

EDUC 622 – RESEARCH METHODS IN EDUCATION

Spring 2013 Academic Hall 211

Tuesdays 5:30-8:15 pm

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Mission Statement of the School of Education, CSUSM

The mission of the School of Education Community is to collaboratively transform public education by preparing thoughtful educators and advancing professional practices. We are committed to diversity, educational equity, and social justice, exemplified through reflective teaching, life-long learning, innovative research and on-going service. Our practices demonstrate a commitment to student-centered education, diversity, collaboration, professionalism, and shared governance. (*Adopted by COE Governance Community, October, 1997*).

Course Description

This core course is designed to introduce educational practitioners to the fields of educational research and evaluation. We will explore quantitative and qualitative methods of designing and conducting research in the context of educational settings. We will further examine measurement, assessment, common statistical techniques and methods for critiquing research and program evaluation studies.

Objectives

This course enables students to become effective, confident creators and consumers of research by providing a foundation of knowledge in the area of research methods that will enable them to read research and program evaluation reports with enough understanding to determine a study's merits.

Students will write a research proposal, which could lead to development of the first three chapters of their MA thesis.

During the course, students will increase: understanding of various research methodologies and statistical techniques; ability to interpret, summarize, and critique educational research; and skills in planning to conduct research.

Therefore students will:

- Develop a working understanding of research methods and designs for educational settings;
- Enhance their practical understanding of both quantitative and qualitative research methods;
- Be able to analyze the strengths and limitations of educational research studies;
- Be able to determine the appropriate use of educational research in addressing student achievement issues in schools.
- Be able to refer to appropriate sources to find the answers to research and evaluation problems and produce a comprehensive review of the literature.
- Develop a working understanding of descriptive and inferential statistical techniques;
- Design a proposal for a research study; and
- Utilize correct APA style writing and citations.

Course Requirements

Required Texts Assigned texts and readings must be brought to all class sessions.

American Psychological Association. (2009). *Publication manual of the American Psychological Association*, 6th Ed. Washington, DC: APA.

Mertler, C.A. and Charles, C.M. (2010). *Introduction to educational research*. 7th Ed. Boston: Pearson Publishing.

* Several other readings are required and will be available for download.

* You must have access to Excel 2007 for Windows. This is available on campus, if no other access.

Recommended Texts Selections may be included in electronic readings.

Cresswell, J. W. (2007). *Educational research: Planning, conducting and evaluating quantitative and qualitative research*, 3rd Ed. NY: Prentice Hall.

Hubbard, R. S. and Power, B. M. (1999). *Living the question: A guide for teacher researchers*. NY: Stenhouse.

To stay updated regarding educational issues that impact teaching, learning and leadership, you are urged to read current publications in the field. Some examples include: *Educational Leadership*; *The Journal of Special Education*; *Language Arts*; *Science and Children*; *Teaching Children Mathematics*; *Democracy & Education*; *Phi Delta Kappan*; *Teaching Tolerance*; and *Rethinking Schools*.

Assignments

All assignments are due on the dates indicated. Assignments *must* be submitted via Cougar Courses, double-spaced, and with standard margins, and adhere to style and formatting guidelines of APA 6th ed., as appropriate to the assignment. It is expected that all assignments will reflect graduate-level expectations for composition and exposition. Use of electronic spelling and grammar checking is encouraged. The Writing Center is available for support (Kellogg Library 1103, 760-750-4168).

Weekly Homework and Class Participation (30 points). As graduate students, you are expected to take an active role in class and class activities. The quality of this course rests on the quality of YOUR participation. Toward this end, you are expected to attend every face-to-face class meeting; arrive fully prepared for classroom activity (i.e. homework is completed); and participate wholly in classroom and online dialogue—including peer review activity. Each reading assignment will require a corresponding response, intended to provide an opportunity for brief personal review, digestion, and self-assessment of the content. These will usually be completed online, one per chapter read. The statistical reasoning content, studied online, is included in this grade.

Annotated Bibliographies (10 points). Because your ability to find and use published literature is paramount to your understanding of research methods, you will be reading, summarizing, and interpreting a variety of published research studies. This practice will prepare you for the literature review portion of any research project and strengthen your critical analysis skills as a consumer of published research.

Four annotated bibliographies will be submitted, each with 5 resources related to the topic of your research proposal. The majority of each bibliography must be empirical research studies. The annotation for these studies will state briefly the research questions(s), the methodology, the research setting and participants, the methods for collecting data, the methods for analyzing data, and the findings. A few comments/critique of the research is appropriate, as are personal notes, such as quotes (with page numbers) that you predict you might use in future writing.

Article Critique (20 points). For one article in particular, you will summarize then critique the research. The critique is not a reaction to the article or the material in it. It is not an explanation of the material, nor an amplification of it. Nor is the critique an editorial, a defense of the material from your standpoint. The article critique is (a.) a summary of the research methods and findings, and (b.) your evaluation of the article and how it is presented to you.

- Write a 4-6 page (maximum!) paper based on your summary and critique. You will be marked down if longer than 6 pages; brevity and concision are valued in this writing genre.
- Report the name of the journal, author(s), and title of the article *only* in a Reference section, save for minimal and introduction in the paper, i.e. the normal APA citational style that acknowledges author's last name and year of publication.
- The summary must include the research problem/questions; highlights of the literature review; name of the design methodology; participants and setting; key elements of the methods for data collection and data analysis; the findings of the research; and a restatement of the author's recommendations (e.g. why the findings are important to educators, how the findings can inform education, ...).
- After this summary, complete a thoughtful critique, focusing on what you believe to be the strengths *and* weaknesses of the research. That is, the validity and reliability of the data, the methods to collect, the methods to analyze, and concerns about bias in findings and/or conclusions.

This article critique will also be assessed for your Graduate Writing Assessment Requirement (GWAR).

Research Proposal (40 points). To prepare you for future research, you will complete key components of a research proposal. These key components will include: Title Page, Table of Contents, Chapter 1: Statement of Problem (*outlined*), Chapter 2: Literature Review, Chapter 3: Methodology (*outlined*), and References. Other than the outlined portions, the proposal must conform to the APA 6th edition style guide throughout.

For some students, this research proposal might lead directly to the Culminating Experience for their MA in Education. This proposal should be considered no more than a **draft** of the first three chapters your Masters thesis or project. It is strongly encouraged that upon completion of this draft, it is taken to your Chair for discussion and feedback. They will let you know when you are ready to submit your formal proposal, acceptance of which allows for your Advancement to Candidacy and enrollment in EDUC 698.

The School of Education (SoE) provides a rubric as an *optional* guide for your writing of each chapter of your final research/project thesis. For this class, you are encouraged to read this rubric before you begin writing, and then revisit it as you make revisions to your chapters in order to help you self-assess. You are also **strongly** encouraged to develop a peer-writing group to get feedback from others during your writing. Remember, *the key to good writing is rewriting*.

Specific details and requirements of the *Research Proposal*:

- *Chapter One: Introduction & Statement of Problem*. Chapter 1 is the Statement of the Problem of the Research Proposal and it should begin with a "Narrative hook" to introduce the topic. Expand that narrative to include the purpose statement and research question(s) following the guidance of Creswell (2012) on pages 64-75 & 122-135 [supplemental reading materials]. Chapter 1 should include the following components: background information, statement of the problem, purpose of study, rationale, research questions, significance of study, applications, limitations, definition of terms and a summary paragraph leading into the *Literature Review*. Your writing should "flow" and so each of the aforementioned components should not necessarily define the structure of the chapter. However, each component should be present. See the SoE Chapter 1 Thesis Rubric for more guidance.
- *Chapter Two: Literature Review*. The Literature Review is a critical and in-depth evaluation of previous research; it serves not only as a summary and critique, but also **synthesis** of the research particular to your area of study.

Your review of literature should be organized around common themes that you found in your research articles, not organized simply as a sequence of individual articles. You should write about the articles within the subheadings of your common themes. You are writing one overview of all of the articles together, not each one separately. Remember to discuss common themes or threads that run through all or some of the papers; do not have one separate paragraph about each paper. If a paper included something unique and significant, you can certainly discuss it.

Follow correct guidelines for citation; be sure to give the authors credit if you take something directly from their paper. Use quotation marks and include the page number when you use an exact quote.

Ensure that the **all** of the reviewed articles were the reports of empirical research conducted by the author(s), and that the majority of articles referenced in this chapter are primary sources. How do you know if it was empirical research? The authors will state the guiding research question(s), how they collected and analyzed data, and the results, implications and conclusions.

The Literature Review should have an introduction that ties the review of literature to your research question. The body of the chapter should be organized by underlying themes or threads (subtopics) that your articles address. You should have a summary at the end that summarizes the review of literature and how it is linked to your research question, and which leads the reader into the *Methodology*. See the SoE Chapter 2 Thesis Rubric for more guidance.

- *Chapter Three: Methodology.* Although only an outline, a quality response to this chapter is important; it is your opportunity to demonstrate what you know about designing a research study. Be thorough. Your methodology chapter will consist of an introduction to the chapter, description of your methodological design, description of the research participants and setting, the data to be collected, instruments and procedures for data collection, the methods for data analysis, and a summary. See the SoE Chapter 3 Thesis Rubric for more guidance.

Grading Standards

Grades will be based on the following grading scale:

The course is writing intensive, and success depends on keeping pace with course writing structures and due dates. As such, work submitted late, but within one week of the due date will be reduced by one letter grade. Work received over one week late will be recorded at half the graded value. *Note:* assignments are due whether or not you are present in class that day.

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|---|-------|----|---|-----------|
| A | | 90 | – | 100% |
| B | | 80 | – | 89% |
| C | | 70 | – | 79% |
| D | | 60 | – | 69% |
| F | | | | Below 60% |

Each written assignment will be graded approximately 80% on content and context (detail, logic, synthesis of information, depth of analysis, etc.), and 20% on mechanics (grammar, syntax, spelling, format, uniformity of citation, etc.).

School of Education Attendance Policy

Due to the dynamic and interactive nature of courses in the School of Education, all students are expected to attend all classes and participate actively. At a minimum, students must attend more than 80% of class time, or s/he may not receive a passing grade for the course at the discretion of the instructor. *Individual instructors may adopt more stringent attendance requirements.* Should the student have extenuating circumstances, s/he should contact the instructor as soon as possible. (*Adopted by the COE [SoE] Governance Community, December, 1997.*)

Course-Specific Participation and Attendance Policy: This course approaches content in a variety of ways. Structured interactions, group processes, oral presentations, guided discussion of readings, and peer review exercises are the norm. Students are expected to have read assigned materials by the date indicated in the syllabus, and should come prepared to discuss readings individually or in variously structured groups. The degree of your engagement in these processes forms the basis for points assigned in the *participation* category.

Due to the fast paced and highly interactive nature of the course, regular attendance and full participation are expected; teaching and learning is difficult (if not impossible) if one is not present for and engaged in the process. Therefore, the above SoE Attendance Policy is amplified as follows:

- Missing more than two class meetings will result in one letter-grade reduction from your final course grade; in other words, -10 points from your total count. A third absence will result in failure of the course, per SoE policy.
- Arriving late or leaving early on two occasions will be considered the equivalent of one absence.

- Up to 5 points may be recovered by a make-up assignment. The instructor will craft an assignment relevant to the missed day. Expect the task to be at minimum equivalent in time commitment to the missed session (3 hours).

Inform the instructor *prior* to an absence. Notification of absence does not warrant an excuse.

Course Load

In all master course work, it is expected that for every one hour of contact time, you will complete approximately two to three hours of work outside of class. For EDUC 622, a 3-credit class, expect 6-9 hours of homework each week. Please plan accordingly.

Graduate Writing Requirements

The California State University maintains a Graduation Writing Assessment Requirement (GWAR) for master's students, to be completed before Advancement to Candidacy can be approved. A student may satisfy the graduate writing requirement in one of two ways: an acceptable standardized test score, or a paper that receives a passing score as described in the GWAR rubric. Toward the goal of providing opportunity for graduate students in the School of Education to satisfy the writing requirement, all papers in all graduate classes must adhere to the rules of style (for writing and format style) detailed in the *Publication Manual of the American Psychological Association, 6th ed.* (2009). This is a required textbook for all CSUSM SoE graduate courses.

Course-Specific Graduate Writing Assessment Requirement (GWAR)

In the School of Education at CSUSM, students complete the Graduate Writing Assessment Requirement (GWAR) through the submission of the *Article Critique* in EDUC 622. The student's writing in this assignment must demonstrate graduate level skills in (1) style and format, (2) mechanics, (3) content and organization, and (4) integration and critical analysis. The paper will be scored using a 4-point rubric in each of the aforementioned four areas. The minimal acceptable combined score from all of the four sections is 10 points, with no scores of "1" on any section, resulting in a minimum of a 2.5 average for all sections. The GWAR Rubric-based assessment of this paper will not directly impact your course grade; however you cannot be advanced to candidacy for your MA without arranging with the SoE to resubmit an equivalent writing sample. The GWAR Rubric is attached to this syllabus.

Students with Disabilities Requiring Reasonable Accommodations

Students with disabilities who require reasonable accommodations must be approved for services by providing appropriate and recent documentation to the Office of Disable Student Services (DSS). This office is located in Craven Hall 4300, and can be contacted by phone at (760) 750-4905, or TTY (760) 750-4909. Students authorized by DSS to receive reasonable accommodations should meet with their instructor during office hours or, in order to ensure confidentiality, in a more private setting.

CSUSM Academic Honesty Policy

"Students will be expected to adhere to standards of academic honesty and integrity, as outlined in the Student Academic Honesty Policy. All written work and oral presentation assignments must be original work. All ideas/materials that are borrowed from other sources must have appropriate references to the original sources. Any quoted material should give credit to the source and be punctuated with quotation marks.

Students are responsible for honest completion of their work including examinations. There will be no tolerance for infractions. If you believe there has been an infraction by someone in the class, please bring it to the instructor's attention. The instructor reserves the right to discipline any student for academic dishonesty in accordance with the general rules and regulations of the university. Disciplinary action may include the lowering of grades and/or the assignment of a failing grade for an exam, assignment, or the class as a whole."

Incidents of Academic Dishonesty will be reported to the Dean of Students. Sanctions at the University level may include suspension or expulsion from the University.

Plagiarism: As an educator, it is expected that each student will do his/her own work, and contribute equally to group projects and processes. Plagiarism or cheating is unacceptable under any circumstances. If you are in doubt about whether your work is paraphrased or plagiarized see the Plagiarism Prevention for Students website <http://library.csusm.edu/plagiarism/index.html>. When relying on supporting documents authored by others, cite them clearly and completely using American Psychological Association (APA) manual, 6th edition. Failure to do so may result in failure of the course. If there are questions about academic honesty, please consult the University catalog.

EDUC 622 Spring 2013 Lawler – Schedule

| Date | Topic | Assignment to be completed BEFORE Class Session |
|--|--|--|
| Week 1 22 Jan 2013 | <i>Welcome; Introduction to Educational Research & APA Style</i> <ul style="list-style-type: none"> • Syllabus • Introduction to Educational Research | Skim APA Manual |
| Week 2 29 Jan 2013 KELL 3400 | <i>Locating Published Research</i> <ul style="list-style-type: none"> • Introduction to CSUSM Library & research resources • Collect research articles (primary sources) • Introduction to APA | Read & Respond: M&C Ch 1, 2 Read <i>Accelerating Maths Achvmt</i> |
| Week 3 5 Feb 2013 KELL 3400 | <i>Workshop: Publishing your Research (or Project) at CSUSM</i> | RR: M&C Ch 3, 4 APA Ch. 7, p. 220 |
| Week 4 12 Feb 2013 TBD | <i>Selecting a Research Topic</i> <ul style="list-style-type: none"> • Locating empirical studies | RR M&C Ch 5 <i>Annotated Bib #1</i> |
| Week 5 19 Feb 2013 | <i>Interpreting and Summarizing Research</i> | RR M&C Ch 6, 7 RR APA Ch. 2-3 |
| Week 6 26 Feb 2013 | <i>Methods for Data Collection and Data Analysis & Techniques for survey data collection</i> | RR M&C Ch 8, 9 <i>Annotated Bib #2</i> |
| Week 7 5 Mar 2013 | <i>Proposing and Reporting Research</i> | RR APA (pp. TBD) Article Critique due |
| Week 8 12 Mar 2013 | <i>Procedures & Exemplars in Qualitative, Quantitative, & Mixed-Methods Research Methodologies</i> <ul style="list-style-type: none"> • Introduction to techniques for quantitative data analysis, in particular the use of Excel • Introduction to techniques for qualitative data analysis | RR M&C Ch 10, 12 <i>Lit Review Outline due</i> <i>Annotated Bib #3</i> |
| Week 9 19 Mar 2013 | <i>Survey Research & Quantitative Data Analysis</i> <ul style="list-style-type: none"> • Techniques for quantitative data analysis, σ • Workshop: Ch. 2 Literature Review | RR M&C Ch 11, 13 <i>Annotated Bib #4</i> |
| Week 10 28 Mar 2013 5:00-6:30 | <i>Research Ethics & Human Subjects Protection; Orientation to IRB Process</i> | CITI training RR M&C Ch 14 Statistics Module 1 |
| Week 11 9 Apr 2013 online | <i>Quantitative Data Analysis</i> <ul style="list-style-type: none"> • Techniques for quantitative data analysis, χ^2 | RR Case Study Statistics Module 3 <i>Lit Review due</i> |
| Week 12 16 Apr 2013 | <i>Evaluation & Action Research Methodologies & Quantitative Data Analysis</i> <ul style="list-style-type: none"> • Techniques for quantitative data analysis, using Excel | RR M&C Ch 15, 16 Statistics Module 2 |
| Week 13 23 Apr 2013 | <i>Review Methods for Data Collection & Data Analysis</i> <ul style="list-style-type: none"> • Workshop: Ch. 3 Methodology | Statistics Module 9 |
| | MA Oral Defense on April 25, 5:30-6:30 | |
| Week 14 30 Apr 2013 | <i>Wrap up Quantitative Data Analysis & Research Proposal</i> <ul style="list-style-type: none"> • Workshop: Research Proposal | Statistics Module 12 |
| Week 15 7 May 2013 | <i>Course Summary & Next Steps toward MA & Celebrations</i> | Research Proposal due |

Although this schedule and syllabus have been carefully planned, either may require modification in response to class needs and interests.

Graduate Writing Assessment Requirement

The Graduate Studies: Graduation Writing Assessment Requirement (GWAR) outlines the procedures for assessing master's student writing proficiency and the criteria for each CSUSM master's program to determine that a master's student has met the GWAR.

The writing requirement must be completed before a graduate student advances to candidacy. A student may satisfy the graduate writing requirement in one of two ways: an acceptable standardized test score, or a paper(s) that receive(s) a passing score as described below.

The paper(s) will be scored using a rubric (1 - 4) in each of four areas: "I. Style and Format", "II. Mechanics", "III. Content and Organization", and "IV. Integration and Critical Analysis". The minimal acceptable combined score from all of the four (I-IV) sections is 10 points, with no scores of "1" on any section, resulting in a minimum of a 2.5 average for all sections.

Find the full policy at http://www.csusm.edu/policies/active/documents/graduate_writing_assessment_requirement.html

Rubric Used to Evaluate Student Submissions to Satisfy the GWAR

| | 4 | 3 | 2 | 1 |
|----------------------------|---|--|--|--|
| I. Style and Format | In addition to meeting the requirement for a "3," the paper consistently models the language and conventions used in the scholarly/professional literature appropriate to the student's discipline. The manuscript would meet the guidelines for submission for publication in a peer-reviewed journal in the student's field of study. | While there may be minor errors, conventions for style and format are used consistently throughout the paper. Demonstrates thoroughness and competence in documenting sources; the reader would have little difficulty referring back to cited sources. Style and format contribute to the comprehensibility of the paper. Suitably models the discipline's overall scholarly style. | The style and format are broadly followed, but inconsistencies are apparent. There is selection of less suitable sources (non-peer reviewed literature, web information). Weak transitions and apparent logic gaps occur between topics being addressed. The style may be difficult to follow so as to detract from the comprehensibility of the manuscript. | While some discipline-specific conventions are followed, others are not. Paper lacks consistency of style and/or format. It may be unclear which references are direct quotes and which are paraphrased. Based on the information provided, the reader would have some difficulty referring back to cited sources. Significant revisions would contribute to the comprehensibility of the paper. |
| II. Mechanics | In addition to meeting the requirements for a "3," the paper is essentially error-free in terms of mechanics. Writing flows smoothly from one idea to another. Transitions effectively establish a sound scholarly argument and aid the reader in following the writer's logic. | While there may be minor errors, the paper follows normal conventions of spelling and grammar throughout. Errors do not significantly interfere with topic comprehensibility. Transitions and organizational structures, such as subheadings, are effectively used which help the reader move from one point to another. | Grammatical conventions are generally used, but inconsistency and/or errors in their use result in weak, but still apparent, connections between topics in the formulation of the argument. There is poor or improper use of headings and related features to keep the reader on track within the topic. Effective discipline-specific vocabulary is used. | Frequent errors in spelling, grammar (such as subject/verb agreements and tense), sentence structure, and/or other writing conventions make reading difficult and interfere with comprehensibility. There is some confusion in the proper use of discipline-specific terms. Writing does not flow smoothly from point to point; appropriate transitions are lacking. |

| | 4 | 3 | 2 | 1 |
|--|--|---|---|---|
| III. Content and Organization | In addition to meeting the requirements for a “3,” excels in the organization and representation of ideas related to the topic. Raises important issues or ideas that may not have been represented in the literature cited. Would serve as a good basis for further research on the topic. | Follows all requirements for the paper. Topic is carefully focused. Clearly outlines the major points related to the topic; ideas are logically arranged to present a sound scholarly argument. Paper is interesting and holds the reader’s attention. Does a credible job summarizing related literature. General ideas are expanded upon in a logical manner thereby extending the significance of the work presented beyond a re-statement of known ideas. | Ideas presented closely follow conventional concepts with little expansion and development of new directions. Certain logical connections or inclusion of specific topics related to the student’s area of study may be omitted. Ideas and concepts are generally satisfactorily presented although lapses in logic and organization are apparent. The reader is suitably introduced to the topic being presented such that the relationship to the student’s area of study is obvious. | The paper is logically and thematically coherent, but is lacking in substantial ways. The content may be poorly focused or the scholarly argument weak or poorly conceived. Major ideas related to the content may be ignored or inadequately explored. Overall, the content and organization needs significant revision to represent a critical analysis of the topic. |
| IV. Integration and Critical Analysis | In addition to meeting the requirement of a “3,” the document presents the current state of knowledge for the topic being addressed utilizing a diversity of opinions. These various, and possibly conflicting, opinions are presented in a balanced manner and seamlessly woven together to illustrate a complete grasp of the literature across multiple research approaches utilizing appropriate national and international peer-reviewed journals. Essential findings of multiple sources are accurately and concisely paraphrased, analyzed, and integrated. Original sources are clearly identified and correctly cited in both the body of the text and the reference section. Organizationally, smooth and effective transitions between topics lead the reader through an orderly discussion of the topic being addressed. The gaps in current knowledge are clearly identified and significant directions and approaches that fill these gaps are identified. | There are inconsistencies in the organization and logic of the presentation, but still clear analysis of the presented materials. While synthesis of all aspects of the topic may show varying degrees of development, the overall consistency, thoroughness, and analysis result in a well-crafted document. | Identification of key topics or uncertainties in the field may be incomplete. New concepts resulting from a synthetic presentation of ideas is poorly developed or lacking. Complex topics and related concepts are awkwardly presented and linkages among topics may be unclear. | Weakness is evident in the coverage of the field and analysis resulting in incorrect or poorly developed synthesis of results. Analysis is limited to categorizing and summarizing topics. The resulting manuscript degrades the comprehensibility of the document and the identification of knowledge gaps. |