

**ED PS 6712-001, 015 (3 credits)**  
**Reading Research**  
**Spring, 2018**

Thursday, 4:30 – 7:00 pm @ Mountain View Elementary 112 (1380 South Navajo St)

Instructor: S. Claire Son, Ph.D.  
Office: Department of Educational Psychology, SAEC 3249  
Email: s.claire.son@utah.edu  
Office hours: by appointment

Course Description:

The purpose of this course is to teach students how to become competent and critical consumers of reading and literacy research and to introduce students to the variety of research methodologies available in the current research in literacy and. The focus will be on understanding and evaluating sections and components of research method in research reports. We will use both quantitative and qualitative studies that have been influential in the literacy field over the last century as well as studies that seek to provide teachers with insight and knowledge about teaching and learning.

Course Objectives:

This course focuses on reading and literacy research as well as research methodology. At the conclusion of the study, the student will:

1. Demonstrate competency in being a critical consumer of reading and literacy research.
2. Know the difference between a high-quality, rigorous study and a mediocre or poor-quality study.
  - a. Know the various components of a study that make it high-quality and rigorous or low quality and not rigorous.
  - b. Know what to do to improve the overall quality of a study to make it rigorous.
3. Demonstrate knowledge of different research methodologies.
  - a. Understand the difference between an opinion piece and a research study.
  - b. Understand what type of research is appropriate for different research questions.
  - c. Understand and articulate the basic components of a research study and identify them in a research article.
  - d. Likewise, identify important missing components of a research study.
  - e. Understand the difference between the results of a single study and the results of a meta-analysis.
  - f. Understand how to translate research to practice and the limitations of translating research to practice.
4. Demonstrate the ability to talk to administrators and parents about research in reading and literacy.

This class is *required* for the Utah State Basic Reading Endorsement (Level II) and for the Master's degree in reading and literacy education (M. Ed).

Required Readings:

The following text is required:

**McMillan, J. H. (2016). *Fundamentals of Educational research (7<sup>th</sup> Edition)*. Boston, MA: Pearson. (ISBN-10: 0-13-4013492, ISBN-13: 978-0134013497)**

*All other readings* will be made available as PDF in the Modules section of Canvas.

Anderson, R. C., Reynolds, R. E., Shallert, D. L., & Goetz, E. T. (1977). Frameworks for comprehending discourse. *American Educational Research Journal*, 14, 367-381.

Brookes, S. J., Summers, J. A., Thornburg, K. R., Ispa, J. M., & Lane, V. J. (2006). Building successful home visitor-mother relationships and reaching program goals in two Early Head start programs: A qualitative look at contributing factors. *Early Childhood Research Quarterly*, 21, 25-45.

Duke, N. K. (2000). 3.6 Minutes a day: The scarcity of informational texts in first grade. *Reading Research Quarterly*, 35(2), 202-224.

Durkin, D. (1978). What classroom observations reveal about reading comprehension instruction. *Reading Research Quarterly*, 14, 481-533.

Duursma, E., Pan, B., A., & Raikes, H. (2008). Predictors and outcomes of low-income fathers' reading with their toddlers. *Early Childhood Research Quarterly*, 23, 351-365.

Foorman, B. R., Francis, D. J., Fletcher, J. M., Schatschneider, C., & Mehta, P. (1998). The role of instruction in learning to read: Preventing reading failure in at-risk children. *Journal of Educational Psychology*, 90, 37-55.

Gilliam, B., Gerla, J. P., & Wright, G. (2004). Providing minority parents with relevant literacy activities for their children. *Reading Improvement*, 41, 226-234.

Juel, C. (1988). Learning to read and write: A longitudinal study of 54 children from first through fourth grades. *Journal of Educational Psychology*, 80, 437-447.

Marulis, F., & Neuman, S. B. (2010). The effects of vocabulary intervention on young children's word learning: A meta-analysis. *Review of Educational Research*, 80(3), 300-335.

Papalewis, R. (2004). Struggling middle school readers: successful, accelerating intervention. *Reading Improvement*, 41, 24-37.

Proctor, C. P., Carlo, M., August, D., & Snow, C. (2005). Native Spanish-speaking children reading in English: Toward a model of comprehension. *Journal of Educational Psychology*, 97(2), 246-256.

Raver, C. C., Jones, S. M., Li-Grining, C., Zhai, F., Bub, K., & Pressler, E. (2011). CSRP's impact on low-income preschoolers' preacademic skills: Self-regulation as a mediating mechanism. *Child Development*, 82(1), 362-378.

Slavin, R. E. (2002). Evidence-based education policies. Transforming educational practice and research. *Educational Researcher*, 31(7), 55-21.

### Course Requirements and Grading Criteria:

1. **Attendance and participation:** You are expected to attend every class, be on time, stay the duration of the class and participate in discussion and activities in class as well as in online Canvas in order to receive full credit; frequent absence will result in reduction of final grades.
2. **Article critique:** There will be four critiques of provided articles, one for each part of the articles, including introduction, method, results, and discussion. Format of the critiques and grading rubrics are attached at the end of the syllabus. Critiques need to be a 3- 5 page, double-spaced document.
3. **Final Exam:** The exam is expanded versions of article critique assignments. Your exam should be well written, without typo / grammatical error, APA style citation and reference list (that means, I want you look for and cite some external sources as justifications of your opinions in discussing an article), appropriate sub-headings and organizations. Grading rubrics are attached at the end of the syllabus. Final should be submitted in the Canvas assignment section. Exams need to be a 4-6 page, double-spaced document.

### Grading:

1. **4 Written article critics – 40 points** (10 points for each critique)
2. **6 Exercise/assignment – 24 points** (4 points for each exercise/upload)
3. **Final Exam - 25 points:** The exam includes a critique of a research article and articulation of research findings to educators
4. **Class attendance and participation – 10 points**

### **Final course grades will be assigned according to the following scale:**

93% ≤ A ≤ 100%, 90% ≤ A < 93%, 87% ≤ B+ < 90%, 83% ≤ B < 87%,  
80% ≤ B- < 83%, 77% ≤ C+ < 80%, 73% ≤ C < 77%, 60% ≤ C-/D < 73%, F < 60%

### Course Policies:

**Attendance.** Frequent absence will result in reduction of final grades. See instructor if you will need to be out of class. Contact the instructor by email, if you do not know in advance.

**Readings, Sharing, and Participants.** It is important for you to complete the assigned readings each day before coming to lecture. See the class schedule table for readings in each class.

**Technology Use in Classroom.** Prevent disruptions by turning off cell phones and by putting away extraneous reading materials. Use of laptop computers in class is not allowed without the instructor's permission.

**Extra Credit.** No extra credit work will be allowed.

**Assignments.** Five points will be deducted for each late day. Assignments will not be accepted over 5 days late. Every assignment should be well-written, concise, typed, double-spaced, and one-inch margin, with 11 or 12 font size. Most assignments are due on canvas Tuesday 11:59 pm.

**Cheating.** Dishonesty of any kind with respect to examinations, course assignments, alteration of records, or illegal possession of examinations shall be considered cheating. It is the responsibility of the student not only to abstain from cheating, but in addition, to avoid the appearance of cheating and to guard against making it possible for others to cheat. Any student who helps another student to cheat is as guilty of cheating as the student he or she assists. The student also should do everything possible to induce respect for the examining process and for honesty in the performance of assigned tasks in or out of class.

**Plagiarism.** Honesty requires that any ideas or materials taken from another source for either written or oral use must be fully acknowledged. Offering the work of someone else as one's own is plagiarism. The language or ideas thus taken from another may range from isolated formulas, sentences, or paragraphs to entire articles copied from books, periodicals, speeches, writings of other students or even the previous writing of one's own. The offering of materials assembled or collected by others in the form of projects or collections without acknowledgement is also considered plagiarism. Any student who fails to give credit for ideas or materials taken from another is guilty of plagiarism. *Cheating, plagiarism, and any other misconduct in this class will result in failure in the course.* See University policy at <http://www.regulations.utah.edu/academics/6-400.html>.

**Non-discrimination Policy.** In accordance with university regulations and the Department of Educational Psychology guidelines, the course instructor and fellow students shall not discriminate on the basis of ethnicity, race, religion, sex, age, national origin, disability, or sexual orientation. We take all allegations of discrimination seriously. If you believe that you have experienced discrimination from the course instructor or another student, please bring it to our attention.

**Students with Special Needs.** The University of Utah seeks to provide equal access to its programs, services, and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be given to the Center for Disability Services, 162 Union Building, 801-581-5020. CDS will work with you and instructor to make arrangements for accommodations.

**Finally:** All graded exams/assignments for this course will be discarded by the end of the semester. Thus, if you have any questions regarding your exams or assignments, you are encouraged to deal with these questions in a timely manner.

***This syllabus is meant to serve as an outline and guide for the course. Please note that it may be modified by the instructor at any time so long as reasonable notice is provided to students of the modification. Especially with continued efforts to make this course hybrid, there may be some sessions move to Canvas sessions. The General Course Outline may also be modified by the instructor at any time to accommodate the needs of a particular class. Should you have any questions or concerns about the syllabus, it is your responsibility to contact the instructor for clarification.***

**EDPS 6712 Tentative Course Schedule, Readings and Assignments**  
 (Readings within a parenthesis indicate option)

<i>Date</i>	<i>Lecture Topics</i>	<i>Critical Concepts</i>	<i>Readings and Assignments (Canvas)</i>
<b>Week 1</b> 1/11	Overview of Course Understanding Reading Research -What is research and why should we care? -Differentiating opinion and research	<i>definition of research, basic research, applied research, primary sources, secondary sources, quantitative research, qualitative research,</i>	McMillan, Ch. 1 Assignment: Upload 1 opinion artifact and 1 research artifact and discuss artifacts of classmates, due 1/16.
<b>Week 2</b> 1/18	Evaluating Introduction and Literature Review -What is a question and why is it important? -Quantitative and qualitative research -Introduction section of a research article	<i>operational definitions, null hypothesis, dependent variable, independent variable, extraneous (confounding variable), mediators, moderators</i>	McMillan, Ch. 3 & 4 Introduction section in: Gilliam, Gerla, & Wright, 2004; Foorman et al, 1998; Papalewis, 2004 (Skim Raver et al., 2011; Proctor et al. 2005) Assignment: Finish online exercise of RQ, variables, diagram and procedure of your research artifact, due 1/23 Written critique of introduction in Gillian et al., Foorman et al., Papalewis studies, due 1/23
<b>Week 3</b> 1/25	Evaluating the Sample -Participants -Sampling -Ethics	<i>target population, purposive sample, randomization, stratified random sample</i>	McMillan, Ch. 5 Participants section in: Gilliam, Gerla, & Wright, 2004; Foorman et al., 1998; Papalewis, 2004. (Skim Raver et al, 2011; Brookes et al, 2006)

<p><b>Week 4</b> 2/1</p>	<p>Evaluating the Measures</p>	<p><i>internal consistency, triangulation, reliability, validity, scale of measurement (nominal, ordinal, interval and ratio)</i></p>	<p>McMillan, Ch. 6 &amp; 7 (174-180) Measures and materials section in: Gilliam, Gerla, &amp; Wright, 2004; Foorman et al., 1998; Papalewis, 2004. (Raver et al, 2011; Brookes et al, 2006)</p>
<p><b>Week 5</b> 2/8</p>	<p>Evaluating the Procedures -Data collection methods -Survey Research, observational research -Procedures section</p>	<p><i>research design, survey research, observational research, triangulation</i></p>	<p>McMillan, Ch 7 (181-197) &amp; 8 (226-231) Procedures section in: Gilliam, Gerla, &amp; Wright, 2004; Foorman et al., 1998; Papalewis, 2004 Written critique of the <i>Methods</i> in Gilliam et al., Foorman et al., and Papalewis studies, due 2/13.</p>
<p><b>Week 6</b> 2/15</p>	<p>Evaluating the Research Results, Part I</p>	<p><i>descriptive statistics, mean, median, mode, range, standard deviation, measures of variability, scale of measurement, t-test, analysis of variance, multivariate analysis of variance, analysis of covariance, (product-moment) correlation coefficient, Spearman rank correlation coefficient, chi-square</i></p>	<p>McMillan, Ch. 10 Analytic plan and Results section in: Gilliam, Gerla, &amp; Wright, 2004; Foorman et al., 1998; Papalewis, 2004</p>
<p><b>Week 7</b> 2/22</p>	<p>Evaluating the Research Results, Part II</p>	<p><i>regression analysis, structural equation modeling, inferential statistics, alpha level, statistical significance, effect size</i></p>	<p>McMillan, Ch. 10 Analytic plan and Results section in: Gilliam, Gerla, &amp; Wright, 2004; Foorman et al., 1998; Papalewis, 2004 (Duursma, 2008) Written critique of the <i>Results</i> in Gilliam et al., Foorman et al., and Papalewis studies, due 2/27.</p>

<b>Week 8</b> 3/8	Evaluating the Discussion, Part I	<i>statistical significance, practical significance, theoretical significance, limitations, conclusions, implications,</i>	McMillan, Ch. 15 Discussion and conclusion section in: Gilliam, Gerla, & Wright, 2004; Foorman et al., 1998; Papalewis, 2004
<b>Week 9</b> 3/15	Evaluating the Discussion, Part II	<i>causal reasoning, Internal validity, external validity, threats to internal validity</i>	McMillan, Ch. 15 Discussion and conclusion section in: Gilliam, Gerla, & Wright, 2004; Foorman et al., 1998; Papalewis, 2004 Written critique of <i>Discussion</i> in Gilliam et al., Foorman et al., and Papalewis studies, due 3/20.
3/22	Spring break		
<b>Week 10</b> 3/29	Experimental, Quasi-Experimental, and Correlational Research Issues in experimental vs. quasi-experimental research. Correlational vs. causal research and their respective instructional implications.	<i>random assignment, random selection, randomized controlled trials (RCTs), factorial design, causal reasoning,</i>	McMillan, Ch. 8 & 9 (Anderson, Reynolds, Shallert, & Goetz, 1977; Juel, 1988)
<b>Week 11</b> 4/5	Qualitative Research Issues in the quality of qualitative research. The question of “the question” in qualitative vs. quantitative research. The strengths of mixed methods research	<i>triangulation, descriptive notes, reflective notes, inductive analysis, member check, audit trail</i>	McMillan, Ch. 11 (&12) Durkin, 1978 (Duke, 2000) Assignment: Upload a brief review of Durkin (1978) about procedures of its qualitative research and related strengths and weaknesses, due 4/10
<b>Week 12</b> 4/12	Reviews of the Research/Meta-analyses of Research The use of reviews of research and meta-analyses in education.	<i>meta-analysis, literature review, narrative review, effect size</i>	Marulis & Neuman, 2010 Assignment: Find a meta-analysis article on a topic of your interest and summarize findings and discuss strengths/weakness of its method, due 4/17
<b>Week 13</b> 4/19	Reading research and education		Slavin (2002) Assignment: Upload a



	<p>Talking to administrators, teachers, and parents about educational research</p>		<p>communication letter for your school administrator or parents about an intervention study (you may choose any reading from this course or other paper of your choice); in the letter, briefly evaluate the intervention program, based on the strength and weaknesses of the study, internal and external validity and your conclusion of the usefulness of the intervention. Use common language without research jargons, due 4/24</p>
<p><b>Week 14</b> 4/25</p>	<p>College of Education Student Research Fair (4/25, Wednesday)</p>	<p>Optional Extra-Credit Assignment: Find an example of a high-quality research poster and a low-quality research poster and summarize why you think so, due 5/1</p>	
	<p>Final Take-Home Essay Exam, Due 5/1</p>		

## Critique of a Research Study

### Complete Citation of Research Study:

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### 1. Introduction:

[Evaluate: a) description of a general problem area, including context and significance; b) review of related literature; and c) statement of objectives of the investigation, problem statement, hypotheses, research questions.]

### 2. Methodology

[Evaluate: a) quality and completeness of the description of the participants in the study, including how and why the specific sample was selected; b) quality and completeness of description of instruments used in the study, including reliability and validity of tests used; c) quality and completeness of description of procedures and instructional intervention; d) quality of description of data analyses.]

### **3. Results**

[Evaluate: a) quality of the description of the results, b) quality and explanation of tables, graphs and figures.]

### **4. Discussion and Conclusion**

[Evaluate: a) Are the results of educational as well as statistical significance; b) Do the discussion and conclusions follow logically from the actual data in the results? c) Are the findings related to the objectives of the study and the previous literature? d) Are there logical implications, limitations and/or recommendations for further research?]

### **5. Overall Summary Evaluation**

[Evaluate: a) the overall quality and rigor of the study, the key and critical points, b) any other major point not mentioned previously but critical to the study.]

## Template for Evaluating a Research Report

(Adapted from Jones & Kottler, 2008)

(Use this to help you evaluate the research studies)

### Introduction

- Significance—Does the topic appear important to the education of our students? Is it personally relevant?
- Language—Is the presentation clear and objective? Is the language consistent with the approach used by the researcher?
- Theoretical Framework—The best studies in the field have a clear and thorough explanation of the theory behind the ideas presented in the study.
- Literature Review—Is there balance in the point of view found in the citations? Is there an appropriate time frame, with some older and some more current references? Is there a coherent theme? Are primary sources emphasized?
- Definitions—Either here in or in the Methods section, terms that are important should be operationally defined for readers.
- Research Questions—Are the questions/objectives clearly identified?
  - If the study is qualitative, are the questions/objectives supported by the literature review and/or by the data that emerged during the study?
  - If the study is qualitative, are the questions/objectives open-ended to facilitate theme exploration?
  - If the study is quantitative, are the questions/objectives limited to those with direct foundation in the literature review?
  - There could also be a “purpose” statement *instead of* research questions. If there is, it should clearly be similar to an objective or a research question.
- Overall evaluation of introduction

### Method

#### Participants

- What—Can you identify the target population—that is, the larger population that the study is targeted toward?
- Who—Is sufficient detail provided about the participants to judge if they are consistent with the target? You want to know, at the least, the ethnic and SES make-up of the sample population, the number of male and female, the ages of the sample population, etc.
- Where—Did the researchers identify the setting, and is that setting appropriate? In other words, if your target population is urban middle school students, your sample should come from urban, middle school students, not suburban, not rural.
- How—Did the researchers specify how participants were selected, and did the selection procedure appear to be appropriate?
- Why—Was there explanation for why these participants were chosen, and is there reason to suggest a bias in selection that would influence the findings?
- Overall evaluation of participants

#### Procedures

- Completeness—Do the researchers thoroughly explain the exact procedures and time line of the study—what happened first, next, next and last?

- Replicability—Was sufficient detail provided about the procedures so that the study can be replicated?
- Appropriateness—Do the procedures appear relevant for the research questions/objectives identified for the study?
- Overall evaluation of procedures

#### *Measures/Instrumentation*

- Identification—Were the tools or tests or other instruments used to gather information clearly identified? Were there one or two examples of items of each instrument so readers get a sense of the specific test or instrument?
- Quality—Do the instruments used to gather information appear appropriate and sufficient to define and describe the variables that were being studied?
- Reliability and Validity—Was information presented about the reliability and validity of each instrument, where appropriate?
- Overall evaluation of measures

#### *Intervention/Treatment*

- Treatment—Is the treatment and/or intervention carefully and thoroughly described for readers? Is the control also carefully described as well?
- Overall evaluation of intervention

#### **Results**

- Clarity—Were the findings (including descriptive and inferential statistics) clearly reported?
- Completeness—Were there indicators of an incomplete analysis, and, if so, was the reason explained?
- Relate to Research Questions—Do the results answer the research questions or purpose presented at the beginning of the study? Did authors use significance test and effect size to answer questions?
- Overall evaluation of results

#### **Discussion**

- Summary—Is there a concise and accurate summary of the major findings?
- Relevance—Is the discussion focused on how the findings are related to the research questions/objectives or purpose of the study?
- Theoretical Framework--Does the discussion tie back to the theoretical framework?
- Review of the Literature—Does the discussion tie back to the review of the literature and tie current findings into previous literature?
- Conclusions—Do the conclusions follow logically from the results? Make sure the researchers do not “go beyond the data.” And provide internal validity and external validity?
- Completeness—Are implications, limitations and/or recommendations for further research included?
- Overall evaluation of discussion

## Research Study Grading Rubric

### **1. Introduction**

- 10 points: Evaluation is concise and thorough. Includes all major points and essential details. All points in research critique template are discussed. Critical issues are emphasized. Length is appropriate. Academic research vocabularies are used mostly.
- 6 points: Evaluation is missing a few key points and essential details; OR evaluation includes a few less important points or provides too many details. Length could be over or under. Academic research vocabularies are used often.
- 2 point: Evaluation is missing most of the key points and essential details; OR evaluation includes many less important points or provides significantly too many details. Length is over or under specified length. Academic research vocabularies are used rarely.

10 possible points for evaluation

### **2. Methods**

- 10 points: Evaluation is concise and thorough. Includes all major points and essential details. All points in research critique template are discussed. Critical issues are emphasized. Length is appropriate. Academic research vocabularies are used mostly.
- 6 points: Evaluation is missing a few key points and essential details; OR evaluation includes a few less important points or provides too many details. Length could be over or under. Academic research vocabularies are used often.
- 2 points: Evaluation is missing most of the key points and essential details; OR evaluation includes many less important points or provides significantly too many details. Length is over or under specified length. Academic research vocabularies are used rarely.

10 possible points for evaluation

### **3. Results**

- 10 points: Evaluation is concise and thorough. Includes all major points and essential details. All points in research critique template are discussed. Critical issues are emphasized. Length is appropriate. Academic research vocabularies are used mostly.

6 points: Evaluation is missing a few key points and essential details; OR evaluation includes a few less important points or provides too many details. Length could be over or under. Academic research vocabularies are used often.

2 points: Evaluation is missing most of the key points and essential details; OR evaluation includes many less important points or provides significantly too many details. Length is over or under specified length. Academic research vocabularies are used rarely.

10 possible points for evaluation

#### **4. Discussion**

10 points: Evaluation is concise and thorough. Includes all major points and essential details. All points in research critique template are discussed. Critical issues are emphasized. Length is appropriate. Academic research vocabularies are used mostly.

6 points: Evaluation is missing a few key points and essential details; OR evaluation includes a few less important points or provides too many details. Length could be over or under. Academic research vocabularies are used often.

2 point: Evaluation is missing most of the key points and essential details; OR evaluation includes many less important points or provides significantly too many details. Length is over or under specified length. Academic research vocabularies are used rarely.

10 possible points for evaluation

#### **5. Final Exam**

*For your final exam, you will receive a total of 4 possible points each for Introduction, Method, Results, Conclusions and Overall Evaluation—for a total of 20 points. Then additional 5 possible points will be earned for ability to articulate research findings (and talk about validity) to educators and administrators.*

#### **Overall Evaluation**

4 points: Overall evaluation highlights the most important parts of the study vis a vis the critique of the study—e.g. mentions and highlights the most critical areas, either favorable or unfavorable. Overall evaluation concisely summarizes the main points identified in the longer critique. Discusses other points that may be critical to the quality of the research study.

2 points: Overall evaluation is missing a few important points or critical areas; OR evaluation includes a few less important points OR provides too many details. May discuss other points critical to the quality of the study but misses the mark.

0 point: Overall evaluation is missing most of the key points or critical areas; OR evaluation includes many less important points OR provides significantly too many details. Does not discuss other points critical to the quality of the study.

**Ability to Articulate Findings to Educators**

5 points: Text for educators is concise and thorough. Includes all major points and essential details. Appropriate arguments are made. Level of language is appropriate for educators. Critical issues are emphasized. Length is appropriate.

3 points: Text is missing a few key points and essential details; OR text includes a few less important points or provides too many details OR not all arguments are appropriate or relevant. Level of language is adequate, but not quite appropriate for educators—too jargon or too simple. Length could be over or under.

1 point: Text is missing major key points and essential details; OR text includes less important points or too many details OR some arguments are inappropriate or irrelevant. Level of language is inadequate. Length could be over or under.