Introduction

The topic analysis is a project proposal and planning document. In it you will answer the following questions: (1) what are you investigating?, (2) why are you investigating it?, and how are you investigating it? You can think of the research process as analogous to the process of developing software. The planning and analysis stages correspond to developing a topic analysis and then a work plan for the project. The execution of the project corresponds to the design and implementation stages. The better the up front work, specifically the topic analysis, the better the final research product will be.

It is a challenge to identify a good topic. How do you know if it is any good? The topic analysis is a way to try it out. In comparison to conducting a research project, topic analyses are inexpensive in terms of time and effort. You may want to try out a number of possible topics by preparing a topic analysis.

Parts of a Topic Analysis

The topic analysis consists of the following sections. The sections correspond to the sections of a research paper. In effect, when you develop a topic analysis, you are outlining and organizing material for your final paper.

1. The problem, hypothesis, or question. It is important that you be able to write your topic in the form of a statement, a hypothetical proposition, or a research question. If you are unable to do so, you should refine and clarify it. You should not use vague, imprecise terms or ambiguous statements or questions.

2. The project’s importance. You need to justify that what you are doing is worthy of your effort and of interest to a peer group. In order to show the importance of a project, it is useful to cite experts or to demonstrate the project’s relationship to extant research. An important project may also be an area that has been ignored. Even if this is the case, there will be some relationship with prior work. It is up to you to provide a reasoned argument as to the project’s importance.

3. Significance of prior work on the subject. You should demonstrate an awareness of existing literature germane to your subject. It doesn’t have to be exhaustive since you will be carrying out a literature review as part of your project.

4. Project methodology or research approach. Explain how you plan to approach the research. You should also describe why your methodology is appropriate for your project. This part may be in rough form.

5. Possible outcomes and the importance of each.

Topic analysis appraisal questions

1. Does the proposal have imagination?

2. Is the problem stated clearly?
(a) Are the objectives stated clearly?  Can they be accomplished?
(b) Is the problem too large?  Can it be accomplished within the timeframe?

3. Is the methodology feasible?
   (a) Can data be collected?
   (b) How will data be analyzed?
   (c) If the project is a research project, will the analysis be conclusive with regard to the research question?
   (d) If the project is to develop a work product, can the work be completed?

4. What will the final research product or work product look like?  Will the analysis use tables, graphs, etc?

5. What will be the consequences if

   (a) the experiment fails;
   (b) the data cannot be obtained;
   (c) the analysis is inconclusive;
   (d) if the work product cannot be developed?

6. Can major project activities be identified?

7. Can a time estimate be made for each activity?

8. Is the project manageable or is it too large and unwieldy?

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