Bay Honors Consortium

Sample Methodologies: A How-To Guide for Writing Good Methodologies for the Honors Research Symposium

One of the components that is required when you submit your proposal for the Bay Honors Research Symposium is to write a 50-word methodology, which should detail the process used in the research project. This guide will give you examples to follow, as well as language to avoid, so that your methodology is truly helpful to the Proposal Committee.

(The examples below are composites from past methodologies. They include elements that are commonly found in desired and undesired methodologies.)

General Comments – For All Genres

- ***Do not list your textbook.*** Even if it is a source used, you should not list it as a work that is consulted; it is expected that you have used it, in addition to many other texts.

- ***Do not list people that you talked to on this matter*** – e.g. your professor, the librarian, etc. If you did have help in your research with respect to the data collection, you should mention that, but the analysis is your own. This is your work, and you need to be the primary researcher. (If this is a group project, then you are all counted as 'the primary researcher'.)

- ***Do not go over the word limit.*** If you write more than 50 words, your proposal will be disqualified.

- ***Grammar and spelling count.*** If your methodology (like the rest of your proposal) is poorly written, with many spelling and grammatical errors, the Proposal Committee will not be able to understand your message.

- ***Describe your methods.*** Remember that the Proposal Committee uses the methodology to evaluate the proposal. They use it to see whether there was actual, original research done (which we want), or if it is a mere literature review/book report (which we don't want).

- ***Don't be vague.*** Be specific when you can be, but respect the word limit.

- ***This is research done for a college course or a college-backed internship, only.*** Any research conducted outside of these realms cannot be accepted.

Arts and Humanities

What you should include:
- Focus on the extra texts that you used, including any first-hand sources (if applicable)
- Discuss any specific analytical lens that you used in your work

Good example 1

I looked at a variety of plays, histories, and reports from these time periods, and examined how they depicted the psychological effects of crime. I also read literature that talked about presence of trauma suffered by people of the era. My focus is on expressed trauma versus implied trauma. [49 words]

Why it works:
- The data collection is clear; specific types of sources are listed, with insight as to how they were used.
- The scope of the methodology is directly stated.

Good example 2

I wanted to demystify C.S. Lewis' perspective on religion, as well as his approach on the subject of morality. I used a synthesis of contemporary criticism and diaries of the author to accomplish this. I also analyzed works of authors that influenced Lewis to find relevant correlations and juxtapositions. [50 words]

Why it works:
- The direction of the analysis is clearly stated.
- The data collection is clear, with specific sources being listed.

Bad example 1

I wrote this paper as an assignment and used the book Ficciones to read and analyze the story "The Circular Ruins." I used online sources in order to help further support my own perspective. I worked closely with my professor to help further my research. [45 words]

Problems:
- The paper would be part of a course, most likely; do not describe it as such, since that is taken for granted.
- The description of the sources is too vague.
- The professor did not do the research; the student did!
- Bad mechanics; book titles should be italicized or faux underlined (e.g.: _War Hammer_).

Bad example 2

After discussing my topic questions with my mentor I then went to the college's library. The librarian helped me conduct the initial searches for sources, which further continued on my own, gathering resources from the catalog. I began finding answers to my research question. [47 words]

Problems:
- Discussing the project proposal with the mentoring professor and the librarian are not relevant to the methodology.
- Gathering sources is not relevant to the methodology.
- Data collection and research analysis are not addressed.
- There are structural errors in this paragraph, especially in the second half.

Social and Behavioral Sciences

What you should include:
- Focus on the types of works consulted, with an emphasis on important works for theoretical analysis.
- If you conducted an experiment, ran a survey, or in any way collected data, this should be mentioned.

Good example 1

I set up a sociological study with a range of students at my college. Questions investigated respondents' knowledge and perceptions of consequences of sex, and their ethnic-cultural mores and restrictions regarding sex. A second survey asked for students' views on consequences and effects of sex after a presentation. [49 words]

Why it works:
- Specific mention of the analytical approach is made. The Proposal Committee can then evaluate the proposal.
- Data collection is adequately described.

Good example 2

I will utilize the work of Robert Reich, Franklin D. Roosevelt and Karl Marx to analyze the current socio-economic situation. I will then suggest various scenarios that address socio-economic inequities in our society. My models are based on the actions of party leaders, peer-reviewed studies, and official assertions. [48 words]

Why it works:
- Specific works are mentioned, so the analytical approach is set. The Proposal Committee can then evaluate the proposal.
- Data collection is clearly delineated, so that it is clear that this is original research and not a literature review/book report.

Bad example 1

I work with a doctor who specializes in patients with dementia, thus I used them in the survey. I was able to do each survey with real patients and gather good data. Another source I had was taking abnormal psychology where a lot of my information derived from. [47 words]

Problems:
- Nothing about the survey's scope was given, so the Proposal Committee cannot figure out if the data collection is valid.
- Getting information from a course is not a part of the methodology; it is too broad in scope, and does not describe the type of analysis to be performed.

Bad example 2

Worked with my college's PRIE to write a survey questionnaire and learn to input data and review survey results. [19 words]

Problems:
- Overall, it is too short, and does not describe much.
- The acronym 'PRIE' is not explained.
- The description of the questionnaire is not specific enough.

<u>**Bad example 3**</u>
Last semester, after the recent election cycle, I audited a political science class on American Politics. I exchanged my perspectives on the outcome of election with many people who were of different backgrounds. Which made me rethink about the importance of learning from colleagues. [44 words]

Problems:
- There should be no mention of the course that the project stemmed from; it is not relevant to the proposal.
- The data collection methods are not sound; this probably does not accurately describe how the data was collected.
- There are numerous grammatical errors.

Mathematics and Sciences

What you should include:
- Description of data collection and analysis – make sure to discuss how you collected your data, and the lens through which you analyzed your data.
- Include where you collected your data, and whether you had help with data collection.

<u>**Good example 1**</u>
We conducted comparative analyses by taking cultures from infected, rehabilitating, and healthy dogs, growing the cultures, and completing antibiotic-sensitivity tests. A scientific survey was conducted for a greater sample size. A psychobiological analysis of charting weight and sleeping patterns helped us determine the effects on their biology and behavior. [49 words]

Why it works:
- The description of the data collection and analysis are clear and detailed, without going over the word limit.
- The explanation is detailed enough, but written in a way that everyone on the Proposal Committee could understand it.

<u>**Good example 2**</u>
I charted safe-or-out and home run challenges from 50 different baseball games, and created data points (n=100) based on length of time per challenge and accuracy based on commentator perspective. I then graphically and statistically analyzed whether there was a positive correlation, and if my independent variable explained the variation. [51 words]

Why it works:
- The data collection is clearly described, as is the analytical approach.
- Even though it may be technically over the limit (51 words), the description is fairly concise and robust.

Bad example 1

My methodology is to examine past environmental and economic data and compare it to the current global state. I will find most of my data through online sources. [28 words]

Problems:
- There is not much description in this methodology. It is too vague.
- Finding data through online sources is not a bad thing, but there needs to be a more specific source mentioned. If it is only through journals, then the project is deemed a 'book report' or 'literature review', and not original research.

Bad example 2

For my research in catalysis, I gained hands-on experience with lab equipment, including a mass spectrometer and scanning electron microscope. I gained access into my lab through a summer internship where I attended many seminars and research symposiums with renown researchers. [41 words]

Problems:
- Description of analysis is missing.
- Description of data collection is vague, and does not specifically address the project proposal.
- It is not clear if this project was part of the internship (like a term project) or done as part of the regular research performed at the lab. The latter case would not be permissible for the Symposium, because in that case the student is not performing the research – the researchers are doing the research, and the student is tagging along and learning about research.

Bad example 3

Last year I was able to perform research for my AP Chemistry class. I utilized the lab in my school to create chemical compounds used in cleaning products. I also performed a chemical analysis of solvents that are easily attainable from renewable sources. [43 words]

Problem:
- Work was not done from a college course or college internship.