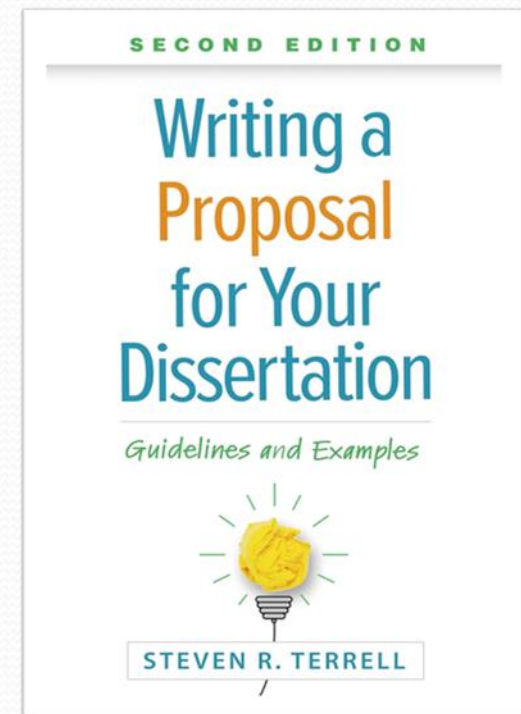


# Writing Problem Statements, Purpose Statements and Research Questions

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Problem Statement with Background  
and Significance

Purpose Statement – What is the  
overarching goal of my study?

Research Questions – what  
do I want to know?





## The Statement of the Problem

All research starts out by identifying a problem or opportunity about which we want to gain better knowledge or find a solution for.

# Characteristics of a Good Problem

- The problem is interesting to the researcher.
- The scope of the problem is manageable.
- The researcher is comfortable in terms of their knowledge, time and resources needed to investigate the problem.
- The problem can be researched through the collection and analysis of data.
- Investigating the problem has theoretical or practical significance.
- It is ethical to investigate the problem.



# Identifying a Good Research Problem

- Personal experience.
- Issues at your workplace or institution.
- By reading about a topic you are interested in.
- Focusing on “suggestions for future research” often shown at the end of a journal article.
- By attending professional conferences & speaking with experts in the field you are interested.
- By replicating the work of others in an attempt to better understand or apply the results of research they have conducted.

## Problem statements must be clear and concise...

- *Observations indicate that there are low levels of student engagement when using online management systems in our school.*
- *Research has shown that the attrition rate for online doctoral programs is significantly higher than from traditional programs.*





The problem statement must include all variables to be considered...

- *Differences exist between urban and sub-urban schools in our district.*
- *Graduates of Ivy-league colleges have the highest SAT scores.*

## The Problem Statement Should Not Interject the Bias of the Researcher...

- *Management members in our corporation believe that employees working in home offices are happier than employees working in traditional offices.*
- *This study will prove that purchasing computers to use in the elementary school curriculum will increase achievement.*
-



## The Problem Statement as Part of a Proposal

- The Background of the Problem
- The Problem Statement
- The Significance of Investigating the Problem

# The Background of the Problem

Historically, 40% to 50% of students matriculating into traditional doctoral programs do not graduate (National Doctoral Research Council, 2016). Studies suggest factors such as student feelings of depersonalization (Wilson, 2014); learning styles incongruent with the learning environment (Anthony, 2008); low levels of intrinsic motivation (Terrell, 2012); issues of socialization (Golden, 2015) and feelings of isolation (Alimant, 2016) negatively affect student persistence in doctoral programs.

## The Problem Statement

The attrition rate for students in distance-based programs is consistently 5% to 10% higher (Whitney, 2017) than the attrition rate for doctoral students in traditional programs.



# The Significance of Investigating the Problem

Regardless of the reason, withdrawal from a doctoral program is costly to the student, the department and the university (Schneider, 2016). It is imperative that researchers, faculty members and administrators identify student characteristics predictive of attrition (Terrell, 2014) . Identification of these factors will lead to a better understanding of student attrition and serve as the impetus for the development of tools and processes that will positively affect doctoral student persistence (Antorcha, 2015).

# Purpose Statements

- Tells the reader the overarching focus or goal of your study.
- In quantitative work, they focus on variables, participants, locations and the unit of analysis.

*The purpose of this study is to determine if different types of feedback will affect 5<sup>th</sup> grade students' motivation and achievement.*


- In qualitative work, you include participants, locations and the central phenomenon.

*The purpose of this study is to gain insight into new business owners' understanding of the use of social media as a tool for advertisement.*



# Research Questions

1. A clear and focused question around which you center your research.
2. A research question is what you want to know about a topic.
3. A research question is a statement that identifies what is to be studied.
4. A research question is the methodological point of departure for scholarly research.



To develop a strong research question from your ideas, you should ask yourself these things:

1. Past: What is already known about the problem area?
2. Present: What specific questions do I want to answer about my problem area?
3. Future: What research is being called for?
4. Ensure these characteristics are being met:
  - It is interesting to the researcher.
  - Its scope is manageable.
  - The researcher has the time, knowledge and resources necessary.
  - Data can be collected and analyzed.
  - Investigating the problem has theoretical or practical significance.
  - It is ethical to investigate the problem.



## Problem Statement

Many students enter college with weak math backgrounds (Bosley, 2009). In schools where general requirements include math classes, historically the failure rate for Algebra I is approximately 15% (Alderman, 2011). Minority students at ABC College fail entry-level Algebra I classes at significantly higher rates (i.e., 22%). Failure of classes early in a student's academic career extends their time in school and is a major predictor of dropping out of college (Schneider, 2006).

## Purpose

The purpose of this study is to determine if the use of tablet-based math software during class can positively affect achievement of minority students in Algebra I classes at ABC College.

## Research Question

Will using tablet-based math software during class result in higher achievement by minority students?

# Keys to Getting Started With Your Dissertation...

- Identify an area of interest or opportunity that can potentially meet the characteristics of a good problem area.
- Read deep into the literature – become the expert.
- Don't rely solely on the literature that supports your beliefs.
- Write the first drafts of your problem statement keeping in mind the background / problem / significance model.
- Listen to the guidance of your chair and committee and make changes as necessary. This may ultimately lead to changes or to moving into a completely new direction.
- You ultimately move forward when you demonstrate that a problem meets the significance test. Win the argument!





## Evaluate Your Work by Asking Yourself:

1. Do I know the field and its literature well?
2. What are the important research questions in my field?
3. What areas need further exploration?
4. Could my study fill a gap? Lead to greater understanding?
5. Has a great deal of research already been conducted in this topic area?
6. Has this study been done before? If so, is there room for improvement?
7. Is the timing right for this question to be answered? Is it a hot topic, or is it becoming obsolete?
8. Most importantly, will my study have a significant impact on the field?