What is a Research Problem?

- It is a problem that someone would like to investigate.
- It is considered a situation that needs to be changed or addressed.
- These problems consist of:
  - Areas of concern
  - Conditions to be improved
  - Difficulties to be eliminated
  - Questions seeking answers
Research Questions

- Proper research questions need collectable data to create possible answers
- Research questions must have an empirical (based on observable evidence) referent(s)
- Figure 2.1 demonstrates the difference between researchable and non-researchable questions

Characteristics of Good Research Questions

- Good research questions possess four essential characteristics:
  - The question is feasible
  - The question is clear
  - The question is significant
  - The question is ethical

Researchable vs. Non-researchable Questions (Figure 2.1)

<table>
<thead>
<tr>
<th>Not researchable</th>
<th>Researchable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Should I put my younger child in preschool?</td>
<td>Do children enrolled in preschool develop better social skills than children not enrolled?</td>
</tr>
<tr>
<td>What is the best way to learn to read?</td>
<td>At what age is it better to introduce phonics to children—age 5, age 6, or age 7?</td>
</tr>
<tr>
<td>Are some people born good?</td>
<td>Who commits more crimes—poor people or rich people?</td>
</tr>
</tbody>
</table>
Defining Terms

- There are 3 ways to clarify important terms or meaning in a research question:
  1) use of constitutive definition (the dictionary approach)
  2) use of proper example(s)
  3) use of operational definition (specifying operations used to measure or identify examples of the term)

See p. 53, “Key Terms to Define in a Research Study”

When Operational Definitions would be Helpful (Figure 2.2)

Research Questions Should Be Significant

- Research questions should be worth investigating
- These questions should be important and significant
- The investment of time and energy should:
  - contribute some knowledge and value to one’s field of study
  - Improve educational practice
  - Improve the human condition
Common Problems for Student Research

- Student justifications for a proposed study are likely to have two weaknesses:
  1) The assumption is too great that everyone will agree that the stated problem is a "problem.
     - It is the researcher's job to clarify and prove that the study or question is important.
  2) Students often overstate the implications of a study.
     - Evidence of the effectiveness of a certain treatment doesn't mean that this will occur or result automatically when adopted or implemented.

Relationship Between Voter Gender and Party Affiliation (Figure 2.3)