Guidance: Research in K – 12 schools

School based research projects require special considerations beyond the federal regulations and University policy. This guidance provides an overview of the unique aspects of conducting research in K-12 schools.

Part I: Definitions

Action research is a common research practice in K-12 settings. It is defined as any systematic inquiry conducted by teachers, administrators, counselors, or others with a vested interest in the teaching and learning process or environment to gather information about how their schools operate, how they teach, and how their students learn (Mills, 2011). Action research is characterized as research that is done by teachers for themselves as a systematic inquiry into one's practice (Mertler, 201).

Coercion occurs when an overt or implicit threat of harm is intentionally presented by one person to another to obtain compliance. For example, an investigator might tell a prospective subject that he or she will lose access to needed health services or educational programs if he or she does not participate in the research.

Undue influence often occurs through an offer of an excessive or inappropriate reward or other overture to obtain compliance. For example, an investigator might promise psychology students extra credit if they participate in the research. If that is the only way a student can earn extra credit, then the investigator is unduly influencing potential subjects. If, however, she offers comparable non-research alternatives for earning extra credit, the possibility of undue influence is minimized. often occurs through an offer of an excessive or inappropriate reward or other overture to obtain compliance.

Part II: Considerations When Participants Are Students

If you are a teacher or administrator working with students who are minors, and you intend to recruit students to whom you provide services, your IRB proposal should clearly describe intent, address conflict of interest, and discuss how the perception of coercion and undue influence risks will be minimized.

Addressing Conflict of Interest

Your role at the school or institution should be clearly described. If you do plan on recruiting students that you serve, the protocol cannot state that there is no conflict of interest. When the subject pool is the researcher's own class, for example, participants are often recruited out of convenience and there may be more benefit to the researcher than to the participants. Past history and a continuing relationship with students can also bias a researcher and affect whether or not free informed consent and assent can truly be achieved. As Nolen & Vander Putten (2007) state "when the researcher is a

member of and plays a role in a system under investigation, issues surrounding role definition, role ambiguity, and role conflict are often significantly greater than when a researcher enters the school as an objective outsider with the explicit purpose of conducting the study" (403).

Addressing undue influence

Undue influence can be subtle. For example, students might feel pressure to participate in research if everyone else in the class is doing so. Influence is contextual, and undue influence is likely to depend on an individual's situation, therefore, it can be difficult to strategize how undue influence can be minimized.

Despite the teacher-researcher's best intentions, the power imbalance between a teacher and student may contribute to a coercive atmosphere and affect the perception that participation is voluntary. As Hick's states in her article Research in Public Schools (2006), "It is difficult, if not impossible, to eliminate undue influence in a setting in which children's lives are orchestrated by adults and in which teachers are often important and, indeed, influential figures in children's lives"(341).

Parents and students may fear that non-agreement will affect their relationship with the teacher or how the student's performance is evaluated. Replicating official-sounding verbiage in the protocol narrative that is provided on the consent form about the voluntariness of the research does not provide a sufficient resolution to decreasing an atmosphere of coercion. Researchers should demonstrate that they are invested in ensuring the voluntariness of the research by providing examples of strategies that will be employed to minimize coercion and promote meaningful and continued consent/assent. The protocol narrative needs to include a description of the tangible measures that will be used to minimize a coercive atmosphere.

Addressing coercion

Instructors have inherent power over students (e.g., through their responsibility for assigning grades). Because of this power relationship, some students will likely feel pressure to comply with requests made by their instructors. This is true independent of whether the instructors try to pressure the students. For example, when instructors ask students to participate in research projects, some students may worry that not participating could influence the instructors' opinions of them or that their grades might be affected. Such potential concerns are problematic regardless of whether the instructor actually would think negatively of nonparticipation or whether the students' grades actually would be affected. Students' perceptions that such negative consequences could happen are enough to make them feel pressured to participate.

Thus, unless the research cannot be reasonably completed in another manner, instructors should not recruit participants from their own courses. However, there are cases in which the research cannot be feasibly completed without recruiting students from a particular course. For example, if the research project concerns a teaching method that will be implemented in the course, then the only possible subject pool comes from the students enrolled in that course. If a research project has a reasonable chance of yielding benefits, and the only feasible way to complete the study is to

recruit in the researcher's course, the research may be permissible if the researcher is able to sufficiently reduce the potential for students to feel pressured to participate.

Strategies for minimizing coercion or perception of coercion

In the rare instances in which recruiting from one's own class is permissible; researchers are expected to minimize the potential for students to feel pressured to participate The following are some examples of how coercion can be mitigated during recruitment.

(i) Have a mechanism to withhold participant names from your knowledge until after the class has ended and the students are no longer under your instruction, or at least until after grades have been assigned.

For example, a research collaborator can run the study and keep any identifying information from the instructor. If a researcher designs a study in this way, two points are crucial:

BEFORE being asked to participate, potential subjects should be informed that the instructor will not know who did and who did not participate (at least until after final grades have been assigned).

The research should be designed so that the instructor cannot infer who participated through indirect means (e.g., by seeing who walks into a laboratory, by getting a list of who earned credit for participating in the study).

(ii) Ask a neutral third party not involved in the research to recruit students on your behalf (it can be another teacher).

(iii) Expand the subject population so that volunteers are sought not just from your own classroom but from other classrooms.

(iv) Re-verify assent by developing data instruments to include a yes or no response item, stating “Please include my answers in the study,” which allows students to opt out of the study while still participating in classroom work.

(v) Reduce peer pressure by including reasonable rewards for participation and attractive alternatives for those who don’t participate.,

When developing a protocol, several of the identified strategies may be used. Additional strategies may also be developed depending on the nature of your research, subject population, and the community in which research is conducted. Your strategies for minimizing coercion, alternatives to participating, and any rewards provided are to be detailed in both the protocol and informed consent process.

Addressing inequitable subject selection and stigmatization

Every effort should be made in the school setting to recruit students who would most benefit from participation in the study. This must be balanced by an equal effort to avoid singling out students from their classmates. The following three examples outline some problematic subject selection strategies that have been presented in IRB protocols in the past as well as some alternative strategies that can be employed to prevent stigmatization of students.[1]

Example One: Research targeting specific groups of students. Concerns are raised when investigators target a specific sub-group of students in a general education setting (e.g., low-performing students, Hispanic students). You can't isolate students based on their race, ethnicity, gender, or academic performance.
Alternative: invite all students to participate and design data instruments with screening criteria built in, so that your target group is evaluated in the analysis stage and not during the recruitment stage.
Alternative: Keep the decision to participate private by handing out materials to all students – some of which may include the research instruments, some of which may include alternative activities, such as games or puzzles.

Example Two: Cherry-picking a representative sample from a group of eligible participants to be subjects of the research. This practice lends itself to researcher bias and does not yield generalizable results. If the research questions are broad, but the sample size is too small, conclusions can only be made about those particular subjects.
Alternative: invite all students to participate and allow for a control group, if feasible, to support conclusions and eliminate alternate explanations for results.

Example Three: Research that withholds educational benefits to students who do not participate. You cannot apply an intervention to a small group of students who agree to participate in the research if the intervention would benefit all students.
Alternative: either apply the intervention to all students who stand to benefit or guarantee that the intervention will be applied to the rest of the group after the research is concluded. Like strategies for minimizing coercion, strategies for minimizing stigmatization should be outlined in the recruitment section of the protocol narrative.

Part III: IRB Review Process

Submitting to the IRB

The following documents are to be submitted for new IRB applications, both exempt and non-exempt:

- Exempt or non-exempt application form
- PI assurance signed by both the PI and student investigator, if applicable
- Research team form, when the research team includes more than the PI and student investigator.

[1] https://sjsu.edu/research/docs/irb-handbook-education.pdf

Additional documents:

- Participant information sheet
- Consent & assent forms and scripts
- Online consent scripts
- Letter of approval/support from school administrator
- Data collection instruments: surveys, focus group/interview questions, etc.
- Recruitment material

Submit all material to IRBReview@northeastern.edu

Notification of exempt determinator or IRB approval

For exempt protocols: The research team will be notified of the exempt determination via a formal determination letter. If a consent and/or assent form will be used, the document(s) will be stamped by the DHR and sent with the exempt determination letter.

For non-exempt protocols: The research team will be notified of IRB approval in writing and receive an approval packet noting the date of approval. This packet will include:

1. IRB approval letter.
2. Protocol application detailing all protocols in the document table.
3. Written consent and assent forms with signatory lines.

During the review, the research team may receive correspondence from the DHR requesting modifications and/or clarifications. Research may not begin until an exempt determination or IRB approval letter has been received.

Letters of Support

All research conducted in, or in cooperation with, schools or school districts requires approval from the building principal or district prior to the initiation of the study. District approval comes in the form of a site letter (on institutional letterhead) signed by the administrator in charge of making such decisions at the school site, or via an email approval from an institutional email address. Researchers are advised to establish contact with the school well in advance to comprehensively understand the district's research review process, timeline, and permissible research scopes.

A copy of this letter or email should be included with the IRB application. Initially, protocols may be approved without these letters. If the letter is obtained after IRB approval, please submit as a modification. No research, including subject recruitment, may take place until an amendment letter is issued.

Modifying exempt and non-exempt protocols

Exempt protocols: Modifications do not need to be submitted for exempt studies so long as the research remains at minimal risk and stays within the boundaries of the exemption categories that the IRB found applied to the research.

There are also instances where modifications will not impact risks to participants or impact exempt determination, however, must still be reported to the office. Examples of these include:

- Change of Principal Investigator.
- Change in study procedures that impact risks to participants.
- Inclusion of new or updates to vulnerable subject populations.
- New data collection sites where a letter of support is required.
- Addition of external funding source

Non-exempt protocols: Any and all changes made to an approved expedited study need to submit a formal modification to the IRB office for approval.

Important Note: All study activities must stop until modifications are approved by the IRB office.

Part IV: Consent and assent

Parental consent: Nearly all research involving school children necessitates signed parental consent or written notification to parents regarding the research.

Student assent: In cases involving child participants, researchers must secure affirmative agreement ("assent") from the students. The assent procedure, including communicative content and delivery method, should be tailored to the child's maturity and cognitive capacity.

The researcher must make clear to both parents and students what participation in the research entails and that participation is voluntary. Students may be expected to complete school assignments, but they cannot be required to do anything beyond that for the research, including allowing the use of their records or school work for research purposes.

The informed consent and assent process is the mechanism that is used to handle agreement to participate on the individual subject level. Institutional permission is initiated before the researcher submits his/her IRB protocol and a document reflecting the institution's approval must be included with the protocol. Informed consent and assent, however, are initiated after IRB approval, as researchers must submit the documents that will be used during this process in addition to describing the process itself in the IRB protocol narrative.

Active (opt-in) consent: Active consent is typically required before conducting research with human participants. In most cases, parents or legal guardians must affirmatively communicate their approval before their child may participate in research.

Passive (opt-out) parental consent: In limited cases, the IRB may allow an opt-out consent process, where a parent or guardian's consent is assumed unless they communicate otherwise. This is limited to cases where all of the following are true:

1. The study poses no risk;
2. The research cannot practicably be carried out otherwise; and,
3. The IRB agrees that opt-out consent is appropriate under the circumstances. If research is conducted in a school setting, the school must agree that an opt-out consent model is consistent with their internal policies.

If an opt-ou consent process is going to be utilized, the letter of support from the school should include the opt-out consent procedure

Additional considerations for opt-out consent

Justify waiver of active consent: Since active consent is expected, you must justify your use of opt-out consent as necessary and ethically appropriate. The IRB will want to know: if the research is part of regular classroom activities; the expected duration of the children's participation; whether the research could pose any risk, such as sensitive questions that may upset or embarrass the child participant; and whether identifying information will be collected.

Document school approval: *For research in schools, ensure the letter of support provided by the school agrees to this consent approach.*

Develop a robust plan for informing parents: Inform parents/guardians about the study and allow them to state that they do not want their child to participate. Ensuring that information is actually received can be a challenge. For example, a recruitment flyer sent home may never be seen by parents. Therefore, consider using more than one method to contact parents/guardians, if possible.

Make it easy to opt out: *T*he IRB recommends providing multiple ways for a parent/guardian to inform the researcher that they do not want their child to participate, i.e. provide both an email address and phone number.

Build in sufficient time: Make sure to give sufficient time for parents/guardians to review the information and act (at least a week) and include a due date for responses.

Communicate effectively: Set the right tone and be respectful in your communications to parents. Describe the study activities and any risks involved in detail. Remind parents they have the option to not consent to their child's involvement in the research. Provide contact information for the PI and student researcher.

Have a plan to address concerns: If a parent/guardian expresses a concern you should address it immediately, beginning by informing the IRB office.

Consider non-English speakers: In situations where the researcher expects that a substantial number of parents/guardians are illiterate or do not read English, offer an appropriate alternative method of communicating information about the study.

Regulations, Resources & References

Family Educational Rights & Privacy Act (FERPA): a federal law that protects the privacy of student education records (ER) maintained by schools. ER include class assignments, grades, GPA, attendance, disciplinary reports, individual student educational plans, etc.

A researcher who has natural access to student records as part of their employment cannot access those records for research purposes without appropriate consent. Parental consent is required for the release of FERPA protected student records for minors.

Protection of Pupil Rights Amendment (PPRA): a federal law that affords certain rights to parents of minor students with regard to surveys that ask questions of a personal nature. PPRA applies to educational agencies or institutions that received funds from any program of the U.S. Department of Education (ED). Thus, public secondary schools are subject to PPRA.

Researchers conducting studies funded in whole or part by any program administered by ED must adhere to the following:

- If the research involves the administration of any ED-funded materials such as a survey, analysis or evaluation to children, researchers must make these materials available for inspection by their parents. If the research is subject to PPRA regulations, the researcher should describe in the IRB application how the materials will be made available to parents for inspection.
- Researchers must obtain written parental permission before asking minor students to participate in any ED-funded survey, analysis, or evaluation that reveals information falling in one of the protected information categories. An example of a protected information category is a survey that asks questions about mental and psychological problems potentially embarrassing to the student and his/her family. The IRB does not have the authority to waive written parental permission for research that falls under PPRA regulations.

Different school districts may have additional requirements or review procedures. It is highly recommended that researchers contact the school district in which they intend to do the research early, and involve them in the development of any research protocol.

Boston Public Schools: Research proposal and approval process

Hicks, L. (2006). Research in Public Schools. In R.J. Amdur & E.A. Bankert (Eds.) Institutional Review Board Management and Function. (2nd ed., pp. 341-345). Sudbury, MA: Jones and Bartlett Publishers

Mertler, C.A. (2014). Action research: Improving schools and empowering educators (4th ed.) Thousand Oaks: Sage

Mills, G. (2003). Action Research: A Guide for the Teacher Researcher (2nd ed.). Upper Saddle River, NJ: Merrill/Prentice Hall.

Nolen, A. L., & Vander Putten, J. (2007). Action Research in Education: Addressing Gaps in Ethical Principles and Practices. Educational Researcher, 36, 401-406.

University of Pittsburgh
Saint Louis University
21 CFR 56.111
45 CFR 46.111