

Writing a Problem Statement

Postgraduate Students Committee (SEML)
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Problem Statement

- ❑ The research problem serves as **the starting point for the research** and is **a unifying thread** that runs throughout all the elements of the research endeavor (Leedy & Ormrod, 2005).
- ❑ Metaphors: A Problem Statement is like...
 - The **DNA** of the research.
 - A **snapshot** of the research.
 - The **foundation** of the research.
 - The **Heart** of the research.
 - A **“taste”** of the research.
 - A **blueprint** for the study.

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What is not a problem statement?

- (1) It is not a **thesis statement**.
 - = a statement indicating writer's main position or argument in an argumentative paper.
- (2) It is not the **background** of the study.
- (3) It is not the description of issues **without identification of research gap(s)**: Intended but not explicit.

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What is a problem statement?

- ❑ A **distinct “statement of the question or issue that is to be investigated”** (Sekaran, 2003, p. 70).
- ❑ It is the **core element** of chapter 1 and the focal point of a thesis:
 - Objectives, Research questions, Significance, and Delimitations stem from this element.
- ❑ Although it can be condensed into just one paragraph, it should be accompanied by a few or several paragraphs which support the problem.

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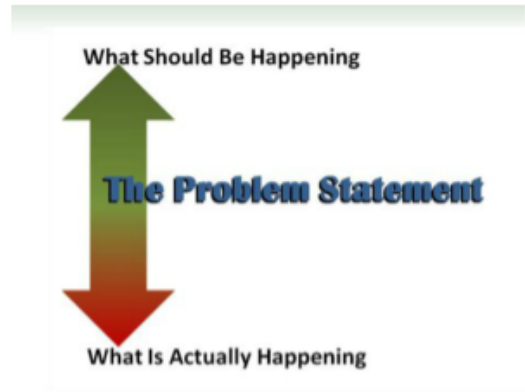
What is a problem statement?

- ❑ You need to clearly identify the **problem** or **knowledge gap** that your research is responding to. This section should:
- Answer the question: “**What is the research gap(s) that needs to be filled?**” and/or “**What is the problem that needs to be solved?**”
 - **Limit the variables** you address in stating your problem or question.

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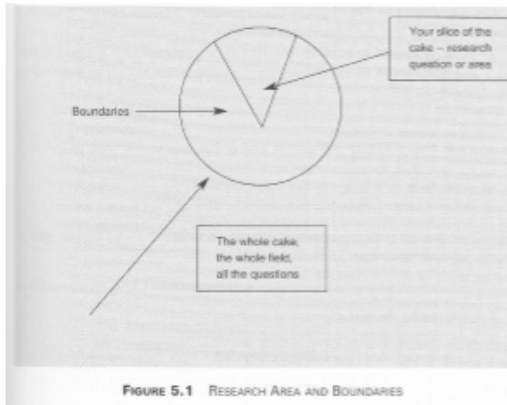
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What is a problem statement?



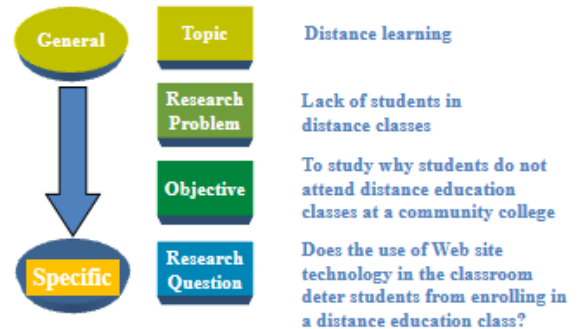
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What is a problem statement?



(Wisker, 2012, p. 129)

What is a problem statement?



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What to consider in selecting a research problem? (MERIT)

- (1) **Manageable** – fits the level of researcher's level of research skills, needed resources, and time restrictions
- (2) **Ethical** – does not embarrass or harm participants.
- (3) **Researchable** – can be investigated through the collection and analysis of data.
- (4) **Interesting** – keeps the researcher interested in it throughout the research process.
- (5) **Telling** – contributes to the improvement and understanding of educational theory and practice.

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How research problems differ for quantitative and qualitative research

Use **quantitative research** if your research problem requires you to:

- Measure variables
- Assess the impact of these variables on an outcome
- Test theories or broad explanations
- Apply results to a large number of people

Use **qualitative research** if your research problem requires you to:

- Learn about the views of the people you plan to study
- Assess a process over time
- Generate theories based on participant perspectives
- Obtain detailed information about a few people or research sites

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A 4-Part Statement of the Research Problem

Introduction, in which the student states as succinctly as possible the nature of the problem, why the student considers it important, and how the research would contribute to its solution.

The research question (or hypothesis), stated in the form of an interrogative sentence that asks the relationship between two or more concepts, variables, phenomena or events. This section includes a definition of terms. Great care should be given to phrasing the proposition, which will determine the thrust of the research efforts and point the student firmly in the right direction.

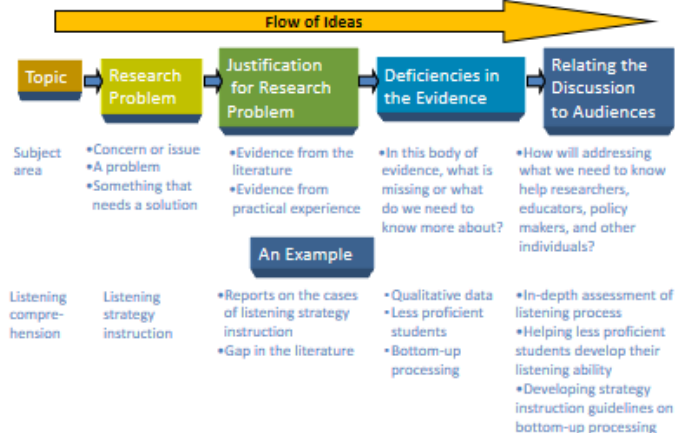
Subsidiary questions (or sub-hypotheses), which, like the research question, may be stated in hypothesis form.

Review of the relevant research and theory. Every researcher owes much to predecessors and contemporaries. While it is both useful and appropriate to recognise their contributions, there is a noticeable tendency to drag in studies that have only the most tenuous connection with the research in hand. As a result, this section of the dissertation proposal sometimes has a disjointed quality or becomes a mere catalogue or listing of research with a bit of annotation added. This will not suffice. Required here is an integrated statement that affords some explanation of why theories or studies cited are important to the work the student proposes to undertake.

(Moses, 1985)

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Example of the Flow of Ideas in the Problem Statement



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Practice: Writing up problem statement

- Include 1 paragraph for each of the previous 5 elements.
- Heavily reference this section with the most recent and relevant literature and statistics.

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How to Identify the Problem: Sources of research problem

- Reading
 - Books
 - Journals
- School & Classroom
 - Process of classroom lectures
 - Class discussions
 - Interaction with students
 - Out-of-class exchanges of ideas with fellow students and professors
- Community
 - Newspaper & magazine
- Internet (Google; PsycInfo; Proquest; Jstor, etc.)
- Consultation with:
 - Supervisor
 - Course instructor
 - Faculty member
- Doing research
- Seminars/paper presentations/workshops
- Keeping a research journal (Hatch & Lazaraton, 1991).

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How to Identify the Problem: Strategies

(1) ANNOTATION: Paying attention to

- Possibility of replication
- Suggestions for further research
- Research gap signals.

(2) SAVING: Systematic filing system (Order of chapter and the core elements; Order of topics)

- Verbatim
- Paraphrase
- Summary
- Annotated comments

(3) CONCEPTUAL MAP or LITERATURE MAP

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Research Gap Signals

- Little attention has been given to...*
- Past studies appear to be/have been restricted/limited to...*
- Although/In spite of... , it is not known/yet unclear whether...*
- Past studies have overlooked/neglected to consider/disregarded...*
- The review indicates... However/nevertheless...*
- Research has tended to focus on... rather than...*
- Past research has been unable to resolve...*
- Emphasis has been on... . Less focus has been given to.../Much less is known about...*
- A question that remains unanswered is whether...*
- One would logically expect that... will...*
- Findings thus far have been inconclusive/questionable...*

(Murad Sani, 2016, p. 124)

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Research Proposal

Chapter 1

- Background of the study
- Problem Statement
- Objectives of the study
- Research questions
- Significance of the study
- Definition of the terms
- Limitations of the study

Chapter 2

Chapter 3

- Research design
- Participants (Sampling)
- Instruments
- Data collection procedures
- ✓ Pilot test
- Data analysis procedures

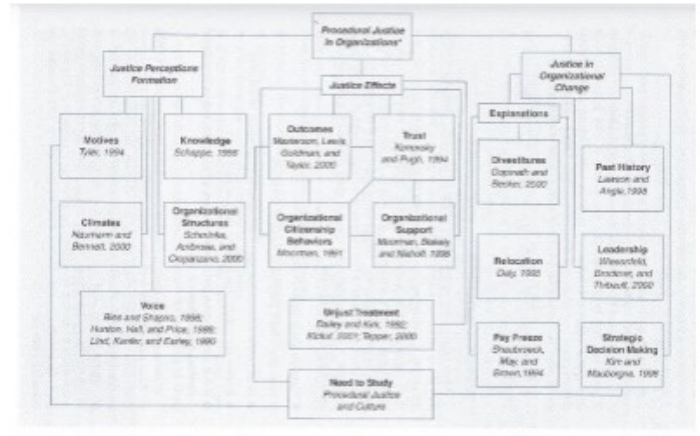


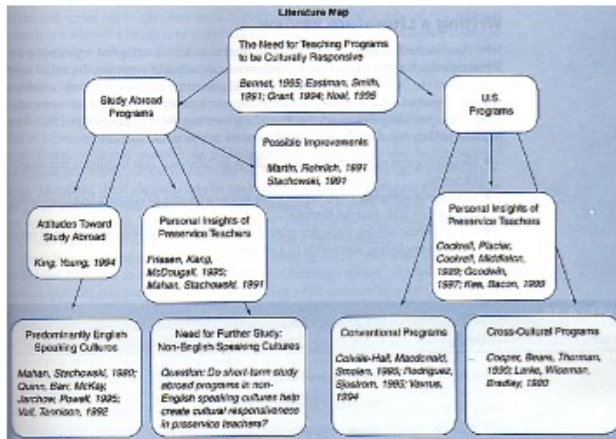
Figure 2.1 An Example of a Literature Map

"Employees' concerns about the fairness of and the making of managerial decisions"
SOURCE: Janovic (2001). Reprinted by permission.

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From Creswell (2002)



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(4) Application of the concept of ORIGINALITY

- 1 setting down a major piece of new information in writing for the first time;
- 2 continuing a previously original piece of work;
- 3 carrying out original work designed by the supervisor;
- 4 providing a single original technique, observation, or result in an otherwise unoriginal but competent piece of research;
- 5 having many original ideas, methods and interpretations all performed by others under the direction of the postgraduate;
- 6 showing originality in testing somebody else's idea.

(Francis, 1976)

- 1 carrying out empirical work that hasn't been done before;
- 2 making a synthesis that hasn't been made before;
- 3 using already known material but with a new interpretation;
- 4 trying out something in Britain that has previously only been done abroad;
- 5 taking a particular technique and applying it in a new area;
- 6 bringing new evidence to bear on an old issue;
- 7 being cross-disciplinary and using different methodologies;
- 8 looking at areas that people in the discipline haven't looked at before;
- 9 adding to knowledge in a way that hasn't been done before.

(Phillips, 1993)

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Summary: Role of Problem Statement

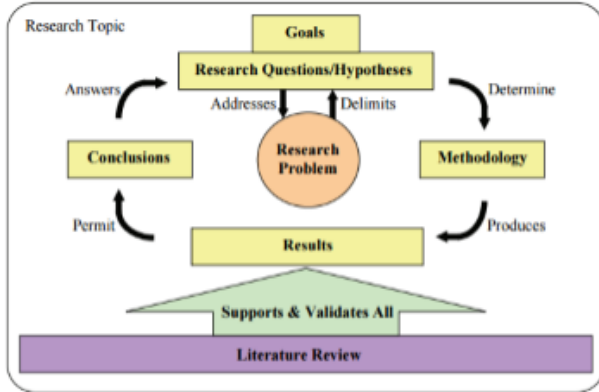
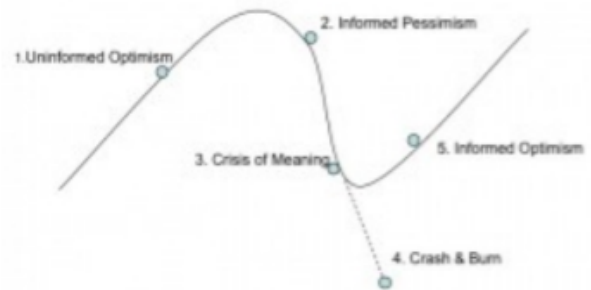


Figure 1: Conceptual Map of the Problem-Based Research Cycle

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A Word of Encouragement

Emotional journey of a PhD



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A Word of Encouragement

Writing is a thinking process

- When we write, we often change or considerably develop what we think. Writing is not just translating into words the images of our thoughts; it's not as simple as that. **In writing, we may transform our thoughts, redefine them or, with great pain and effort, give shape to our ideas.**
- Thus, it is important to give ourselves time to write. Many students find it helpful to begin writing early in the process of doing a research degree. With the time constraints on a thesis writer, **an early start is imperative.**
- Remember, what you write is not necessarily what you will print in the final draft (though in some parts it may be). **It is not necessary, in fact it is often impossible, to do all the thinking and then 'write it up'.**

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4 Types of Writers

- Architects** (those who consciously pre-plan and organise and do little revision);
- Watercolour artists** (who try to write a final draft on the first attempt - little revision);
- Bricklayers** (who revise at sentence and paragraph level as they proceed), and
- Oil painters** (who pre-plan little but rework text repeatedly).

Into (or in between) which category(ies) do you think you fall, if any? It is useful to know how you prefer to go about writing academic pieces, but you may actually find it useful to try out other ways with a thesis, since this is probably a considerably longer piece of work than any you have undertaken before.

(Chandler, 1994)

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A Word of Encouragement

- “Perfection is your enemy. Do the best you can and move on to the next project. Striving for perfection can stop you from achieving any results. Go for results. The more you do, the better you get. Quantity leads to quality. Ray Bradbury wrote 2,000 stories in order to get 200 that were classics. Some authors write six books in order to have two that are worth publishing. Don’t judge your work as you write it, just write it! Crank out the stuff!” (Vitale, 2007, pp. 118-119)