Learning Research Ethics using an Online Quiz System

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July 6, 2018
Roadmap for today

- Why did I start this project?
- What was it about?
- How did students find it?
Motivation behind the project

1. I spend a lot of time editing students' ethics applications.
2. Students' mistakes reflect lack of understanding of both the theoretical and practical aspects of the ethics application process.
3. The face-to-face tutorial has to be repeated whenever a new batch of students appear.
Motivation behind the project

1. I am not ready to complete the ethics application when the face-to-face tutorial takes place. I want to learn when I am ready.

2. I want to spread out my learning over multiple sessions and do it at a convenient time to me.

3. I want to focus on concepts that are relevant to my research project.
How to solve the problem?

- An online tutorial!

Advantages:
- Students will have great flexibility in accessing the materials on their own time and at their own pace
- Students can pick and choose modules that are relevant to their projects, after mastering the basic concepts
- Quiz feature ensures student understanding before advancing to the next topic
- With improved efficiency in obtaining ethics clearance, students and advisors can spend more quality time on the actual project
- Potential to be adopted by other programmes
### Moodle “Lesson” feature

#### Time | Activity | Details
---|---|---
18 Dec 2017 | Start date of the research project |  
10 Mar 2018 (1400-1630; E-P-01) | 1st poster presentation | Research proposal with detailed methodology will be presented  
1 week after the 1st poster presentation (17 Mar 2018)* | Submission of ethics application materials to supervisor | You need to prepare the application form, full proposal, questionnaire/interview script, and relevant consent forms and information sheets for the ethics application. More details can be found in the "Ethics application" section below. Please prepare and submit the application materials as early as possible. The files need to be endorsed by the supervisor before sending to FHREC.  
Around the week 25-30 Jun 2018 | 2nd poster presentation | Data analyses need to be finished and major findings will be presented.  
27 July 2018, 5pm | Submission of final dissertation | You will submit your final dissertation
Course Structure

Core Units
1. An Introduction and Brief History of Research Ethics
2. Informed Consent
3. Understanding Vulnerability
4. Risk Assessment and Benefits
5. Data Storage and Confidentiality
6. Professional Conduct
7. Ethics Application Procedure

Special Topics in Research Ethics (complete 2 out of 4)
1. Working with children
2. Working with college samples
3. Research involving deception
4. Data collection using surveys

Students must complete all 7 units

Students complete at least 2 units
Ensured that students completed the compulsory modules as the instructor wished.
Optional topics are “unlocked” after students finished the compulsory topics.

Special Topic: Working with Children
Not available unless:
- The activity Unit 1 is complete and passed
- The activity Unit 2 is complete and passed
- The activity Unit 3 is complete and passed
- The activity Unit 4 is complete and passed
- The activity Unit 5 is complete and passed
- The activity Unit 6 is complete and passed
- The activity Unit 7 is complete and passed

Special Topic: Research involving Deception
Not available unless:
- The activity Unit 1 is complete and passed
- The activity Unit 2 is complete and passed
- The activity Unit 3 is complete and passed
- The activity Unit 4 is complete and passed
- The activity Unit 5 is complete and passed
- The activity Unit 6 is complete and passed
- The activity Unit 7 is complete and passed

Special Topic: Data collection using surveys
Not available unless:
- The activity Unit 1 is complete and passed
- The activity Unit 2 is complete and passed
- The activity Unit 3 is complete and passed
- The activity Unit 4 is complete and passed
- The activity Unit 5 is complete and passed
- The activity Unit 6 is complete and passed
- The activity Unit 7 is complete and passed
An example unit: informed consent
Objectives

▫ Understand the importance and requirements of informed consent

▫ Learn the concepts of coercion and undue influence and why these must be avoided when conducting your study

Topics to be covered:

informed consent
Coercion
Undue influence
Informed Consent (1)

The principle of respect for persons states the need to treat individuals as autonomous agents, thus voluntary informed consent must be obtained before subjects participate in research.

Three aspects of informed consent:

- Information

Provide thorough information about your study for individual to make a decision:

- Purpose
- Risk & Benefits
- Extent of Confidentiality
- Compensation in case of injury during research
- Contact information if subjects have further questions
- Conditions of participation i.e., they can withdraw from the study without consequences
The principle of respect for persons states the need to treat individuals as autonomous agents, thus voluntary informed consent must be obtained before subjects participate in research.

**Comprehension**
- Individuals have the capacity to understand the information presented for making an informed decision to participate

**Voluntariness**
- The decision to participate is free from influence of anyone else
Methods for obtaining informed consent (1)

- **Use a consent form**
  - Document that participants have been appropriately informed of the purpose, risks, and benefits for the research before they participate
  - This form must be signed by the participant or in special cases, participant’s legally authorized representative

- **Provide an information sheet for participants**
  - Delivered in a language comprehensible to the subject! This may involve you translating the presentation to a language that the participant is comfortable with
Methods for obtaining informed consent (2)

- Oral presentation to provide opportunity for participants to ask questions

- Additional materials that may help explain a specific procedure in the study and familiarize participants with what they will experience

  - In a cognitive neuroscience study, a video presentation may be used to show what it is like to complete a computer task in an MRI scanner
Now complete the quiz for Unit 2!
**Question:**
When is informed consent required?

<table>
<thead>
<tr>
<th>Answer:</th>
<th>Class statistics</th>
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<tr>
<td>☐ When the research study involves interaction with human participants</td>
<td>4.88% Checked this one.</td>
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<tr>
<td>☐ When the research study involves interventions with human participants</td>
<td>No one checked this.</td>
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<tr>
<td>☐ When the research study will collect personal information from human participants</td>
<td>2.44% Checked this one.</td>
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All of the other choices: 92.68% Checked this one.
Students had to answer all questions correctly to "level-up", or they will be redirected back to the unit.

Nice functionalities in Moodle: # of attempts stats

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<th>Attempts</th>
<th>High score</th>
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KA YEE HONG
### Nice functionalities in Moodle: progress check

<table>
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<th>Surname* First name</th>
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<th>Unit 7</th>
<th>Special Topic: Working with...</th>
<th>Special Topic: Research ...</th>
<th>Special Topic: Data ...</th>
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Practical aspects of the ethics application procedures are also covered
Ethics Application Procedure

UNIT 7
Here’s the process

**DOCUMENTS:**
1. Ethics application form
2. Consent form
3. Information sheet
4. Your proposal
5. Sample survey items (if applicable)

Note: Data collection can only commence after approval is received!
Access the relevant documents here:

Find the PS Department Homepage

Find “Information for our staff / students”, click on ‘Guideline and Policy’

Click on ‘Ethics Review Application Materials’

Helpful documents:

(For Reference) Ethics Application Related Materials

1. PS Department Guidelines for Student Ethics Applications
2. PS Department FAQs for Student Ethics Applications
1. Ethics Application Form

2. Consent Form

3. Information Sheet
Parts I and II (1. & 2.) are largely self-explanatory

- When in doubt about either the post, or contact details of your supervisor, check the PS website!

- Read carefully the instructions on the form
  - put an ‘X’
  - ‘delete as appropriate’
Section 8:

• This is a summary of your research. Stick to the word limit!

• When describing the methodology, make sure you include details of your participants i.e., who, age, how many? Be specific in the criteria of participants you will be recruiting.

• Include a summary of what your participants will be doing in your study.

The ethics committee suggests you to use this date as a generous estimate, so that you do not have to re-apply for an extension.
1. Ethics Application Form

2. Consent Form

3. Information Sheet
Sample Information Sheet (1)

• This is a sample info sheet. Prepare it in the language that you are presenting to participants, i.e., Chinese or English.

• The details included here should be consistent with what you filled in for Part II Section 9 (Methodology of Research)!

• If your study involves deception, your 'Project Title' may need modification to conceal the real purpose of the study – This needs to be explained in the ethics application form (Part II Section 9).

• Address the participants directly, as if you are speaking to them, e.g., “You will be doing a computer task etc.” – do not write in first person e.g., “I will give you ….”

• For info sheet written in Chinese, use EITHER Traditional or Simplified Chinese (choose the one that is suitable to your study sample), but NOT a mix of characters.
How did students find the tutorial?
Feedback from BSocSci students (first run)

- The instructions on how to use the tutorial were clear.
- The course materials were effectively organized/presented.
- The unit quizzes were helpful in consolidating my understanding of the topics.
- The tutorial has raised my awareness of ethical issues when designing a research study.
- The content of the tutorial were sufficient in BREADTH (range of topics covered).
- The content of the tutorial were sufficient in DEPTH (detail of topics covered).
- The contents were essential in helping me complete my ethics application.
- Overall helpfulness of the ethics tutorial?
- How interested were you about learning research ethics BEFORE you completed the tutorial?
- How interested are you about learning research ethics AFTER you completed the tutorial?
Feedback from MSocSci students (second run)

- The instructions on how to use the tutorial were clear.
- The course materials were effectively organized/presented.
- The unit quizzes were helpful in consolidating my understanding of the topics.
- The tutorial has raised my awareness of ethical issues when designing a research study.
- The content of the tutorial were sufficient in BREADTH (range of topics covered).
- The content of the tutorial were sufficient in DEPTH (detail of topics covered).
- The contents were essential in helping me complete my ethics application.
- Overall helpfulness of the ethics tutorial?
- How interested were you about learning research ethics BEFORE you completed the tutorial?
- How interested are you about learning research ethics AFTER you completed the tutorial?
How many sessions did students take to finish the tutorial?

Many students took advantage of the multi-session feature of the tutorial.
How much time did students spend on the tutorial?

Many students engaged with the materials as intended.
How many **optional** units did students complete?

BSocSci students:
- 0 modules: 75%
- 1 module: 15%
- 2 modules: 8%
- 3 modules: 2%
- 4 modules: 0%

MSocSci students:
- 0 modules: 60%
- 1 module: 30%
- 2 modules: 5%
- 3 modules: 1%
- 4 modules: 4%

Many students did **more** than what was required!
Qualitative feedback

- "It is quite clear and straight to the point, surprised me because at first I think it will be boring and lengthy, but finally help me in the organisation of the research ethics."
- "This E-learning method is a very helpful way to learn things at my own pace, this is a very good attempt!"
- "It was very helpful for me to finish the consent form, information sheet, and application form. It is equivalent to the guidelines."
- "It might be useful if the PowerPoint (or some key points) could be downloaded after completed the tutorial for review."
An online training tutorial for research ethics was developed.

It encompasses both theoretical and practical aspects of research ethics application procedures.

Cater to students’ needs: flexibility in when they study and which modules they study.

Other programmes can adopt it to benefit all students conducting undergraduate / postgraduate research projects.