

Overseeing Research: Ethics and the Institutional Review Board

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Abstract: In this paper I examine my experience of submitting a research proposal to the Institutional Review Board of a university. In the United States of America Institutional Review Boards (IRBs) are federally mandated ethics committees that evaluate research proposals to ensure the rights of human subjects are protected by conducting a risk benefit analysis of proposed research, ensuring that informed consent and confidentiality protocols are applied appropriately, and that the selection of participants is just and equitable. While accepting the need for IRBs, I suggest that their documentation and practices privilege specific research practices. This paper seeks to highlight the emerging consistencies and contradictions of this documentation when applied to a research approach seeking to study an urban science classroom and argues that there needs to be an ongoing dialogue to examine and acknowledge these contradictions in their documentation.

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1. Introduction

Prior to the beginning of the 2004/2005 academic year, I was invited to join an urban science education collaboration with colleagues from two other universities. The goal of our collaboration was to share research methods and our research experiences. I was interested in examining the learning environment a beginning chemistry teacher and the students he taught created as they studied chemistry and prepared for a high stakes State exam at the end of the academic year. This issue was of particular interest because a major goal of the science education program in which I worked was to prepare people to teach science in middle and high school. We offer an undergraduate and a graduate program but have far less contact with students in the undergraduate program who have to learn both the science discipline they are going to teach and the pedagogy associated with that teaching. So I was interested to discover how a graduate of our undergraduate program negotiated her/his transition as a new teacher. [1]

In proposing this research study, I was influenced by earlier research on learning to teach in urban schools (TOBIN, ROTH & ZIMMERMANN, 2001; ROTH, TOBIN, CARAMBO & DALLAND, 2004). I knew a beginning chemistry teacher who I spoke to about his possible interest in the study. We discussed the study and it was agreed that I would attend one chemistry class at least three times a week for an entire academic year and interact with the teacher and students. I would attend more often if needed to observe a specific activity or set of interactions. I was interested in the cultural resources that the teacher and the students brought to the classroom and how they used these resources in the classroom. I was interested also in interacting with the teacher and students to examine possibilities for change that might improve students' options for learning chemistry. I wanted, as much as possible, to be embedded in the classroom so that I became a familiar face to the students and the teacher. As such, my research approach would be ethnographic grounded in an epistemology in which knowledge generation is active and context-based and influenced by the meanings and values that all participants bring to a study (BARTON, 2001). I was anticipating that an institution that is seeking to develop a higher research profile would provide as much assistance as possible to early-career researchers such as myself and that the operation documentation of the committee that oversees research approval would be sympathetic to a broad range of research methods. In this paper I attempt to articulate some of the challenges that I faced as a beginning qualitative researcher seeking approval to conduct research in an urban high school science classroom and reflect on possible implications for other qualitative researchers. [2]

2. Gatekeepers and the Emergence of Ethical Conundrums

Once I had a likely teacher-participant, I knew that I needed to approach the Principal of the school for her support for this research study. For classroom research, principals are one of the organizational gatekeepers (BROADHEAD & RIST, 1976; COUPAL, 2004) whose support is necessary for a proposed study to progress any further. BROADHEAD and RIST describe a gatekeeper as a third party that has control of research access to some populations such as school children and employees of a specific organization. [3]

Although I began organizing approval for this research study before the beginning of the 2004 school academic year, it was well into the first month of school before I had permission from the Principal. I began to realize that gaining permission to conduct this research was going to take longer than I had anticipated because I still needed approval for research from the following additional gatekeepers: the Superintendent of the school district, the Research Department of the school district, and the academic institution of which I am a member. However, once I had the permission of the Principal I could move to achieve the second level of permission, which involved the school district and the academic institution. In the United States, Institutional Review Boards (IRBs)¹ are federally mandated ethics committees charged with evaluating any research conducted under the auspices

¹ IRBs seem to have similar responsibilities to Ethics Review Boards and Research Review Boards in other countries.

of research organizations such as universities. With the implementation of more stringent requirements for research permission, WAX (1980) argued that although IRBs served to make researchers more conscious of the ethical implications of their research, these Boards also served as agencies that denied populations the right to determine for themselves the type of relationship they might have with researchers. In 2004, this was still the case. [4]

Recognizing that I was a novice at obtaining permission from an IRB especially with the tightening of requirements in 2003, I met first with the School of Education's expert to find out what I needed to do. Once I had developed the initial proposal, I met with the head administrator for the University Committee on Activities Involving Human Subjects (UCAIHS) that functions as the university's Institutional Review Board (IRB). Once I acted on the advice of the administrator, I met twice with the School of Education's representative on the IRB to try to make sure that I had addressed adequately the aspects of the research process outlined in the documentation of the IRB for activities involving "human subjects." [5]

This human subjects documentation outlines the responsibilities of IRBs for protecting human subjects by conducting a risk benefit analysis of proposed research, ensuring that informed consent and confidentiality protocols are applied appropriately, and that the selection of participants is just and equitable. However, as AZAR (2002) notes, IRBs often are challenged in their functioning by the need to achieve a balance between protecting human research participants and preventing delays and/or making requests to researchers that seem unreasonable (ANTHONY, 2005). At the same time I was developing a proposal for the IRB, I was also developing a proposal for the Research Office of the School District. Both require research permission from the other before giving their approval for the research creating a Catch-22 situation that seems irresolvable except to acknowledge to one research approval group that one is currently seeking approval from the other group. It was over a month before I received a response from the IRB and it came in the following format:

At its recent meeting, the University Committee on Activities Involving Human Subjects (UCAIHS) reviewed but deferred approval of your proposal entitled, "Seeking a Balance: Investigating the Teaching and Learning of Chemistry, an Urban Chemistry Classroom with a Beginning Teacher." Before granting approval, the Committee requests a response to the following concerns:

5. Confirmation of the amount of the stipend, which is currently listed as \$5000 (this is a far greater incentive than normally offered and could itself be construed as coercive). (Institutional Review Board, 2004) [6]

In all the UCAIHS raised eleven concerns about my application to conduct classroom research. Initially, my response was one of frustration—I had met with a faculty advisor, an administrator for the IRB, and faculty member of the Committee on four separate occasions before submitting the application and although I had been advised not to expect my application to pass without some queries, I did not expect such a number of concerns. Unfortunately, the faculty

member with whom I met prior to submitting my proposal who perhaps could have been an advocate, or at least could have explained my goals and proposed actions, was not a member of the section of the committee that considered my application. Some of the concerns listed by the committee such as the one I have chosen to acknowledge in the quote above engendered an immediate feeling of frustration but also disbelief. [7]

I felt that the response of the IRB to my proposal was similar to that described by ROTH (2004) when chairs of ethics committees complied a laundry list of reviewers comments without making any decision about the salience and reasonableness of the comments. This was confirmed when I met with my committee-assigned mentor who was to assist me with my response to the committee. When I critiqued some of the comments that had been made, for example one comment had asked me to indicate the age of the student participants but in my initial application their age range was listed on the first page, she indicated that it was enough for one member of the committee to articulate a concern for it to be included in the issues requiring further response. Also listening to the advice and the concerns of the IRB, I was reminded of ROTH'S assertion that members of the IRB had either no experience or a limited level of experience conducting research in school classrooms. This suggests that researchers seeking to conduct qualitative research in classrooms must fulfill two goals on their application: complete the documentation and assist members of the IRB to understand what it is like to conduct research in classrooms. [8]

Once I began to respond to the concerns raised by the Committee, I was forced to reflect on the apparent gulf between my notions of ethical research and those of members of the committee. Reflecting on my experience as I composed this paper and on the tasks assigned to the UCAIHS, has made me more sympathetic to the challenges committee members face as they apply federal regulations and ethical standards to a broad raft of research proposals but I think that forms of qualitative research are not well understood by members of with whom I am interacting. [9]

My concerns about how IRBs operate is not related to the technical aspects of balancing protection of research participants against delays in the implementation of research, although it would be helpful if they could respond more quickly. Rather, it is with the forms of ethics and research methods that are privileged by their current discourses and practices. In the following sections of this paper, I examine the implications for research associated with the language of IRB documentation and the types of research privileged by that language, the form of ethics that is underpinned by concepts such as individual risk benefit analysis, informed consent, "subject selection and recruitment," and confidentiality, and the ethical conundrums that emerge. [10]

3. Ethical Conundrums and the Theory, Language and Practice of the IRB

3.1 Power and ethics

According to the documentation from the IRB that is available to applicants, research generates "generalizable knowledge" through "systematic investigations." These "systematic investigations mean that information is arranged allowing conclusions to be drawn that are accessible to peers." This language supports an ethical and philosophical stance that the knowledge generated by research so described is intrinsically good, or at least neutral, so truthful means must be used in the conduct of research that will generate this knowledge requiring imperatives such as informed consent and confidentiality (MAY, 1980). These imperatives have not become one possible approach to being ethical but the only approach to being ethical and therefore have become fundamental principles of IRB documentation. Taking a FOUCAULTian perspective, COUPAL (2004) argues that when knowledge production is viewed as a neutral practice, using ethical guidelines to fairly represent the views of participants is workable. But if we accept the FOUCAULTian argument that those in power determine what counts as knowledge then these protections might do more to support those who control the research process rather than those who would be research participants in a study. [11]

3.2 Language and practice

The IRB documentation describes human subjects research as any activity intended to obtain and record information from or about individuals for research purposes and a human subject is a living individual about whom the investigation obtains data through interventions with the individual or via identifiable private information. Other researchers (AZAR, 2002; McKEE, 2003; OAKES, 2002) have argued that underpinning much of the language of the documentation for IRBs is a biomedical research model. The language that frames the description of human subjects seems to privilege research that establishes a distance between the researcher and the researched. The researched become objectified. They are "human subjects" on which something is done to generate data. The research field can be controlled and it is possible to predict the likely outcomes of the research. However, there exist other research models such as those framed around ethnographic and feminist perspectives in which the researcher becomes part of the research process, the agency of all participants becomes an integral aspect of the research process, where the field is complex and changing, and where the outcomes cannot be predicted in advance of participation in the research process (LATHER, 2004). In the language of IRB documentation there is an element of a focus on objectivity, prediction, and control rather than description, interpretation, and discovery. Currently, there seems no place in the IRB documentation for language to describe the role of humans in these alternative forms of research. [12]

In my case, I was interested in seeing if the teacher with whom I hoped to conduct research might be willing to use co-generative dialogues with his students. Co-generative dialogues (ROTH & TOBIN, 2004) constitute concrete situations in which all stakeholders can examine the contradictions and consistencies that emerge from their experiences of teaching and learning and consequently design changes for themselves that can be implemented. Co-generative dialogues as an alternative to interviewing teachers and students also provide a site for the generation of theory as part of the research and provide a space for conversation with stakeholders. However, in my application to the IRB I described them as "focus groups," a term with which I thought members of the IRB would be more comfortable even though I felt uncomfortable using a term that did not communicate my theoretical and practical stance. Of course, once I had introduced the term, focus groups, I was then required to outline the types of questions I might ask. [13]

Although I acquiesced to the requirements of the IRB and outlined such questions, I felt conflicted because I knew that I did not plan to proceed with cogenerative dialogues if any one of the stakeholders was not interested in using this form of interaction. Also, and perhaps more importantly from a research perspective, I did not want to impose a particular structure on co-generative dialogues based on specific questions but wanted to see what sort of conversations would emerge from the participants who were present as they took a more active role in generating the conversation, making decisions for change and assigning responsibilities. [14]

If I was beginning this application process with what I now know, I might frame my study proposal differently and be more willing to attempt to engage the IRB in a conversation about this issue. Part of the problem was also the mind set that I initially brought to the application process because I saw it as a hoop to jump through rather than recognizing the possible personal ethical conundrum posed for myself when I was not initially true to the research practices I value. [15]

3.3 The utility of research

Like other research evaluating committees, the IRB with which I am interacting is charged with the task of analyzing my proposed research using a risk/benefit analysis. This procedure, which has evolved historically to be one of the major tasks of IRBs (HECHT, 1996), is an example of utilitarian ethics in which a committee decides the overall harm or good that a specific proposed research study might produce (MAY, 1980). In my case, this analysis by the IRB seemed positive since I was not required to further justify my research proposal. My experience was different from that reported by McKEE (2003), a scholar in communication and composition, whose research was assessed as "not beneficial because it did not provide 'tangible benefits' to participants" (p.491). However, I must admit that I felt uncomfortable with the thought of weighing the risks and benefits of research because how can one know in advance the risks or benefits that might accrue through the conduct of research? If I was conducting a clinical study where variables are controlled it might be easier to make these

assessments because the goal of such research is to control the context and assign cause and effect. I have conducted research studies with school children, teachers, and pre-service teachers in multiple settings, using classroom observation and interviews, videotaping, audio-taping, and generating field notes. The contexts of these studies are complex and fluid and it is difficult to predict research outcomes at the commencement of research. In many of the research contexts, participants including pre-service teachers, students and teachers commented favorably on their experience as a research participant because I was someone who was interested in their practices, their knowledge and their experiences. However, long term I expect that many of the participants in these studies forgot about me and my research but how can any researcher know? [16]

As I mentioned earlier, this form of risk/benefit analysis is combined with two other cornerstones of ethical research, informed consent and confidentiality and incorporated into legislation that informs the deliberations of IRBs. These are universal ethical principles for individuals that emerged from KANTian ethics, a completely different theory of ethics than that of utilitarian risk/benefit analysis (MAY, 1980). It seems likely that the KANTian ethics of informed consent and confidentiality were introduced to ensure the rights of the individual are considered along with a broader risk/benefit analysis of the proposed study. Integrated into IRB deliberations, and associated with the need to ensure respect for individuals, are questions associated with how a researcher selects participants for her research study. The process of selection is viewed as having implications for both informed consent and confidentiality. [17]

3.4 Coercion, subject selection and/or a community of researchers

For those of us wishing to conduct classroom research, "subject selection and recruitment" as it is labeled in the IRB documentation, can become a vexed issue especially when one is asked to address the issue of coercion. Although coercion is not mentioned anywhere in the application document for research with human subjects, clearly in my case at least one member of the IRB was concerned that my offer of a \$5000 stipend to the participating teacher was coercive because it was greater than "normally" offered. There is no doubt that coercion is a subtle issue. OAKES (2002) describes more obvious forms of coercion in situations where research participation is tied to grades and less obvious ones where the researcher comes from a position of power to convince people to participate in a study. Coercion is associated with the exercise of power to cause someone to do something they might not do if they felt able to enact their own agency. One way of attempting to shift some of the power differentials associated with having university researchers work with teachers and students is to provide opportunities for teachers and students to work as researchers. However, it was clear to me when I initially raised this as an option with an administrator for the IRB that such a research approach would not be looked upon favorably by the committee. [18]

In the required documentation researchers, students, and teachers, are positioned in a specific way to remove the impression of coercion but this process of separation creates a research discourse of the "investigator" and "subject" with

which I am uncomfortable. On reflection, it seems clear that creating a community of researchers where the context blurs the separation of the researcher and the researched makes it more difficult to separate the passive researched from the active researcher. Such an approach is not likely to be approved because it makes it more difficult to formalize the contract that lies at the heart of how informed consent is constructed by IRBs. [19]

I would like to examine further the issue of coercion and the offer of a stipend to the participating teacher. I have always conducted research in schools by inviting teachers to be involved in a research study. I hold no expectations that everyone I ask will be interested. In the past, I have been dependent on the willingness of teachers and then their students to participate. Like ROTH (2004), I have always been humbled by the generosity of both teachers and students who invite me into their classrooms and allow me to participate, to varying degrees, in the life of their classrooms. Having been a teacher for many years I felt that, if I had the chance to recognize participation in a more tangible way, for example through the award of a stipend, I would do so. [20]

The teacher who agreed to participate in my proposed study was aware that participation might involve him in practices such as debriefing after classes, reading research papers, meeting with students to talk about teaching and learning, meeting with colleagues, and assisting with the analysis of data, that could be considered to be an extension to his normal professional duties. Also, I was aware that in science education there had been a move towards providing stipends for teachers who participated in educational programs. Thus, I did not consider that a stipend was unreasonable considering that we would be involved in the research process for at least an entire year. Consequently, once I found a teacher who was interested in participating in the study I told him that there would be a stipend and I included information about the stipend in material I sent to the IRB. Consequently, I was very surprised when I read Concern 5:

5. Confirmation of the amount of the stipend, which is currently listed as \$5000 (this is a far greater incentive than normally offered and could itself be construed as coercive). [21]

Writing to a colleague my chagrin and frustration are clear:

I tried to use the language of the form but obviously not enough. It's funny because I am as yet unaware of any teacher, even a beginning one, that you can tell to do something in their own classroom and they will do it. I have far greater coercive power with the people I teach! Needless to say the language for Consent Forms was changed from when I started this process. At least I've got that off my chest!! [22]

Part of my response to the IRB was as follows:

As a former practicing high school teacher who has been researched and someone who has conducted classroom research for a research Masters, a doctoral study involving student teachers, and as part of a large NSF grant, I believe that for too

long researchers such as myself have relied on the largess of teachers to be able to conduct the type of research that I value. I believe that since the teacher involved in the study will be expected to be involved in activities such as read research papers, debrief after the class, meet regularly and keep a reflective journal her/his contribution should be acknowledged. Teachers who were involved in a year long externally funded study in which I was involved as a researcher were offered the chance to complete doctorates and also supported in other ways to a level of support that far exceeded the stipend I propose. Considering the tasks that I request of the invited participant, I think the stipend is fair. [23]

However, the concern expressed by the IRB has made me more aware of the subtleties of coercion and how actions can be interpreted differently. As in all research situations, it is particularly important for me to be honest and open about the research, the goals that I have, and the benefits that I hope might come to both students and teachers. The students with whom I propose to work are young but reaching towards maturity. I realize that I will come to them from one position of power but they also hold the power to influence whether or not the research progresses and without their participation it will not be possible to develop a rich picture of classroom interactions. The IRB documentation with its language of subject selection and recruitment reinforces the concept of passive subjects and active researchers that serves to buttress a power differential. This issue of the relationship between power and knowledge and its implications for the forms of research that are permitted by the IRB needs further discussion of the role of power in the forms of ethics that are valued by IRB documentation and the implications this has for how the researcher and the researched are constructed. [24]

3.5 Informed consent and confidentiality

The ethical constructions of informed consent and confidentiality became especially problematic in my proposed study because I wished to videotape classroom interactions. The IRB documentation describes "informed consent" as the following:

A basic underpinning of all the codes of Ethics

Ensures voluntariness of a subject's participation

Reflects respect for an individual's autonomy

Generally documented in writing

Consent form is only part of the process by which the researcher ensures that the subject understands the nature of the research and can decide, knowledgeably and voluntarily, whether or not to participate. [25]

The fundamental principles of informed consent are that the consent is knowledgeable, exercised in a non-coercive situation, and made by competent individuals. It could be argued that the language of informed consent, based as it is on the moral imperative that research participants have the right to be treated as persons not objects and to have their autonomy and humanity respected, and the language of subject recruitment in which subjects are objectified, stand in

contrast to each other (THORNE, 1980). THORNE also argues that informed consent is designed to protect the rights of the individual against the possible claims of the researcher that the research serves a broader social good and therefore the benefits to society outweigh the risks to individuals. [26]

Although IRB documentation talks of "informed consent" as a process, the Consent Form that is distributed to students and parents represents a contract in which students and parents are expected to make an active judgment about participation in the research. It might seem obvious that for minors to participate in research they need the consent of their parents and, if they are over seven years old, should be able to express a personal decision about participation in research via a signed contract. However, the issue of active consent is not as unproblematic as one might think. Studies have indicated that active consent can sometimes skew the participant population, which can have serious consequences for experimental studies and observational studies using surveys (POKORNY, JASON, SCHOENY, TOWNSEND, & CURIE, 2001). Recognizing that informed consent is presented as a universal moral norm, COUPAL (2004) argues that informed consent is not appropriate in all circumstances especially when people do not value their experiences and that self-selection ensures that some participants are not represented in research. She argues for a deep knowledge of the context in which people decide whether or not to participate. [27]

Recognizing that informed consent is an ethical stance informed by a specific epistemology, it should be more strongly framed as a process in which caring interactions are established and maintained over time rather than a contract that once signed is forgotten. [28]

The notion of informed consent intersects with the application of confidentiality, which can be described as the researcher's responsibility to ensure that the decision of someone to become a participant or not remains confidential. Because of my interest in classroom interactions and my desire to involve both the teacher and students in the analysis of data, I wanted to use videotape to collect data for the study. From a change perspective, videotape has the potential to involve all participants in the analysis of data, from the selection of tape to be analyzed to analysis of the interactions that are captured. It allows participants a chance that was previously denied them to revisit classroom interactions and provides a basis for making changes to classroom practices (ROTH & TOBIN, 2004). Understandably the IRB were concerned that my use of videotape did not interfere with each student's right to confidentiality associated with her/his decision whether or not to participate in the research study. They couched their concerns in the following way:

7. Clarification of how investigator will exclude from videotapes those students who do not have parental permission and/or have not consented to participate and, at the same time, preserve student confidentiality from the teacher and other students during videotaping.

10. Revision of the Parental Permission Form to indicate how the child's participation will be kept confidential given the fact that you are videotaping. [29]

Informed consent requires first that participants be knowledgeable about the study. I explained to the IRB that, to the best of my ability, as I introduced the study to the participants I would explain the study and answer any questions that they might have. The Consent Form had been revised to outline what participants would be invited to do. The Consent Forms would come with a stamped envelope that was addressed to me so that the teacher will not know which students were not participating. This procedure would be enacted to prevent arguments of coercion in the relationship between the teacher and the students, that is the teacher has responsibility for assigning grades and should not know which students are not participating. In my response to the IRB, I indicated that my interest is more in the teacher's way of being in the classroom and that I would be videotaping from the back of the room so students would not be able to see who was or was not being videotaped. I also informed them that my current practice when videotaping was to always ask students for their permission to videotape even if they had given prior permission. If videotape vignettes were to be used for research papers or presentations, further permission would be sought. I agreed to obscure the images of students so that they could not be identified on the videotape. Currently, I am awaiting their response. [30]

The issue of confidentiality is a thorny one if a researcher is seeking to create a research community that shares the goal of improving opportunities for teaching and learning. This leads me to ask if this possible to create such a learning community if only a proportion of the learning community are active participants in the research study. I wonder if it would be more appropriate and more ethical to negotiate participation on a day-to-day basis depending on context. [31]

4. Models of Research and Models of Ethics

I note that the current language and ethical theories underpinning the documentation required the IRB is consistent with the current argument of the need for education to move towards "scientifically-based" education research designed to establish causation through the use of experimentation (SHAVELSON & TOWNE, 2002). My concern rests with the apparent desire of some within a relatively new field of systematic study such as education to severely limit the forms of research that are considered acceptable by policy bodies and by ethics committees. Increasingly, the medical model of clinical trials using controlled experiments is presented as a form of "gold standard" for educational research (SLAVIN, 2002). The definition of scientifically based research in education especially amongst some proponents (SHAVELSON & TOWNE, 2002), seems to deify experiments while demonizing other research methodologies retaining a fascination and awe with the process of scientific research, leading educators to propose how education can be made more "scientific" by following specific processes and being more "scientifically" rigorous. Coming as I do from a quantitative research background, my concern with the proposal that research in education be restricted to randomized

experiments is associated with my own experiences of the inability of experiments to cope with the complexity of the classroom. The documentation of the IRB in its current form provides further support for this movement and indicates a further need for the dialogue I have described. [32]

I know that I do not have all the answers but the ethical stance of IRBs is an area of the research process that should be a focus of a more open conversation. Concepts such as *informed consent*, *risk/benefit analysis*, and *confidentiality* are not inherent truths of ethics or categorical imperatives. They are constructs that have emerged from specific ethical philosophies. I do wonder whether the current construct of informed consent is consistent with the type of classroom research I value and that I think has the potential to make a difference to urban classrooms in which I work. A deeper understanding of the complexities of classroom life, establishing collegial research relationships between teachers and students, and providing opportunities for students to have a greater say in their learning will not come from a continued separation of the researched and the researcher. My writing of this paper and reflection on the language and practices of the IRB have also led me to wonder why committee meetings are not open to applicants when their application is being considered so that there might be an opportunity for some sort of dialogue about these issues. [33]

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