CHAPTER 2

SELECTING A PROBLEM AND PREPARING A RESEARCH PROPOSAL

Key Definitions and Concepts:

the academic research project
levels of research projects
sources of research problems
evaluation of the research problem
the research proposal
statement of the problem
definitions
assumptions
limitations
delimitations
the review of related literature
the hypothesis
the method section
for research proposals

the subject section the procedure section time schedules experimental ethics informed consent invasion of privacy confidentiality finding related literature note-taking guidelines references bibliography the first research report seeking funding

Multiple-Choice Test Items:

- 1. The reason selecting a research problem is so difficult for the beginning researcher is that
 - a. the beginning researcher is likely to select a problem that is too broad in scope.
 - b. the beginning researcher is usually naive about related research literature.
 - c. his or her research activity may be fragmentary and bear little relevance to the formulation of theory.
- *d. all of the above.

2. Research is

- a. a process of proving theories.
- *b. a process of testing hypotheses.
- c. a subjective, individual process.
- d. all of the above.

3. Invasion of privacy

- a. is concerned with generalizing publicly recorded behaviors.
- b. suggests that public behavior cannot be observed ethically.
- *c. is concerned about the use of private correspondence without the subject's knowledge and permission.
- d. all of the above.

4. Informed consent

a. is not necessary when subjects are mentally incapacitated.

- b. is not necessary when the subjects are minors.
- *c. includes the freedom to withdraw from an experiment without reprisal. d. all of the above.
- 5. The research hypothesis
 - a. may be formulated after the data are gathered.
 - b. need not be consistent with known facts or theories.
- *c. should be stated in such a way that it can be tested and found to be probably true or probably false.

d. all of the above.

- 6. Additional hypotheses formulated after data are collected
 - a. are always inappropriate.
 - b. are necessary for an unbiased investigation.
 - c. should be included in the review of the literature.
- *d. should be tested on the basis of new data.
- 7. Which is not a function of the Procedure section in a research proposal?
- a. It describes in detail what is to be done in the experiment.
- b. It describes in detail what data-gathering devices will be used.
- *c. It describes in detail who the subjects will be.
- d. It describes in detail what data will be needed.

8. The limitations of the beginning researcher

- a. imply that the results of his or her research will be unimportant.
- *b. put the emphasis on learning how to conduct research.
- c. should be no different than those researchers pursuing doctoral dissertations.
- d. prevent him or her from expanding the first research problem into a more comprehensive treatment at a later date.

9. In a research proposal the statement of the problem

- a. presents broad areas of concern from which many problems are presented.
- b. does not suggest a specific definitive solution.
- *c. must be limited in scope to make a definite conclusion.
- d. must not be based on personal observation or experience.

10. Assumptions

- a. are criteria used to define observable samples of behavior.
- *b. are statements of belief that a researcher cannot verify.
- c. are the boundaries of that particular study.
- d. are never presented in the research proposal.

- 11. In a research proposal, limitations are
- a. the boundaries of that particular study.
- b. independent variables expressed in operational terms.
- *c. conditions beyond the researcher's control that may restrict the conclusions of the study.
- d. all of the above.
- 12. In a research proposal, delimitations are
- *a. the boundaries of that particular study.
- b. independent variables expressed in operational terms.
- c. conditions beyond the researcher's control that may restrict the conclusions from the study.
- d. all of the above.
- 13. In a research proposal, the review of related literature
 - a. includes a long list of annotated studies that relate to the problem.
 - b. includes poorly executed studies as well as competent ones.
- *c. signifies the researcher is familiar with what is already known and what remains untested.
- d. all of the above.
- 14. Research makes its contribution to human welfare by
- a. supplying quick and fairly spectacular solutions to social problems. *b. countless small additions of knowledge.
- c. selecting problems that are very broad in scope.
- d. proving existing theories.
- 15. Which of the following is a likely source to which one may go for a suitable research problem?
 - a. Problems confronted in the classroom or school.
 - b. Technological changes that are currently happening.
 - c. Consultation with an advisor or professor.
- *d. All of the above.
- 16. Which question would be considered last when initially evaluating a research problem?
 - a. Is the problem significant?
 - b. Are pertinent data accessible?
 - c. Am I competent enough to plan and carry out a study of this type?
- *d. How will it be funded?
- 17. The statement of the problem is inappropriate when
 - a. it is written in question form.
 - b. its major statement is followed by minor statements.
- c. it is not derived from personal observation and experience.
- *d. it does not allow for specific answers.

- 18. Significance of the problem refers to
 - a. the distinguishing and unusual terms of a study that could be misinterpreted.
- *b. justifying its worth for conducting a study.
- c. the number of variables that can be considered in operational terms.
- d. the boundaries of the research Problem.

19. A data-gathering device that has not been validated is an example of a. a definition.

- b. an assumption.
- *c. a limitation.
- d. a delimitation.
- 20. A researcher's insistence that after three days observers will not have a reactive effect on subjects' behavior is an example of
 - a. a definition.
- *b. an assumption.
- c. a limitation.
- d. a delimitation.
- 21. A study of addition performance concerned only with learning disabled students is an example of
 - a. a definition.
 - b. an assumption.
 - c. a limitation.
- *d. a delimitation.
- 22. In searching for related literature, the researcher should take note of a. faults that could have been avoided.
 - b. reports of studies of closely related problems previously investigated.
 - c. the design of the study and the populations that were sampled.
 - *d. all of the above.
- 23. Time schedules are important because
 - a. they include a detailed outline about how the research will be carried out.
 - *b. they help to systematize the study and avoid procrastination.
 - c. they outline the frequencies of variables used in the study.
 - d. all of the above.
- 24. Observing and recording public behavior of anonymous persons a. is still an invasion of privacy.
- *b. is not an invasion of privacy.
- c. still requires informed consent.
- d. both b and c.

- 25. A standard score on an achievement test would most likely be used as an operational definition for
 - a. creativity.
- *b. knowledge.
- c. coordination.
- d. self-esteem.
- 26. "There will be no differences in reading comprehension gains of learning disabled students in the fourth grade due to a direct instruction method as compared to a group of normal peers."
 - This is an example of
 - a. a research hypothesis.
- *b. a null hypothesis.
- c. an operational definition.
- d. a research assumption.

Essay Test Items and Topics for Class Discussion:

- 1. Why is selecting a research proposal such a difficult problem for the novice?
- 2. Select a research problem and try to narrow its scope so that a study could be proposed from it.
- 3. What can be done to encourage students who have received training in research activities to carry out studies on their own?
- 4. What obstacles must a part-time student overcome concerning conducting research that may not apply to the full-time student.
- 5. Review and discuss the many sources to which the beginning researcher may go for a suitable research problem.
- 6. From the list of sixty problem sources suggested by the text, select some of interest and practice narrowing the scope of the research problem.
- 7. Discuss four important questions which a researcher must consider before a proposed research problem can be deemed appropriate.
- 8. Review and discuss the importance of the ten guidelines suggested by the text when taking notes for the research Proposal.
- 9. Review and discuss the twelve suggestions presented in the text concerning those who may want to seek financial support for their research proposal.
- 10. Why is it necessary to indicate how your study will add to or refine present knowledge?

- 11. Why must a research proposal possess the qualities of significance, originality and feasibility?
- 12. Review and discuss the important elements that the researcher should note when searching for related literature of the research problem.
- 13. Why are time schedules useful?
- 14. What are the major areas of concern that a researcher must review when regarding ethics in human experimentation?