

ASE 579 METHODS OF RESEARCH
Summer Semester 2008

Sam Houston State University
College of Education
Department of Educational Leadership & Counseling

INSTRUCTOR:

John R. Slate, Ph.D.
Teacher Education Center, Rm. 319-H
Box 2119
Phone: 936-294-4348; Fax: 936-294-3886
Cell Phone for emergencies: 913-710-5347
e-mail: jrs051@shsu.edu or profslate@netscape.net
Computer Help Desk --936-294-1950

PLACE & TIME:

Online

REQUIRED TEXT(S):

Gay, L. R., Mills, G. E., & Airasian, P. (2006). *Educational Research: Competencies for Analysis and Applications* (8th ed.). Upper Saddle River, NJ: Prentice Hall. ISBN 0-13-118534-9.

American Psychological Association. (2001). *Publication manual of the American Psychological Association* (5th ed.) Washington, DC: American Psychological Association.

STATPAK or SPSS(Statistical Package for the Social Sciences-PC).

- STATPAK is free and you can access it by going purchasing the text and going to www.penhall.com/gay.
- SPSS can be obtained by: (a) downloading a 14-day trial from www.spss.com, (b) remote accessing through Sam Houston web page {Start>All Programs>Accessories>Communications>Remote Desktop Connection. Click Connect, SHSU log-in appears, log-in, SHSU desktop will appear on the computer screen. Any problems with this call, Computer Help Desk 936-294-1950, (c) or by purchasing through Barnes and Noble SHSU Bookstore, 936-294-1862. The entire package of Educational Research.....(text, workbook, and SPSS student version) is \$146.00, text itself is \$107.00 and shipping is \$6.95.
- If you are looking to save money on the text, you may rent the text for the course by logging on to <http://www.safarix.com>.

COURSE DESCRIPTION:

This course is designed to guide graduate students in the College of Education through the process of conducting a research study.

COURSE OBJECTIVES:

1. Identify and define a researchable problem.
2. Review related literature in which a context is provided for your researchable problem.
3. Use technology for enhancing learning (e.g., Blackboard, e-mail, web-sites, Power Point, SPSS, STATPAK).
4. Write research questions (hypotheses) to guide research.
5. Write null hypotheses for research questions.
6. Write nondirectional hypotheses for research questions.
7. Write directional hypotheses for research questions.
8. Apply a sampling procedure in developing your research proposal.
9. Demonstrate knowledge of criteria for evaluation and selection of test instruments and apply this knowledge to a research problem.
10. Compare and contrast the following research designs (i.e., descriptive, experimental, correlational).
11. Apply one of the above-mentioned research designs in developing your research proposal.
12. Select and calculate, as appropriate, the following measures of central tendency: mean, median, and mode.
13. Select and calculate the following measures of variability: range, variance, and standard deviation.
14. In calculating any of the above-mentioned statistics, be able to use a statistical package such as SPSS or STATPAK.
15. In calculating any of the above-mentioned statistics, be able to interpret correctly.
16. In calculating any of the above-mentioned statistics, be able to write the findings correctly in APA style.
17. Evaluate research articles in a critical manner.
18. Use library resources in an efficient manner for conducting research.
19. Be able to write a research proposal in conformity with the American Psychological Association's latest style manual.
20. Be familiar with and apply ethical procedures in conducting research.

FOR YOUR INFORMATION

- ✓ Please check Blackboard daily for instructions on web-site changes, web-site links, information, etc. You will need a student account, call 936-294-1950 if you have difficulty setting up account. Log on to Blackboard by accessing SHSU webpage and linking on to Blackboard. Your student account # will also permit you to use library resources.
- ✓ If you are a student with a disability that may affect your academic performance, please contact the professor as soon as possible or you may contact the Director of the Counseling Center as chair of the Committee for

Continuing Assistance for Disabled Students at 294-1720.

- ✓ Academic honesty is expected in this class. Violations will result in course failure.
- ✓ Attendance. You are encouraged to attend every class meeting and only miss in case of emergencies.
- ✓ Late assignments will be penalized by one letter grade for each 24-hour-period they are not turned in.
- ✓ The syllabus is subject to change pending notification.

Week One July 7 - 11

Topics for Part One of This Week

Overview of Course Syllabus

Nature of Research

Brief, brief, history of educational research

Guidelines for writing researchable questions

Powerpoints to Examine:

Introduction to Educational Research

Introduction to Research Class One

Required Readings for This Week:

GMA text chapter 1 (Introduction to Educational Research)

GMA text chapter 2 (focus on Identifying a Topic or Question to Research)

Supplementary URLs to read, if needed:

http://www.southalabama.edu/coe/bset/johnson/dr_johnson/lectures/lec1.htm

http://www.southalabama.edu/coe/bset/johnson/dr_johnson/lectures/lec2.htm

<http://www.csulb.edu/~msaintg/ppa696/696intro.htm#696intro>

Objectives:

1. Use library for accessing research articles.
2. Use technology (Blackboard, SPSS, STATPAK, e-mail, Power Point, websites) for learning about methods of research.
3. Use American Psychology Association (APA) Publication Manual for formatting paper, citations, and references.
4. Select and define a research topic. **After reading chapter 1 & 2 in text**, go to your text's website www.prenhall.com/gay, go to chapters 1 & 2, view Power Point that corresponds to chapters 1 & 2. You will define a research topic on which you will write your 10-page paper (excluding references and tables). The paper can be written in partners; you may reach them via e-mail and Discussion Board on Blackboard.

Activities:

1. Log on to SHSU website, on main page click Newton Gresham Library (NGLibrary)
Click - On-Line Instruction Series
Click - Information Literacy Tutorial
Go through the modules, take tests
Print certificate. Certificate will be attached to the final paper you turn in.
2. Click - Internet Tutorial
Go through all modules.
Take tests. Print Certificate for your records. Keep an electronic copy of your certificates and attach in digital form to the final paper you upload to the Bb site.
3. Complete the multiple choice test for objectives 1 and 3 for chapter 1; the essay/activity questions for objective 2, 4, and 5 for chapter 1; and, all of the multiple choice tests for objectives 1 – 5 for Chapter 2. Once completed and graded, use the email function at the bottom of the screen to email me your test results, profslate@netscape.net You will have a separate email sent to me at profslate@netscape.net for each completed test for each objective.
4. Brainstorm about a topic for your paper. If you know another person in class with whom you would like to work, that would be fine with me. Let me know of any pairs or small groups (max of four persons) who would like to work together on a research proposal.

Topics for Part Two of This Week

Research Questions
Important Terms
Develop a draft of one or more research questions for your proposal

Powerpoints to be Covered:

Sample Quantitative Research Questions
Research Question Quantitative

Required Readings for Week Two:

GMA text chapter 2 (focus on hypothesis section)
GMA text chapter 20 (Action Research)

Supplementary URLs to read (only if necessary for you to understand these topics better):

http://www.southalabama.edu/coe/bset/johnson/dr_johnson/lectures/lec3.pdf
<http://www.csulb.edu/~msaintg/ppa696/696meas.htm#696meas>
http://www.southalabama.edu/coe/bset/johnson/dr_johnson/lectures/lec11.pdf

Activities:

1. Read Chapter 20 and log on to website and view Power Point on this chapter.
http://wps.prenhall.com/chet_airasian_edresearch_8/38/9872/2527268.cw/index.html

2. Complete the multiple choice questions
http://wps.prenhall.com/chet_airsian_edresearch_8/38/9872/2527268.cw/index.html for objectives 1, 2, 3, 4, 5, and 6 for Chapter 20. Once completed and graded, use the email function at the bottom of the screen to email me your test results, profslate@netscape.net You will have a separate email sent to me at profslate@netscape.net for each completed test for each objective.
3. Submit idea regarding research proposal by July 11.

Week Two July 14 – July 18

Topics for Part One of This Week

Theories and Hypotheses
 Quantitative Approaches
 Go over research question draft – feedback provided

Powerpoints to be Covered:

Research Proposal Guidelines
 Theories and Hypotheses

Required Readings for Part Two of This Week:

GMA text chapter 3 (Preparing and Evaluating a Research Plan)
 GMA text chapter 21 (Preparing a Research Report)

Supplementary URLs to read, if needed:

http://www.southalabama.edu/coe/bset/johnson/dr_johnson/lectures/lec14.pdf
<http://faculty.ncwc.edu/toconnor/308/308lect02.htm>
<http://www.uh.edu/~srama/Research%20Basics/keyideas.htm>
<http://www.uh.edu/~srama/Quantitative%20Methods/Quant%20Methods%20Overview.htm>

Activities:

3. Read Chapter 3 and log on to website and view Power Point on this chapter.
http://wps.prenhall.com/chet_airsian_edresearch_8/38/9866/2525745.cw/index.html
4. Complete the multiple choice questions
http://wps.prenhall.com/chet_airsian_edresearch_8/38/9866/2525745.cw/index.html for objectives A, 1, 2, 3, 4, and 5 for Chapter 3. Once completed and graded, use the email function at the bottom of the screen to email me your test results, profslate@netscape.net You will have a separate email sent to me at profslate@netscape.net for each completed test for each objective.

Topics for Part Two of This Week

Writing in American Psychological Association format
 Ethics and research

Powerpoints to be Covered:

APA Guidelines
 Ethics in Human Subjects Research
 Simplified Overview of Research Methods

Supplementary URLs to read, if needed:

http://www.southalabama.edu/coe/bset/johnson/dr_johnson/lectures/lec4.pdf

<http://tamuk.edu/grad/manual.html>

<http://www.csulb.edu/~msaintg/ppa696/696ethic.htm#ethics>

<http://bioethics.od.nih.gov/IRB.html#guidance>

Activities:

5. Read Chapter 21 and log on to website and view Power Point on this chapter.
http://wps.prenhall.com/chet_airasian_edresearch_8/38/9872/2527328.cw/index.html
6. Complete the multiple choice questions
http://wps.prenhall.com/chet_airasian_edresearch_8/38/9872/2527328.cw/index.html for objectives 1 and 2 for Chapter 21. Once completed and graded, use the email function at the bottom of the screen to email me your test results, profslate@netscape.net You will have a separate email sent to me at profslate@netscape.net for each completed test for each objective.
7. Submit revised draft of research proposal: must contain research question(s); significance of study; purpose of study; title page; definition of terms; and references page. This draft should be submitted by July 18th.

Week Three July 21 – 25Topics for Part One of This Week

Reviewing the Literature

Common Errors Made in Research

Common Errors found in Educational Research Texts

Powerpoints to be Covered:

Conducting a Literature Review

Internal and External Validity Issues

Relevant WORD documents:

Literature Review Information

Required Readings for This Week:

GMA text chapter 5 (Selecting Measuring Instruments)

GMA text chapter 9 (Experimental Research)

Supplementary URLs to read, if needed:

<http://www.socialresearchmethods.net/kb/design.htm>

<http://www.csulb.edu/~msaintg/ppa696/696exper.htm#Experimental%20Designs>

<http://www.socialresearchmethods.net/kb/constval.htm>

<http://www.socialresearchmethods.net/kb/reliable.htm>

Activities:

1. Read Chapter 5 and log on to website and view Power Point on this chapter.
http://wps.prenhall.com/chet_airasian_edresearch_8/38/9866/2525943.cw/index.html
2. Complete the multiple choice questions

http://wps.prenhall.com/chet_airasian_edresearch_8/38/9866/2525943.cw/index.html for objectives 1, 2, 3, 4, 6, 7, and 8 for Chapter 5. Once completed and graded, use the email function at the bottom of the screen to email me your test results, profslate@netscape.net You will have a separate email sent to me at profslate@netscape.net for each completed test for each objective.

3. Read Chapter 9 and log on to website and view Power Point on this chapter.
4. Complete the multiple choice questions on the text website for objectives 1 – 9 for Chapter 9. Once completed and graded, use the email function at the bottom of the screen to email me your test results, profslate@netscape.net You will have a separate email sent to me at profslate@netscape.net for each completed test for each objective.

Topics for Part Two of This Week

Experimental Research Designs
Quantitative Data Issues
Validity and Reliability

Powerpoints to be Covered:

Experimental Research Designs
Reliability Issues
Validity Issues
Causal-comparative and Correlational Designs
Survey Designs
Internal and External Validity Concerns

Powerpoints to be Covered:

Correlational & Causal-Comparative Designs
Descriptive Research Methods
Internal and External Validity Factors

Required Readings for Next Week:

GMA text chapter 8 (Causal-Comparative Research)
GMA text chapter 7 (Correlational Research)
GMA text chapter 6 (Descriptive Research)

Supplementary URLs to read, if needed:

http://www.southalabama.edu/coe/bset/johnson/dr_johnson/lectures/lec11.pdf

Supplementary URLs to read, only if necessary:

http://www.southalabama.edu/coe/bset/johnson/dr_johnson/lectures/lec7.pdf

<http://www.socialresearchmethods.net/kb/sampling.htm>

<http://www.csulb.edu/~msaintg/ppa696/696sampl.htm#sampling>

Activities:

1. Read Chapter 8 and log on to website and view Power Point on this chapter.
2. Complete the multiple choice questions on the text website for objectives 1, 2, 3, 4, and 6 for Chapter 8. Once completed and graded, use the email function at the bottom of the screen to email me your test results, profslate@netscape.net You will have a separate email sent to me at profslate@netscape.net for each completed test for each objective.
3. Read Chapter 7 and log on to website and view Power Point on this chapter.

4. Complete the multiple choice questions on the text website for objectives 1, 2, 3, and 4 for Chapter 7. Once completed and graded, use the email function at the bottom of the screen to email me your test results, profslate@netscape.net You will have a separate email sent to me at profslate@netscape.net for each completed test for each objective.
5. Read Chapter 6 and log on to website and view Power Point on this chapter.
6. Complete the multiple choice questions on the text website for objectives 1, 2, 3, 4, and 5 for Chapter 6. Once completed and graded, use the email function at the bottom of the screen to email me your test results, profslate@netscape.net You will have a separate email sent to me at profslate@netscape.net for each completed test for each objective.
7. Submit revised draft of research proposal: must contain research question(s); significance of study; purpose of study; title page; definition of terms; headings and subheadings for literature review section; hypotheses; and references page. This draft should be submitted by July 25th.

Week Four July 28 – August 1

Topics for Part One of This Week

Sampling

Methods and Procedures

Powerpoints to be Covered:

Sampling Presentation

Method and Procedures section

Required Readings for This Week:

GMA text chapter 4 (Sampling)

GMA text chapter 11 (Descriptive Statistics)

<http://www.statsoft.com/textbook/stathome.html>

<http://glass.ed.asu.edu/stats/lesson2/>

<http://www.mste.uiuc.edu/hill/dstat/dstat.html>

<http://www.animatedsoftware.com/statglos/statglos.htm>

Activities:

1. Read Chapters 4 and 11 and log on to website and view the Power Points on these chapters.
2. Using STATPAK or SPSS (for persons very familiar with Excel, you are permitted to use it as well):
 - (a) Calculate measures of central tendency for notebook.
 - (b) Calculate measures of variability for notebook.
 - (c) Run three types of visual depictions of data for notebook.
3. Submit digital draft of research proposal in process. Submit revised draft of research proposal: must contain research question(s); significance of study; purpose of study; title page; definition of terms; headings and subheadings for literature review section; hypotheses; method section; and references page. This draft should be submitted by July 25th.

Topics for Part Two of This Week

Inferential Statistics

Required Reading:

GMA text chapter 12 (Inferential Statistics)

<http://www.statsoft.com/textbook/stathome.html><http://glass.ed.asu.edu/stats/lesson4/><http://www.psychstat.missouristate.edu/introbook/sbk28.htm>Activities:

1. Read Chapter 12 and log on to website and view the Power Points on this chapter.

Week Five August 4 – August 7Activities:

1. You will submit a digital version of a 10 to 12 page paper to include: (a) quantitative research, (b) APA-style, (c) a minimum of 8 references and citations, (d) emphasis of one particular design (survey, correlational, experimental, causal-comparative, (e) 1 research question, (f) all three hypotheses, and (g) references page. You have been provided with a model of how your completed research proposal should look on the Bb site.
2. The two certificates for library work you completed in week one should be uploaded in digital form to the designated Bb site.
3. Develop a 10-12 minute powerpoint presentation summarizing your research proposal. A scoring rubric will be provided for you on this assignment. You will upload your ppt to the designated Bb site.
4. Complete final written exam.
5. All work must be submitted by five p.m. on the last day of class, as per the summer two academic calendar.

Methods of Evaluation

1	Completed Research Proposal	33%
2	Draft One Ready by Scheduled Date	3%
3	Draft Two Ready by Scheduled Date and Incorporated Feedback from Draft One review	3%
4	Powerpoint of Research Proposal Presentation	20%
5	Statistics Notebook	20%
6	Correctly completed Forms	10%
7	All tests/activities as required in the syllabus	8%
8	Final written exam	3%

A = 90% + B = 80% + C = 70% + F = below 70%

PLAGIARISM: WHAT IT IS

The following comments are taken verbatim from Campbell, Ballou, and Slade's (1986) book entitled, Form and Style Theses, Reports, Term Papers (7th ed.).

"Quotations in a research paper, thesis, or dissertation can be of two types: indirect (paraphrased or summarized), or direct (verbatim). Both indirect and direct quotations must be documented. That is, you must indicate the source either with parenthetical documentation accompanied by a list of works cited...

Plagiarism-the use of another person's ideas or wording without giving proper credit-results from the failure to document fully and accurately. Ideas and expressions of them are considered to belong to the individual who first puts them forward. Therefore, when you incorporate ideas or phrasing from any other author in your paper, whether you quote them directly or indirectly, you need to be honest and complete about indicating the source to avoid plagiarism. When intentional or unintentional, plagiarism can bring serious consequences, both academic, in the form of failure or expulsion, and legal, in the form of lawsuits. Plagiarism is a violation of the ethics of the academic community.

Any fact or opinion that you read in one of your sources, whether you first discovered the idea there or have assimilated it so thoroughly that it seems to be your own, should be documented in your paper. Two exceptions are facts that are common knowledge (e.g., John Hancock signed the Declaration of Independence) and facts that can be verified easily and would not differ from one source to another (the headquarters of the Common Market are in Brussels, Belgium). Under most circumstances, these kinds of materials would not need to be documented. On the other hand, material available in only one source or a limited number of sources (a fact about changes in the birth rate in China) should usually be documented." (p. 59).

In reference to notetaking, Campbell, Ballou, and Slade (1986) stated: "When you write a summary during notetaking, you must be careful to avoid inadvertently using the author's wording. Changing an occasional word or reversing the order of phrases or sentences does not result in an adequate summary. A good discipline is to try to write a summary without looking at the source. After writing a summary, look at the original and make a critical comparison, checking for duplication of wording and accuracy in statement of the ideas. If you find that you have used more than two consecutive words from the original (with the exception of articles or prepositions), place them in quotation marks. Carelessness in writing a summary can result in unintentional plagiarism...Even though the summary contains your own words, you will want to give credit for the ideas if you use them in your paper. Be as careful about recording the author's name and page numbers for a summary or paraphrase as you would be for a direct quote." (p. 14-15).

Commenting about paraphrasing, Campbell, Ballou, and Slade (1986) add: "Your paraphrase or summary should represent the source's ideas accurately, avoiding distortion through misstatement or improper emphasis. At the same time, your summary should be stated entirely in your own words. Avoid imitating sentence structure, rearranging words and phrases, and borrowing phrases even of two or three words, since these constitute plagiarism. If you find that you cannot avoid using a phrase from the original, place the words in quote marks. Even when you have restated a passage completely in your own words, indicate that you encountered the information in your reading by" (p. 59-60) citing the reference and including the reference on your reference page.