

**George Mason University  
College of Education and Human Development  
Early Childhood Education Program**

**EDRS 590  
Education Research (3:3:0)  
Spring 2011  
Thursday 5:00pm to 9:00pm  
Founder's Hall 475 (478), Arlington Campus**

**Instructor:** M. Susan Burns  
**Office:** Robinson A 326  
**Telephone:** 703/993-2017  
**Email address:** mburns2@gmu.edu  
**Office hours:** before and after class

**Course Description**

Develops skills, insights, and understanding to perform research, with emphasis on interpreting and applying research results. Critiques research, and uses findings in educational settings.

**Relationship to Program**

This course meets the requirements for the Master of Education in Curriculum and Instruction with concentrations in Early Childhood Education of Diverse Learners and Early Childhood Education-Teach for America.

**Course Format**

This course utilizes a distributed learning format requiring active participation of all students. Students are expected to complete all class readings prior to each session so as to engage in active dialogue, productive learning, and critical reflection. Activities will include instructor presentation, small group discussions, student presentations, guest speakers, videos, and whole class sharing to support course content. In addition, a Blackboard on-line component of coursework is required.

**Overall Student Outcomes**

At the completion of this course, students will be able to do the following:

- Participate in a collaborative action research project
- Demonstrate the skills associated with the critical reading and evaluation of the educational research literature
- Describe the basic concepts, principles, and techniques of educational research in early childhood education including introductory skills in analysis and interpretation of research data

## Required Readings

Bransford, J.D., Stipek, D.J., Vye, N.J., Gomez, L.M., & Lam, D. (2009). *The role of research in educational improvement*. Cambridge, MA: Harvard Education Press.  
(Introduction and Chapters 4, 7, 9)

Goodwin, W.L., & Goodwin, L.D. (1996). *Understanding quantitative and qualitative research in early childhood education*. New York, NY: Teachers College Press.

## College of Education and Human Development Expectations and Resources

### *Student Expectations*

- Students must adhere to the guidelines of the George Mason University Honor Code [See <http://academicintegrity.gmu.edu/honorcode/>].
- Students with disabilities who seek accommodations in a course must be registered with the George Mason University Office of Disability Services (ODS) and inform their instructor, in writing, at the beginning of the semester [See <http://ods.gmu.edu/>].
- Students must follow the university policy for Responsible Use of Computing [See <http://universitypolicy.gmu.edu/1301gen.html>].
- Students are responsible for the content of university communications sent to their George Mason University email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students solely through their Mason email account.
- Students must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.
- Students are expected to exhibit professional behaviors and dispositions at all times.

### *Campus Resources*

- The George Mason University Counseling and Psychological Services (CAPS) staff consists of professional counseling and clinical psychologists, social workers, and counselors who offer a wide range of services (e.g., individual and group counseling, workshops and outreach programs) to enhance students' personal experience and academic performance [See <http://caps.gmu.edu/>].
- The George Mason University Writing Center staff provides a variety of resources and services (e.g., tutoring, workshops, writing guides, handbooks) intended to support students as they work to construct and share knowledge through writing [See <http://writingcenter.gmu.edu/>].

For additional information on the College of Education and Human Development, Graduate School of Education, please visit our website [See <http://gse.gmu.edu/>].

**Note:** To determine whether the campus is closed due to inclement weather, call 703-993-1000 or go to [www.gmu.edu](http://www.gmu.edu).

## Course Requirements

### General Requirements

- a. The completion of all readings assigned for the course is assumed. Because the class will be structured around discussion and small group activities, it is imperative that students keep up with the readings and participate in class.
- b. Class attendance is important. If, due to an emergency, students will not be in class, they must call the instructor and leave a message.
- c. The university requires that all pagers and cell phones be turned off before class begins. All in-class usage of electronic devices, which includes telephones, laptops, etc., must have approval of course instructor. Laptops and other electronic devices are to be used for educational and learning purposes only and should not be used during class time to check email, surf the web, or communicate with people outside of the class unless part of the class activity.
- d. It is expected that assignments will be turned in on time (the beginning of the class in which they are due). However, it is recognized that students occasionally have serious problems that prevent work completion. If such a dilemma arises, students should speak to the instructor in a timely fashion.

### Attendance

Attendance in class is important to students' learning; therefore, students are expected to make every effort to attend class sessions. Absences, tardiness, and leaving early may negatively affect course grades. The following policy is from the university course catalog:

Students are expected to attend the class periods of the courses for which they register. In-class participation is important not only to the individual student, but also to the class as a whole. Because class participation may be a factor in grading, instructors may use absence, tardiness, or early departure as de facto evidence of nonparticipation. Students who miss an exam with an acceptable excuse may be penalized according to the individual instructor's grading policy, as stated in the course syllabus.

### Written Assignments

All written assignments prepared outside of class will be evaluated for content and presentation. The American Psychological Association, Sixth Edition (APA) style will be followed for all written work. All written work unless otherwise noted must be completed on a word processor and should be proofread carefully. (Use spell check!) If students are not confident of their own ability to catch errors, they should have another person proofread their work. When in doubt, they should check the APA manual. Portions of the APA manual appear at the Style Manuals link on the Mason library web guide at <http://library.gmu.edu/resources/edu/>. Students may consult the Writing Center for additional writing support.

Students will

1. Present ideas in a clear, concise, and organized manner. (Avoid wordiness and redundancy.)
2. Develop points coherently, definitively, and thoroughly.

3. Refer to appropriate authorities, studies, and examples to document where appropriate. (Avoid meaningless generalizations, unwarranted assumptions, and unsupported opinions.)
4. Use correct capitalization, punctuation, spelling, and grammar.

### **Grading Criteria**

A = 95 – 100      A- = 90 – 94      B+ = 87 – 89      B = 83 – 86  
B- = 80 – 82      C = 70 – 79      F = < 70

A+ is possible if work is of exceptional high quality above and beyond that required for the course.

### **Grading Policy**

All CEHD undergraduate and graduate students are held to the university grading policies as described in the Academic Policies section of the current catalog, which can be accessed at <http://catalog.gmu.edu>. Those students enrolled in a CEHD Licensure Graduate Certificate program, however, must earn a B- or better in all licensure coursework. A degree-seeking graduate student will be dismissed after accumulating grades of F in two courses or 9 credits of unsatisfactory grades (C or F) in graduate courses. A 3.0 grade point average is required for completion of the graduate degree.

## **Assignments**

### **Attendance and Participation (15 points)**

Because active participation and engagement are imperative for optimal learning, preparation for and participation in in-class activities will be evaluated based on the following criteria:

- Students attend class, arrive on time, and stay for the entire class period.
- Students complete readings and prepare for class activities prior to class as is evidenced by their ability to discuss and write about the concepts presented and examined in the texts as well as participate fully in related activities.
- Students are actively involved in in-class learning experiences as is evidenced by (1) participating in all activities, (2) engaging in small and large group discussions, (3) completing written work related to the activities, and (4) supporting the participation and learning of classmates.
- Students show evidence of critical reflective thinking through in-class discussions, activities, and written reflections.

Points toward this score are taken away for each missing or partially completed on-line assignment.

### **Evaluation Project (30 points)**

Students enact information presented in this class through the development of an evaluation project. One example is to develop a survey to evaluate student's satisfaction as they complete their program of study and collect suggestions for program improvement.

Given this possibility, the students will develop a tool to address these issues. Next the class will implement the evaluation, most likely on Survey Monkey. Finally, the class will analyze the outcomes of the evaluation. Other examples might include closer analyses of processes used for evaluating ECE internship experiences or helping with a faculty member or doctoral student with on-going research.

**Rubric for Evaluation Project (30 points)**

Assignment Dimension	23 and Below	24-26	27-30
a. Demonstrated understanding of the Human Subject Review process for this type of evaluation	Does not hand in completed form regarding the Human Subject Review Process or provides inaccurate information	Provides reasons for completing Human Subject Review Process but misses at least one key component	Provides main reasons for completing Human Subject Review Process
b. Integration of reading from text on Survey Research and Descriptive Research	Does not participate in class discussion and report out	In class report out of readings includes some detail but is vague	In class report out of readings is accurate and comprehensive
c. Critique of initial draft of survey	Does not participate in class discussion or does not initiate item changes or suggestions for future items	Suggestions for item changes and additional items is minimal	Provides detailed information in possible item changes and additional items for future survey
d. Recruits participants for evaluation	Does not report recruitment of participants	Report of recruitment of participants is minimal	Report of recruitment of participants includes 3 or more unique efforts
e. Participated in analyzing data from survey using descriptive statistics and interpreting results	Does not participate in class analysis of collected survey data or does not provide the individual interpretation information or provides individual interpretations that are inconsistent with the results	Participated in class analysis of collected survey data and provides own interpretation information, however, that information is vague or not aligned directly with the results	Participated in class analysis of collected survey data and interpretation of results and provides own interpretation that is consistent with results, as well as participating in group interpretation

## Reflections on Research (25 points)

Early childhood education faculty and doctoral students will report on their on-going research. After such a presentation, students will submit a reflection on the work on Blackboard. The purpose of the reflection is to show that the student understands how the research is related to information in the text and how the research is related to practice in early childhood education.

## Rubric for Reflections on Research (5 points each for 5 reflections)

There are five reflections there needs to be at least 1 focused on the following methodologies

- Correlational Research Design
- Causal-Comparative and Experimental Research Design
- Single Subject Research Design
- Collective Case Study Research Design
- Mixed Method Research Design

### Combining Reflections

Combined score across all reflections that span across the 5 types of research mentioned above. If two reflections were given on one type of research, the highest scored reflection will be counted. Five points are deleted for each area of research not addressed.

### Rubric for Each Reflection

Assignment Dimension	3 and below	4	5
Demonstrates basic understanding of the research study presented in class	Basic details presented are unclear or basic details missing	Adequate description of the research study however some basic details are vague	Basic details provided about the research study presented in class
The research study presented in class is clearly aligned with a research methodology and information from the text.	Lack of clarity, specificity and thoroughness - didn't address research methodology	Research methodology is specified but alignment with the text is vague	Research methodology is specified, information in the text about the methodology, including design, data collection and analysis are clear
Specification of methodological issues specific to early childhood education	Minimal reflection and critical analysis	Adequate reflection referencing issues in a vague manner	Critical reflection includes issues related to the research study, e.g., the variability of young children's behavior and

			associated difficulties associated with measurement; teachers with vast differences in credentials and associated impact
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### Literature Review (30 points)

Students will read research articles on an early childhood topic of their interest. They will analyze and critique the research and work toward a sense of the type and quantity of research needed to support changes in educational settings. Steps in this project include the following:

- Read and review at least 5 research articles. Include documentation of children and families studied, methodologies employed, questions asked, and findings. Information can be put in a chart or as a narrative.
- Complete a synthesis graphic of the information reviewed.
- Write a brief critical review of the articles studied and propose whether they support any needed change in early childhood education practice.
- Participate in an in-class sharing of findings from literature review.

### Rubric for Literature Review (30 points)

Assignment Dimension	23 and Below	24-26	27-30
Reviews at least 5 <u>research articles</u>	Fewer than 5 <u>research articles</u> included	Reviewed 5 <u>research articles</u> however some basic details are vague	Reviewed 5 <u>research articles</u> and clearly included documentation of children, families or teachers studied, methodologies employed, questions asked, and findings
Synthesis graphic of the information reviewed	Synthesis graphic not included or misses major dimensions of the studies reviewed	Synthesis graphic includes findings of all studies but some details are not clear on the information presented re: the children, families or teachers studied, methodologies employed, questions	Synthesis graphic includes findings of all studies including details on children, families or teachers studied, methodologies employed, questions asked, and findings; and the relationships

		asked, and findings	between the studies reviewed
Critical review of article and support they provide for changes in early childhood education practice	Minimal reflection and critical analysis	Reflection referencing issues in a vague manner	Critical reflection includes positive and negative aspects of the <u>research articles</u> and any associated suggestion for changes in childhood education practice
Share findings with class	Does not attend class or fails to present research graphic on 5 articles	Presents graphic on findings of research literature review in a vague manner	Presents graphic on findings of research literature review in clear, precise manner

### Grading of Assignments

1. Attendance and Participation	15
2. Evaluation Project (3 parts @ 10 points each)	30
3. Reflections on Research (5 @ 5 points each)	25
4. Literature Review	30
<b>Total Points Possible</b>	<b>100</b>

### Tentative Course Schedule

Date	Assignment	If class, topic If on line, specific assignment	Assignment and due date
<b>Class Jan 27</b>		Overview of Class Human Subjects Review Process and Why Developing a Survey (in-class reading - Goodwin & Goodwin Ch 3, pgs 33-38) <i>Evaluation project</i>	Evaluation (a) exit ticket
<b>Class Feb 3</b>	Reading: Goodwin & Goodwin Ch 1 & 2	Finalize Survey and Upload on Survey Monkey Research and Its Role in ECE Overview of the Research Endeavor <i>Burns &amp; Kidd Writing Research</i>	Evaluation (b, c) Reflection 1 (after class on blackboard)
<b>Class Feb 10</b>	Goodwin & Goodwin Ch 3 & 4	Quantitative Research Descriptive Research: Survey and Developmental	Evaluation (d – self report on blackboard, e)

		Descriptive Analyses Correlation Research <i>Correlation research study presentation</i> <i>Initial findings from Evaluation Project</i> <i>Update on Burns &amp; Kidd Writing Research</i>	Reflection 2 (after class on blackboard)
<b>On-Line Feb 15</b>	Bransford et al Introduction	Read and take part in on-line discussion given prompt	should respond at least 3 times in discussion
<b>On-Line Mar 1</b>	Bransford et al Ch 4	Read and take part in on-line discussion given prompt	should respond at least 3 times in discussion
<b>Class Mar 10</b>	Review Goodwin & Goodwin Ch 3 & 4	Quantitative Research (continued) Causal-Comparative Research Experimental Research Inferential Statistics <i>Experimental research study presentation</i> <i>Update on Burns &amp; Kidd Writing Research</i> <i>Continued exploration of findings from Evaluation Project</i>	Reflection 3 (after class on blackboard)
<b>Class Mar 24</b>	Goodwin & Goodwin Ch 5 & 6	Qualitative Research Types of Qualitative Research Data Collection and Data Analysis in Qualitative Research <i>Qualitative research study presentation</i> <i>Update on Burns &amp; Kidd Writing Research</i> <i>Continued exploration of findings from Evaluation Project</i>	Reflection 4, 5 (after class on blackboard)
<b>On-Line April 5</b>	Bransford et al Ch 7	Read and take part in on-line discussion given prompt	should respond at least 3 times in discussion
<b>On-line April 19</b>	Bransford et al Ch 9	Read and take part in on-line discussion given prompt	should respond at least 3 times in discussion
<b>Class April 28</b>	Goodwin & Goodwin Ch 7	Integrating Quantitative and Qualitative Research Presentation of findings from research literature review	Literature Review Due

<b>On-Line May 5</b>	Review Goodwin & Goodwin Ch 7	Reflecting on research literature reviews and continue Integrating Quantitative and Qualitative Research Read and take part in on-line discussion given prompt	should respond at least 3 times in discussion
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