come to be valued or not valued by children and the role played by perceived ethical issues. Ethnography with children allows for the co-construction of knowledge through meaningful activities and quality interactions where children and researcher act “as resource for each other and assume varying roles and responsibilities in decision-making” (Maguire, 2005). Work with children, who often bluntly speak their minds, gives us great insight into how these issues can be dealt with in other vulnerable but less outspoken populations. A “power with” approach should be valued over a “power over” approach in order to demonstrate to children a willingness to develop a partnership with them (Wilson & Neville, 2009, p. 76).

Ethnography *with* children is very much about process. It is about acknowledging that the journey is the destination and that the adventure is very much shaped by who and what we are in a very dynamic and ever-changing process. It is also about enculturation and moving beyond guest and/or outsider status in a culture. Enculturation requires familiarity gained by the researcher’s presence in the classroom for an extended length of time (Tedlock, 2000) and acceptance as an insider gained through full engagement, not simply observation. Most importantly, ethnography with children is about validating the voices of children in meaningful and authentic ways (Maguire, 2005) while ensuring that they are reflected and re-presented accurately and fairly within the socio-political, educational, and/or historical context of the inquiry.

As valued and accepted insiders, researchers can gain insight into the day-to-day classroom and school realities and gather information on how to appropriately engage and work with children (Wilson & Neville, 2009). Ethnographers need to be “part of the process, continually making choices, testing assumptions, and reshaping their questions” (Rossman & Rallis, 2003, p. 4). Yet children,

too, share these needs. If children are encouraged and allowed to join in the process, they are put on equal footing with ethnographers. Ethnographers should be fully aware of their privileged positions and work to establish a rapport with participants (Wilson & Neville, 2009; Wolcott, 1995) that is based on trust and respect, participation and engagement in decision-making and problem-solving, and the celebration and safeguarding of participants' worldviews, values, and beliefs. This familiarity will ensure that children are more confident decision-makers with regard to whether or not to participate and where, when, and how to participate. Because participation to a child may be significantly different than to a researcher, it is critical for researchers to make "an emotional, linguistic, and intellectual effort to enter children's worlds so that no child is left out, ignored, comprised, at risk, or uninformed about what it means to participate in research activities" (Maguire, 2005).

Ethnography is often characterized by emergent design and responsiveness to participants' worldviews, wants, and needs; if these are collaboratively negotiated, the likelihood is that children will accept a researcher in their community. Because decision-making and problem-solving are often shared, ethnographies require flexibility and demand that researchers take risks not normally found in traditional scientific investigations. Researchers must be patient and assure themselves from the beginning that many inquiries, particularly those in naturalistic settings, develop life cycles of their own, especially within the context of a school (Wolcott, 1997).

In conclusion, ethnography, by its design, values children's needs for cultural and emotional safety, and is an approach that involves "doing the right thing, at the right time, in the right way" (Wilson & Neville, 2009, p. 75). Fieldwork becomes "as much a matter of luck and being in the right place at the right time as it is a matter of good training" (Van Maanen, 1988, p. 78).

AVOIDING ETHICAL DILEMMAS: ONE EXAMPLE

What follows is a description of how one classroom ethnography unfolded in ways that solved the basic ethical dilemmas and issues identified above. The design was emergent as the goal was to empower students, engage them in research, and ultimately understand how they would speak, think, and act when engaged as collaborators and co-investigators. The ethnography unfolded in five phases that included initiation, exploration, learning, adoption, and taking social action. Each stage allowed students to fully explore their roles and responsibilities in a research context. The research focused on the use of text-to-speech technology (TTST) as a high yield strategy in the regular classroom; students were trained to use the software and then ultimately freed to make a choice about its use in their day-to-day reading. (Note: Text-to-speech technologies convert print texts to electronic auditory texts, bypassing issues of decoding.)

Initiating: Getting started

On November 13, an invitation to participate in my research project was extended to 28 grade 5 students. I anticipated getting started at the beginning of December; their expectations were different. As a result, on November 14, I readied my consent forms and supplies and entered the classroom. I recognized their excitement as a sign of engagement. My entry to the classroom on their timelines demonstrated willingness on my part to share power and control. Since my letter of introduction had been shared with them, students were familiar with the project. Beginning with a question and answer period allowed them to construct their knowledge of what participation, consent, research, and the project meant to them. Each child was asked for their written consent prior to their guardian's consent. This allowed *them* to make the choice to participate or not; had any child dissented, a guardian consent form would not have been sent home. While securing guardian consent, an interesting situation arose, which attested to a child's sense of agency and competence. One set of guardians out of 27 declined participation on their daughter's behalf. She did not agree with their decision, returned home, explained in great detail the purpose and process of the inquiry, and subsequently persuaded her parents that she should participate. Clearly, she did not feel compromised by the inquiry and wanted her voice to be heard along with the others; a signed consent was returned the next day.

Exploring: Working through the novelty

During November and December, students explored various forms of instructional technology. Parameters to support this transition-to-inquiry period were established; mini-lessons were interspersed with instruction when needed, highlighting the importance of responsiveness in an intervention or research setting. If participants are not ready or interested, then there is no vested interest or purpose beyond novelty for them to learn and/or participate. Child participants established a pattern of responsibility, risk-taking, a sense of agency or self-efficacy, and self-advocacy as they worked through the novelty of my presence and the technology.

As the exploration of technology progressed, I noticed that its novelty wore off and students developed a sense of comfort and confidence. The students were the ones who made the decision to move on to the next phase; they indicated when they were ready to take a risk and try something new. In this way, a collaborative relationship was established, power was shared, and individual needs were responded to; as a result, benefits were maximized and risks were minimized.

Implementing: Learning about text-to-speech technology

Throughout January and February of the next year, the intervention was formally introduced, mini-lessons were structured, and information regarding

tools was provided by both myself and experienced students. In order to share the experience with students and retain a balance of power, I avoided the tendency to formally instruct. Instead, I proceeded by structuring opportunities for students to use TTST for real and authentic purposes. They explored, they inquired, and I responded. Allowing students to explore intuitively built ownership in the use of the technology, allowed students autonomy, and thereby maintained a balanced power relationship between child and adult. It also respected students' ability to make decisions for themselves, thus minimizing the power risk inherent in "adult knows best."

Adopting: Making an Informed Decision

At the beginning of March, students were free to make a choice about the technology and provide a rationale for their decision informed by what they understood about themselves as learners, readers, and participants in the inquiry. When asked why they had chosen one text type over another, many students explained that simply having the freedom to choose solved what they considered to be a social justice issue. This simple reflection demonstrates their ability to grasp ethical dilemmas, communicate effectively, and make appropriate decisions. What this phase really made clear was the necessity for students to have legitimate choice and control, not just perceived control; it really didn't matter which option they chose, provided that by the end of the block, the text had been read in a way that fostered comprehension and discussion.

Reflecting: Taking social action

This final phase was unexpected and unplanned from my perspective as researcher, but necessary for students' sense of agency, self-efficacy, and self-advocacy. In response to a student suggestion - "We should tell Kurzweil [the software developers] what we think!" - students co-constructed a letter that outlined their experiences with the technology, insights they had gained, and suggestions for future versions. Listening in on conversations all year, I knew that these students were more than competent; they had something valuable to say about technology, something that would be meaningful to the software developers. Just the beginning of their letter provides us with great insight into the power, control, competence, and confidence possessed by these students: "Today, we would like to be your conscience. We are going to be the voices in the back of your head telling you what we like about Kurzweil and what we think you need to know to make it even better...."

A CRITICAL RETROSPECTIVE: WHAT I'VE LEARNED ABOUT ETHICAL DILEMMAS AND CHILDREN

The child as speaking personality

Classroom ethnographies provide a space for dialogue and negotiation between child participants and researchers where the worldviews, traditions,

protocols, cultures, and political realities of children are celebrated and valued. As researcher, this required that I not privilege my knowledge over that of participants' but instead recognize their expertise by listening and observing before speaking. What I needed was a sense of humility, and a disposition towards celebrating and valuing their worldviews, protocols, and needs in a safe environment where they were willing to take risks. The students' active engagement and full participation in the inquiry enabled them to develop and strengthen their expressive ability, their competencies, their self-confidence and self-esteem, and their ability to challenge and question (Lansdown, as cited in Maguire, 2005), which in turn gave them the courage to speak up. Their need to take action transformed them into speaking personalities instead of simply objects of study.

From a retrospective and critical literacy standpoint, I now realize the effectiveness and the importance of allowing the inquiry to unfold naturally in a way that was responsive to the needs of children and their right to be heard. Although we spoke about confidentiality, they wanted their voices to be heard and their own names used as a way of demonstrating that they had been real and active participants. As a compromise, we agreed that they could suggest their own pseudonyms; many students exercised power and control by choosing names that they would have given themselves if given the opportunity, or providing the names of personal heroes.

The researcher and child as co-investigators

Collaborator, fully engaged participant, co-investigator, co-writer – any of these titles could be ascribed to the participants in this inquiry as well as to myself as researcher. A shared and mutually respectful power relationship is critical in the development of rapport, particularly with children. Participant comments such as “you should let us teach others” or “it is best to let us learn by doing and interacting with each other” remind us of the agency of children along with not only their willingness to take risks, but their competence in the process as well. Researchers who are willing to respect the views of children and share ownership in the process of inquiry are far more likely to negotiate meaningful and authentic conversations and relationships with their research participants.

Ethnography as ethical balance

Ethnographers involved in real life classroom research with real children must be open to the day-to-day life and needs of students, parents, teachers, classrooms, schools, and at times, political contexts; this is far from a lab situation that allows for the tight control of variables. Inquiries and/or research questions as originally envisioned and/or designed by the researcher do not always unfold in the intended way. What becomes far more important is the need for responsive balance, flexibility, and creativity. These qualities of

ethnographic research allow scholars to share the responsibility of decision-making and problem-solving with participants and achieve a more balanced researcher/child participant relationship. Regardless of how well prepared I was as researcher, or how well I *controlled* my research design, there was no possible way that this could be lived out in a real life classroom with real children – not if I was looking for results that were real, meaningful, and authentic. Perhaps most importantly, the emergent design of the inquiry allowed the students, the teacher, and myself to make day-to-day choices that were of benefit to the students, the school community, and the project, all of which contributed to its success (Harste & Leland, 2007).

Classroom ethnography as method allowed me to explore and negotiate with participants such things as sequencing and format of lessons, classroom and research organization, and day-to-day interactions. This negotiation both recognized and addressed issues related to vulnerable populations, including the need to be heard, power relations, novelty, risk taking, decision-making, consent, confidentiality, and taking social action. Research participants from vulnerable populations (those most often studied in ethnographies) “must feel their voices are being heard, that they are respected, and that the research process feels safe;” further, they need to feel like themselves, believe that the research is connected to their lives in a real and authentic manner, that they are involved, and that they have choices (Wilson & Neville, 2009, p. 77); they must feel “that they can trust the researchers and what they will do with the information shared with them” (p. 72).

IMPLICATIONS

While this paper deals specifically with children as a vulnerable population, the process outlined is equally applicable to other vulnerable populations, particularly those who have linguistic, cultural, and/or intellectual differences that might interfere with balances of power, perceived risk, consent, and confidentiality. Emergent research design and classroom ethnography ensure that participants are competent and comfortable speaking personalities. If the principles of partnership, participation, protection, and power (Wilson & Neville, 2009) can be upheld with children, then they can also be upheld with other vulnerable populations.

In conclusion, future research undertaken with children or other vulnerable populations, should ensure that:

- researchers look critically at the purpose of research and how research projects are constructed;
- ethical standards are maintained throughout an inquiry, recognizing that with children issues of assent, consent, dissent, confidentiality, and ethics need to be ongoing conversations;

- costs, benefits, and risks are continually re-assessed with participants, and the research design, day-to-day interactions, and practices revised when necessary;
- a balance of shared power and trust is maintained that allows participants a legitimate right to speak, be heard, participate, and negotiate ways of being in the research that respect and validate their unique perspectives and culture;
- adequate time is allocated for inquiry whereby researcher and participants have time to negotiate, develop partnerships, explore, work through novelty, learn, make informed decisions, and take social action, all of which enhance agency, self-efficacy, and self-advocacy.

Ethnography as method allows researchers to go where participants need to go, not where they think they should go. Ethical dilemmas can be alleviated and much knowledge can be gained when researchers facilitate, negotiate, and guide as opposed to direct; ask the right questions and do the right things at just the right time; balance their needs with those of participants; and ensure that participants' voices and perspectives are listened to, valued, and celebrated.

REFERENCES

- Berman, H. (2003). Getting critical with children: Empowering approaches with a disempowered group. *Advances in Nursing Science*, 26(2), 1020-1113.
- Dorsey, C. J., & Murdaugh, C. L. (2003). The theory of self-care management for vulnerable populations. *Journal of Theory Construction and Testing*, 7(2), 43-49.
- Ely, H., Vinz, R., Downing, M., & Anzul, M. (1997). *On writing qualitative research: Living by words*. London, UK: Falmer Press.
- Harste, J., & Leland, C. (2007). On getting lost, finding one's direction, and teacher research. *Voices from the Middle*, 14(3), 7-11.
- James, A. (2001). Ethnography in the study of children and childhood. In P. Atkinson, A. Coffey, S. Delamont, J. Lofland, & L. Lofland. (Eds.) *Handbook of ethnography* (pp. 246-257). Thousand Oaks, CA: Sage.
- Maguire, M. (2005). What if you talked to me? I could be interesting. Ethical and research considerations in engaging research with bilingual/multilingual child participants in human inquiry. *Forum: Qualitative Social Research*, 6(1), Retrieved June 10, 2007 from <http://www.qualitative-research.net/fqs-texte/1-05/05-14-e.htm>.
- Mkandawire-Valhmu, L., Rice, E. & Bathum, M. E. (2009). Promoting an egalitarian approach to research with vulnerable populations of women. *Journal of Advanced Nursing*, 65(8), 1725-1734.
- Purcell-Gates, V. (2004). Ethnographic research. In N. K. Duke & M. H. Mallette (Eds.), *Literacy research methodologies* (pp. 92-113). New York, NY: Guilford Press.
- Rossmann, G. B., & Rallis, S. F. (2003). *Learning in the field: An introduction to qualitative research*, 2nd ed. Thousand Oaks, CA: Sage.
- Smith, A. B., & Taylor, N. (2003). Rethinking children's involvement in decision-making after parental separation. *Childhood*, 10 (2), 201-216.
- Tedlock, B. (2000). Ethnography and ethnographic representation. In N. K. Denzin & Y. S. Lincoln. (Eds.) *Handbook of qualitative research* (2nd ed., pp. 455-486). Thousand Oaks, CA: Sage.

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Van Maanen, J. (1988) *Tales of the field: On writing ethnography*. Chicago, IL: University of Chicago Press.

Watson-Gegeo, K.A., (1997). Classroom ethnography. In N. H. Hornberger & D. Corson, (Eds.), *Encyclopedia of language and education, volume 8: Research methods in language and education* (pp. 135-144). Dordrecht, The Netherlands: Kluwer.

Wilson, D., & Neville, S. (2009). Culturally safe research with vulnerable populations. *Contemporary Nurse*, 33(1), 69-79.

Wolcott, H. F. (1995). *The art of fieldwork*. Walnut Creek, CA: Alta Mira Press.

Wolcott, H. F. (1997). Ethnographic research in education. In R. Jaeger (Ed.), *Complementary methods for research in education* (2nd ed., pp. 327-353). Washington, DC: American Educational Research Association.

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