Introduction to the Science Education Research IRB Adrienne Williams, PhD HHMI-UCI Professor Program March 2012

The purpose of this white paper is to help research and teaching faculty to navigate the first series of hurdles in obtaining an IRB for education research.

What is IRB approval?

According to federal and UC <u>policies</u>, any research using students in a classroom counts as human subject research, and is subject to approval by the institutional review board (IRB) at the institution where the research occurs. At UCI, the review board is administered by the <u>Office of Research</u>.

In addition to IRB approval, any research that utilizes student data from the classroom or the registrar comes under regulation by the Family Rights and Privacy Act of 1974 (FERPA). The use of student data is approved by the FERPA representative at the <u>Registrar</u>. The process of collecting IRB approval will include FERPA approval, but recognize that they are two different university offices and may have slightly different requirements.

What requires IRB approval? What does not?

If you are interested in disseminating your results outside of the university in any way, you need to obtain IRB approval for your research. If you are merely seeking data to make an internal decision or as a "beta test" for an experiment, you do not need IRB approval. But if there is ANY likelihood of something interesting coming out of your work, it is better to get approval beforehand rather than try to get post-hoc approval.

What are the first steps?

In order to submit a protocol to IRB, you must meet the <u>eligibility requirements</u> to be a Lead Researcher and complete the <u>Human Research Protections Training</u> course, an online tutorial.

Which narrative form should I use?

The IRB categorizes human subjects research based on the risk to the subject. The main categories are exempt, expedited, and full. Educational research generally falls under the category of "exempt" if it occurs in "established or commonly accepted educational settings" and is limited to questions about curriculum and student learning. We recommend you use the "Protocol Narrative for Exempt Review" found under IRB Forms <u>here</u>.

What parts of the narrative am I going to have trouble with?

The narrative is not inherently confusing, but there are some things you will need before you begin:

- 1. A literature review. Section 1 requires the rationale for the project, and will need your project to be placed in the framework of previous research.
- 2. All study instruments to be written out. If you are planning to use a survey or any other instrument that is not a normal part of the course, this will need to be written out in advance.
- 3. A member on your research team that is not associated with your course. Students will need someone to contact that will not be able to affect their grade. This can be anyone who has some research skill, is associated with the university, and has taken the Human Research Protections Training tutorial.



4. A completed methods section. The narrative itself appears long and intimidating to start. Essentially, however, it is a Materials and Methods section organized in a way that the IRB Committee can understand.

Once you have written up the entire narrative, you will need to create a study information sheet (SIS) to obtain student permission to use them as subjects:

What is a study information sheet?

There are four kinds of data you might be collecting from your students:

- 1) student records from the registrar (demographic info, SAT scores, GPA, etc.)
- 2) classroom materials (student work like homework papers, exam scores, writing samples)
- 3) surveys (measuring student satisfaction or gathering feedback)
- 4) media like photographs and video that contains student images.

In general, FERPA laws and the IRB Committee requires that students be given clear information about what will be collected from them and how to request that their data not be used in published research. This information is given in a study information sheet. The format of every researcher's SIS will be slightly different, as you will list what information will be collected, when it will be collected, and what amount of time will be asked of the subjects. We have given an example on our website here.

Generally, posting an SIS on the class website and linking to it in the class syllabus, plus announcing it in class, is considered obtaining consent. You only need "opt-in" consent for student data where their privacy is at higher risk, such as in videotaping or during focus groups.

Some other helpful hints:

- If you have a small number of students in your class (fewer than 100), it is safer to use an optin SIS. This has the same text, but includes a page for students to sign and turn in. An opt-in consent provides more protection to the university, but is difficult to administer in very large classes.
- You may find it helpful to design your SIS with just enough specifics that it will likely be useable for several different experiments. For instance, rather than say, "we will administer a survey the week after the final grades are posted, and will take 10 minutes to complete" you might want to say "we will administer surveys at different times throughout the quarter. The surveys will take from 1 minute to 10 minutes to complete."
- Students under 18 require either parental consent or removal from the data set. We have found that we can ask students who are not 18 to please email the appropriate researcher, and they will do so.
- Be sure to include ALL the demographic data you want to collect in the SIS. You can't get Math SAT scores, for instance, if that is not listed on the SIS.
- If you are going to be collecting video, add this information to the SIS and design a videotape release form for students to sign. A sample of our release form is posted here.

What is a FERPA letter?

FERPA stands for the Federal Education Rights and Privacy Act. It regulates student privacy issues at schools. UC Irvine has a FERPA expert in the Registrar's Office, and part of his job is to approve the use of student records (data type #1 and 2, above) for legitimate purposes. When preparing your IRB, you will need to send a request to the FERPA expert and include your completed narrative, study information sheet, and any waivers. A sample email is included below, addressed to the current FERPA expert, Mark Fonseca:

Subject: Request for FERPA Approval



Dear Mark,

We are submitting an IRB that will study the effect of active teaching techniques on student learning. As such, we would like FERPA approval and request a Waiver of Consent for the student records and classroom materials components.

Please see the highlighted sections in the Narrative for the parts most relevant to FERPA and the waiver. We also include separate documents that show the study information that the students will receive. Please contact me if you have any questions or concerns.

Best,

Adrienne Williams

It can take several days to get a letter back, so plan accordingly. FERPA is most concerned that student privacy is protected, and that students will all see the SIS. You can improve your compliance with FERPA law by making sure you have included all the following:

- A statement in your SIS that says "These data will only be reported in aggregate as the average
 of a large group of students. No personal or identifiable information will be published or
 available outside of this research project, and all research data collected will be stored
 securely and confidentially."
- Statements in your Protocol Narrative that indicate that the SIS will be described in the syllabus, posted on the class website, and announced in class (making sure students know about the study is very important).
- A description of how any small sample sizes (around 10 subjects) will be handled to maintain student anonymity.

How long does IRB approval take? How can I make sure approval goes smoothly?

You will submit your narrative, study information sheet and FERPA letter to the IRB using the electronic upload feature, and send hard copies of the application by mail. Your materials will be reviewed by administrative staff to make sure all the materials are present. The IRB subcommittee associated with exempt research meets weekly, but it can take about 3-4 weeks for your application to reach the top of the queue.

If this is your first application, we recommend you meet with an IRB staff analyst to go over your application before the committee meeting to fix any obvious errors. The actual people associated with each IRB Committee changes rather often, but education research falls under Social-Behavioral Committee C. Call the IRB receptionist at 824-0018 and ask to speak to the Head Analyst for Committee C.

