



Technology Teacher Education Program
 S. Petrina, L. Liu, Y.-L. Lee, & S. Namae (10 October 2018)

EDUC 451
Inquiry Project Guide

The Inquiry generally consists of three parts:

1. Preparing the Inquiry Proposal (EDUC 450)
2. Conducting and Presenting the Inquiry Project (EDUC 451)
3. Completing and Presenting the Final Inquiry Project (EDUC 452)

Potential Inquiry Project Final Formats (EDUC 452)

The Inquiry Project is intended as a culminating project that is of personal use to the student and considered educationally valuable by peers. Although a formal written report may be submitted, we also encourage the production of a variety of educational resource packages or tutorials, pro D workshops, magazine articles, multimedia, performances, podcasts, videos, etc. shared with peers. A final written document or report (EDUC 452) should be between 1,200 and 1,500 words + Bibliography. Alternative formats must be discussed and approved by Instructors.

Inquiry Project Timelines

Problem	Process	Product
EDUC 450 Sept-Dec	EDUC 451 January	EDUC 452
<ul style="list-style-type: none"> • Proposal 	<ul style="list-style-type: none"> • Processing Information • Piloting or Testing Ideas • Conducting Inquiry / Research <ul style="list-style-type: none"> ○ Collecting Information ○ Note-taking ○ Analyzing ○ Organizing 	<ul style="list-style-type: none"> • Report or Media
Exploring, Presenting, Writing	Inquiry, Presenting, Producing, Writing	Inquiry, Producing, Writing, Presenting

Format of the Inquiry Project

Section	Pages
Working Title	
1. Introduction: What are your general and more specific interests in what you explored across the Inquiry timeline? This reflects a focus on your practice and the design and technology education curriculum (e.g., classroom management, gender, safety).	½ page
2. Inquiry Question(s) or Problem: What is the question (or are the questions) that ground(s) your inquiry?	¼ page
3. Inquiry Purpose: Why is this important? Who is the potential audience or participants that will likely gain from your inquiry?	¼ page
4. Key or Critical Concepts: Identify 2-3 concepts that you explored or focused on in your inquiry. Provide a brief description of these or definitions as related to your interests and inquiry. This section includes the review of literature or resources that inform the key or critical concepts.	1-2 pages
5. Key Findings, Conclusions and Implications: What are the key findings of the inquiry (this is primarily descriptive)? What are the conclusions drawn from the findings? What are the implications for learning and teaching? For design and technology education? STEM?, etc.	3.5 – 4 pages
6. Ethical Considerations: Identify any ethical considerations that arose in your inquiry or ethical problems that had to be resolved before or during the inquiry.	¼ page
7. References and Apps: Add any references or apps that are important.	Attach
	5-6 pages total + refs & apps

Inquiry Project Assignments:

1. Inquiry Project Proposal (EDUC 450)
2. Inquiry Project Key or Critical Concepts (EDUC 451)
3. Final Inquiry Project & Presentation (EDUC 452)

Options (addressing the Inquiry Project format) (EDUC 451 & 452):

1. Paper: 3-5 pages + References (approx. 1,200-1,500 words)
2. Podcast: 10 minutes + References
3. Video: 10 minutes + References scrolled
4. Tutorial: 10 minutes for audience to complete + References
5. Resource Package: e.g., brochures 3 column format, double-formatted + References

Presentation Options (addressing the Inquiry Project format) (EDUC 451 & 452):

1. Presentation: 10 Minutes + 5 min Q&A. Audience attends all presentations.
2. Workshop: 10 Minutes. Audience attends all workshops.
3. Poster (paper or digital, i.e., e-poster): Audience rotates informally from poster to poster.

1. Teacher Inquiry

- a. Inquiry v Research
- b. Definitions and Taxonomies
 - i. Teacher Inquiry

1. Samaras & Roberts (2001, p. 43): Self-study teacher research is designed to encourage teachers to be agents of their own reform initiatives while working collaboratively with school colleagues. It has proven useful to an array of educators coming from multiple disciplines and programs (Kosnik, Beck, Freese, & Samaras 2006). In self-study, teachers critically examine their actions and the context of those actions as a way of developing a more consciously driven mode of professional activity, as contrasted with action based on habit, tradition, or impulse. Self-study allows teachers to plan, enact, and assess their pedagogical strategies with the support and critique of professional colleagues while examining the impact of their efforts on student learning.

2. Samaras & Roberts (2001, pp. 42-43):

- a. Imagine if teachers were given these prompts:

- i. What question do I most wonder about in my teaching practice?
- ii. What causes me to wonder about this question?
- iii. Why is this question important to me? What experiences and perspectives brought me to ask this question?
- iv. Who would benefit from addressing this question (e.g. me, my students, my school, a school division, society at large)?

- b. Samaras & Roberts (2001, pp. 43-45) offer the following method:

- i. STEP 1: Author your own question.
 - ii. STEP 2: Work with a critical friends team.
 - iii. STEP 3: Plan new pedagogies for improved learning.
 - iv. STEP 4: Enact, document, and assess your research process.
 - v. STEP 5: Generate and share what you learned.
- ii. Practitioner Research
 - 1. Dadds (2004, p. 3): Practitioner research, therefore, is not seeking generalisations in the way some large-scale forms of research attempt to do. Rather, it is seeking new understandings that will enable us to create the most intelligent and informed approach we can to improving our provision for those in our care. Stenhouse claimed that ‘we are concerned with the development of a sensitive and self-critical subjective perspective and not with the aspiration to unattainable objectivity’ (1975:157). In accepting the mantle, as researchers, of professional communicators in a more public arena, therefore, we seek to share our research stories with others so that colleagues can, if appropriate, engage with them and relate them to their own work. In this sense, the notion of relateability becomes more appropriate for practitioner research than the traditional research concept of generalisability. This is how the influence of the small-scale, particular project, shared across the profession, can work its way into the larger fabric.
- iii. Practitioner Action Research
 - 1. Reason & Bradbury (2001, p. 1): Action research is a participatory, democratic process concerned with developing practical knowing in the pursuit of worthwhile human purposes...It seeks to bring together action and reflection, theory and practice, in participation with others, in the pursuit of practical solutions to issues of pressing concern to people, and more generally to the flourishing of individual persons and their communities.
- iv. Self-Study
 - 1. Lewison (2003, p. 100): [A self-study is] a generally agreed upon set of insider research practices that promote teachers taking a close, critical look at their teaching and the academic and social development of their students... [A self-study] involves classroom teachers in a cycle of inquiry, reflection, and action. In this cycle, teachers question common practice, approach problems from new perspectives, consider research and evidence to propose new solutions, implement these solutions, and evaluate the results, starting the cycle anew.
- v. Appreciative Inquiry
 - 1. More (2010): Appreciative Inquiry (AI) is a method for discovering, understanding and fostering innovations in organizations through the gathering of positive stories and images and the construction of positive interactions. AI seeks out the very best of "what is" to help ignite the collective imagination of ‘what could be’. The aim is to

generate new knowledge which expands the ‘realm of the possible’ and helps members of an organization envision a collectively desired future and to carry forth that vision in ways which successfully translates images of possibility into reality and beliefs into practice.

c. Methodologies

i. Samaras & Roberts (2010, pp. 43-44):

1. STEP 1: Author your own question.
2. STEP 2: Work with a critical friends team.
3. STEP 3: Plan new pedagogies for improved learning.
4. STEP 4: Enact, document, and assess your research process.
5. STEP 5: Generate and share what you learned.

References

1. British Columbia Teachers’ Federation (2008). *Teacher Inquiry in the BCTF: A focus for supporting teachers’ professional development*. Vancouver, BC: BCTF.
2. Hammond, S. A. (1996). *The thin book of appreciative inquiry*. Plano, TX: CSS.
3. Samaras, A.P. & Roberts, L. (2011). Flying solo: Teachers take charge of their learning through self-study research. *Learning Forward*, 22(5), 42-45.