



**College of Education and Human Development
Division of Special Education and disAbility Research**

Spring 2015

EDSE 842 001: Applied Research Methods in Special Education

CRN: 10538, 3 - Credits

Instructor: Dr. Kelley Regan	Meeting Dates: 1/20/2015 - 5/13/2015
Phone: 703-993-9858	Meeting Day(s): Tuesdays
E-Mail: kregan@gmu.edu	Meeting Time(s): 4:30 pm-7:10 pm
Office Hours: by appointment	Meeting Location: Fairfax-Krug Hall #102

***Note:** This syllabus may change according to class needs. Students will be advised of any changes immediately through George Mason e-mail and/or through Blackboard.*

Course Description

Provides knowledge and skills in the application of research methodology in special education. Topics include methods for conducting survey research, experimental and quasi-experimental research, research involving correlation and regression, and qualitative research. Emphasizes application to specific issues in special education research. Prerequisite(s): Admission to PhD in education program, or permission of instructor. Hours of Lecture or Seminar per week: 3Hours of Lab or Studio per week: 0

Prerequisite(s): Admission to PhD in education program, or permission of instructor

Co-requisite(s): None

Advising Contact Information

Please make sure that you are being advised on a regular basis as to your status and progress through your program. Mason M.Ed. and Certificate students should contact the Special Education Advising Office at (703) 993-3670 for assistance. All other students should refer to their faculty advisor.

Nature of Course Delivery

Learning activities include the following:

1. Class lecture and discussion
2. Application activities
3. Small group activities and assignments
4. Video and other media supports
5. Research and presentation activities
6. Electronic supplements and activities via Blackboard

Learner Outcomes

Upon completion of this course, students will be able to:

- Describe the strengths and limitations of single subject research designs in special education research.
- Describe basic procedures involving single subject research designs.
- Evaluate previous research that has employed single subject research methodology.
- Design future special education research using single subject methodology.
- Describe the strengths and limitations of qualitative research designs in special education research.
- Evaluate previous research that has employed qualitative research methodology.
- Design future special education research using qualitative methodology.
- Describe the strengths and limitations of survey research designs in special education research.
- Evaluate previous research that has employed survey research methodology.
- Design future special education research using survey methodology.
- Describe the strengths and limitations of group-experimental research designs in special education research.
- Describe basic procedures involving group-experimental research designs.
- Evaluate previous special education research that has employed group-experimental research methodology.
- Design future special education research using group-experimental methodology.

Required Textbooks

None

Recommended Textbooks

APA Manual

American Psychological Association (2010). Publication manual of the American Psychological Association (6th ed.). Washington, DC: Author.

Required Readings

(To be downloaded from GMU library)

- Berkeley, S., Mastropieri, M.A., & Scruggs, T.E. (2011). Reading comprehension strategy instruction and attribution retraining for secondary students with learning and other mild disabilities. *Journal of Learning Disabilities, 44*, 18-32.
- Bishop, A. G., Brownell, M. T., Klingner, J. K., Leko, M. M., & Galman, S. A. C. (2010). Differences in beginning special education teachers: The influence of personal attributes, preparation, and school environment on classroom reading practices. *Learning Disability Quarterly, 33*, 75-92.
- Burns, M. K., & Ysseldyke, J. E. (2009). Reported prevalence of evidence based instructional practices in special education. *The Journal of Special Education, 43*(1), 3-11.
- Brantlinger, E., Jiminez, R., Klingner, J., Pugach, M., & Richardson, V. (2005). Qualitative studies in special education. *Exceptional Children, 71*, 195-207.
<http://www.cec.sped.org/content/NavigationMenu/Publications2/exceptionalchildren/>
- Chard, D. J., Ketterlin-Geller, L. R., Baker, S. K., Doabler, C., & Apichatabutra, C. (2009). Repeated reading interventions for students with learning disabilities: Status of the evidence. *Exceptional Children, 75*, 263 – 282.
<http://www.cec.sped.org/content/NavigationMenu/Publications2/exceptionalchildren/>
- Cook, L., Cook, B. G., Landrum, T. J., & Tankersley, M. (2008). Examining the role of group experimental research in establishing evidence-based practices. *Intervention in School and Clinic, 44*, 76 – 82. doi: 10.1177/1053451208324504
- Cook, B. G., Tankersley, M., & Landrum, T. J. (2009). Determining evidence-based practices in special education. *Exceptional Children, 75*, 365 – 384.
<http://www.cec.sped.org/content/NavigationMenu/Publications2/exceptionalchildren/>
- Evmenova, A. S., Behrman, M. M., Mastropieri, M. A., Baker, P. H., Graff, H., J. (2011). Effects of video adaptations on comprehension of students with intellectual and development disabilities. *Journal of Special Education Technology, 26*(2), 39-54.
- Gersten, R., Fuchs, L. S., Compton, D., Coyne, M., Greenwood, C., & Innocenti, M. S. (2005). Quality indicators for group experimental and quasi-experimental research in special education. *Exceptional Children, 71*, 149-164.
<http://www.cec.sped.org/content/NavigationMenu/Publications2/exceptionalchildren/>
- Horner, R. H., Carr, E. G., Halle, J., McGee, G., Odom, S., & Wolery, M. (2005). The use of single-subject research to identify evidence-based practice in special education. *Exceptional Children, 71*, 165-179.
<http://www.cec.sped.org/content/NavigationMenu/Publications2/exceptionalchildren/>

- Klingner, J. K., & Boardman, A. G. (2011). Addressing the “Research Gap” in special education through mixed methods. *Learning Disability Quarterly*, 34(3), 208-218.
- Lane, K. L., Kalberg, J. R., & Shepcaro, J. C. (2009). An examination of the evidence base for function-based interventions for students with emotional and/or behavioral disorders attending middle and high schools. *Exceptional Children*, 75(3), 321-341.
<http://www.cec.sped.org/content/NavigationMenu/Publications2/exceptionalchildren/>
- Leko, M. M., & Brownell, M. T. (2011). Special education preservice teachers’ appropriation of pedagogical tools for teaching reading. *Exceptional Children*, 77, 229-251.
- Marshak, L., Mastropieri, M. A., & Scruggs, T. E. (2011). Curriculum enhancements in inclusive secondary social studies classrooms. *Exceptionality: A Special Education Journal*, 19(2), 61-74. doi: 10.1080/09362835.2011.562092
- Mastropieri, M. A., Scruggs, T. E., Norland, J., Berkeley, S., McDuffie, K., Tornquist, E. H., & Connors, N. (2006). Differentiated curriculum enhancement in inclusive middle school science: Effects on classroom and high-stakes tests. *Journal of Special Education*, 40, 130-137.
- Mastropieri, M. A., Berkeley, S., McDuffie, K. A., Graff, H., Marshak, L., Connors, N. A., ...Cuenca-Sanchez (2009). What is published in the field of special education? An analysis of 11 prominent journals. *Exceptional Children*, 76, 95-109.
- McDuffie, K. A., & Scruggs, T. E. (2008). The contributions of qualitative research to discussions of evidence-based practice in special education. *Intervention in School and Clinic*, 44, 91 – 97. doi:10.1177/1053451208321564
- Montague, M., & Dietz, S. (2009). Evaluating the evidence-base for cognitive strategy instruction and mathematical problem solving. *Exceptional Children*, 75, 285 – 303.
<http://www.cec.sped.org/content/NavigationMenu/Publications2/exceptionalchildren/>
- Odom, S. L., Brantlinger, E., Gersten, R., Horner, R. H., Thompson, B., & Harris, K R. (2005). Research in special education: Scientific methods and evidence-based practices. *Exceptional Children*, 71, 137 – 148.
<http://www.cec.sped.org/content/NavigationMenu/Publications2/exceptionalchildren/>
- Regan, K. S., Mastropieri, M. A., & Scruggs, T. E. (2005). Promoting expressive writing among students with emotional and behavioral disturbance via dialogue journals. *Behavioral Disorders*, 31, 33-50.
- Swanson, E., Wanzek, J., Haring, C., Ciullo, S., & McCulley, L. (2013). Intervention fidelity in special and general education research journals. *Journal of Special Education*, 47(3), 3-13. doi: 10.1177/0022466911419516
- Tankersley, M., Harjusola-Webb, S., & Landrum, T. J. (2008). Using single-subject research to establish the evidence base of special education. *Intervention in School and Clinic*, 44, 83 – 90. doi:10.1177/1053451208321600

Weston, J. R., Curran, C. M., Majsterek, D. J., & Prigge, D. J. (2010). An exploratory study in self-reported school-wide response to intervention reading practices. *Learning Disabilities: A Multi-Disciplinary Journal*, 16(3), 125-132.

Additional Readings

May be assigned during semester to support discussions

Course Relationships to Program Goals and Professional Organizations

This course is part of the George Mason University, Graduate School of Education (GSE), Special Education Program. This program complies with the standards for special educators established by the Council for Exceptional Children (CEC), the major special education professional organization. The CEC Standards are listed on the following website: <http://www.cec.sped.org/Content/NavigationMenu/ProfessionalDevelopment/ProfessionalStandards/>.

GMU POLICIES AND RESOURCES FOR STUDENTS:

- a. Students must adhere to the guidelines of the George Mason University Honor Code [See <http://oai.gmu.edu/the-mason-honor-code/>].
- b. Students must follow the university policy for Responsible Use of Computing [See <http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/>].
- c. 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.
- d. 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/>].
- e. 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/>].
- f. Students must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.
- g. 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/>].

PROFESSIONAL DISPOSITIONS

Students are expected to exhibit professional behaviors and dispositions at all times.

CORE VALUES COMMITMENT

The College of Education & Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles. [See <http://cehd.gmu.edu/values/>]

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

Course Policies & Expectations

Attendance.

Because of the importance of lecture and discussion to the total learning experience, students are encouraged to both attend and participate in class regularly. Attendance, punctuality, preparation, and active contribution to small and large group efforts are essential. These elements will reflect the professional attitude implied in the course goals and will account for 13% of the course grade. Students who must miss a class must notify the instructor (preferably in advance) and are responsible for completing all assignments and readings for the next class.

Late Work.

All assignments must be submitted on or before the assigned due date. In fairness to students who make the effort to submit work on time, 5% of the total assignment points will be deducted each day from your grade for late assignments.

TaskStream Submission

Every student registered for any Special Education course with a required performance-based assessment is required to submit this assessment, (*NO ASSESSMENT REQUIRED FOR THIS COURSE*) (regardless of whether a course is an elective, a onetime course or part of an undergraduate minor). Evaluation of the performance-based assessment by the course instructor will also be completed in TaskStream. Failure to submit the assessment to TaskStream will result in the course instructor reporting the course grade as Incomplete(IN). Unless the IN grade is changed upon completion of the required TaskStream submission, the IN will convert to an F nine weeks into the following semester.

If you have never used TaskStream before, you **MUST** use the login and password information that has been created for you. This information is distributed to students through GMU email, so it is very important that you set up your GMU email. For more TaskStream information, go to <http://cehd.gmu.edu/api/taskstream>.

Grading Scale

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

Assignments

Performance-based Assessment (TaskStream submission required).

NONE

Performance-based Common Assignments (No TaskStream submission required).

See below

Other Assignments.

Class Participation (13 points)

1. Professional Behavior: For a satisfactory grade in the course, students are expected to attend all classes, arrive on time, be prepared for class, demonstrate professional behavior (see Professional Disposition Criteria at <http://www.gse.gmu.edu> for a listing of these dispositions), and complete all assignments with professional quality in a timely manner. To successfully complete this course, students need to adhere to the due dates for specific readings and assignments to be completed. If you feel you cannot adhere to the schedule noted in the syllabus, please contact the Instructor immediately to discuss options for withdrawing and completing the course during another semester.
2. Laptops, cell phones, PDAs and all other electronic devices should be silenced during class time. If you choose to use your personal laptop for note taking, I ask that you utilize it for that purpose only (not for surfing the web, checking email, etc.).
3. Promptness: All assignments must be submitted on or before the assigned due date. In fairness to students who make the effort to submit work on time, 5% of the total assignment points will be deducted each day from your grade for late assignments.
4. Written Products: All written assignments must be prepared in a professional manner following guidelines stated in the Publication Manual of the American Psychological Association (6th edition). All final products must be typed. Products that, in the judgment of the instructor, are unreadable or unprofessionally prepared will be returned un-graded or assigned a lower evaluation.

****PLEASE expect to verbally participate, effectively listen during every class session, and encourage discussion of your peers.**

One Methods Sections (40 points)

One paper inclusive of a complete methods section is to be completed. The student may select any of the following methodologies: *single-subject*, *qualitative*, or *group-experimental* or *quasi-experimental* methodology. The paper should be about 7-10 page max., double –spaced, for each proposal (NOT including title page, abstract, and references). The paper will be evaluated for APA (6th ed.) format. Provide a title for your paper. Provide brief introduction. Then, subsequent subheadings should ordinarily include the following:

- Background literature (brief)
- Purpose statement
- Research Questions
- Method
 - Participants
 - Setting
 - Materials/Instrument
- Procedures
 - Data Sources
- Data analysis
- Anticipated results/Discussion
- References

RUBRIC FOR METHOD SECTION ASSIGNMENT (30 points for content; 10 points for mechanics, grammar, APA)

Exemplary paper

(Content - 30 points): Appropriate topic, thorough description of participants, data sources, and procedures. Adequate design, analysis, and general understanding/interpretation of the relevant methodology; excellent incorporation of QIs

(Mechanics – 10 points): clearly and directly written, good writing style, free of mechanical or stylistic errors, appropriate and correct use of APA format.

Adequate paper

(Content – 27-29 points): Good overall paper, lacking in one or two of the criteria for an exemplary paper., and/or may have neglected specific components relevant to the relevant methodology; addresses some but neglects significant QIs

(Mechanics – 8-9 points): Not entirely clear and thorough, minor writing style or APA format errors may be present;

Marginal paper

(Content – 24-26 points): Overall, acceptable but with one or more significant problems. Contains some useful information, but may have substantial problems with the evaluation, or unclear or inappropriate description of methodology.

(Mechanics – 6-7 points): Substantial problems with writing style/APA format

Inadequate paper

(Content < 24 points): Paper with substantial problems in important areas such as writing, description of participants, data sources, procedures, data analysis, or overall thoughtfulness. Contains little or no information of value to the field of education.

(Mechanics- 4-5 points): Writing lacks organization, subheadings, limited APA format

Unacceptable/no paper (0 points): Paper with no value whatsoever relative to the assignment, or no paper turned in at all.

Peer Exchange Feedback (15 points):

Each student will provide another student with his/her final methods paper. The task is to provide thorough feedback to the peer using track changes. Comments and suggestions made should consider the quality indicators and elements of quality research designs and/or considerations of special education research. A rubric will be provided in class.

Final (14 points)

The final exam will be completed in class. Responses to open-ended prompts will be typed and provided to the instructor at a designated due date (see schedule). Responses on exam should not be discussed among peers but course materials, resources, and readings may be used to support the responses.

RUBRIC FOR FINAL EXAMINATION

For each open-ended test item:

Exemplary response (2 points): Provides direct and thorough response to question, defines relevant terms, and provides specific examples or instances of the concepts being discussed. Answer is directly reflective of lecture, readings, activities, or assignments, or other material of direct relevance to class.

Adequate response (1.5 point): Provides direct and relevant response to question, provides accurate information directly relevant to class readings, notes, or activities. May provide less information, less elaboration, or a less thoughtful overall response than an exemplary response.

Marginal response (1 point): Provides some relevant information, but does not demonstrate overall a clear or complete understanding of the relevant concepts.

Comparative Methodological Table (18 points)

This table should be a graphic organizer that depicts characteristics for each of the following research methodologies: qualitative, single-subject, and survey research.

The table should include the following headers for each research method (at least): *Purpose* (apart from other methods; why this methodology specifically over others?); *Data Sources*

(identify the types of data sources typical of this methodology); *Strengthen Internal Validity* by... (How do you strengthen internal validity? Procedures? Steps?); *Strengthen External Validity* by...(How do you strengthen internal validity? Procedures? Steps?); Establish Reliability by...(How do you establish reliability?)

You can feel free to add additional headers/columns to the comparative methodological table. The ten points should include accuracy in those headers provided above. This table is to be completed independently but it is expected that individuals will use class materials, resources, lectures, discussions, to support completion of this assignment. A rubric will be provided in class.

Evaluation (see rubrics)

- 1. Attendance/participation: 13 points
- 2. 1 Methods section: 40 points
- 3. Peer Exchange: Feedback 15 points
- 4. Final Exam 14 points
- 5. Comparative Methodological Table: 18 points
- Total: 100 points

Schedule

Week	Topic
Week 1 Jan 20	<p>Introduction/Organization: Pretest; research traditions; common methodological concerns; nomothetic vs ideographic methods; causation; internal and external validity; dependent and independent variables; what’s published in special education?</p> <p>Read for next week:</p> <ul style="list-style-type: none"> • Odom, Brantlinger, Gersten, Horner, Thompson, & Harris (2005) • Cook, Tankersley, & Landrum (2009) • Mastropieri et al. (2009)
Week 2 Jan 27	<p>Evidence-Based Practices in Special Education: Quality Indicators</p> <p>Read for next week: McDuffie & Scruggs (2008)</p> <ul style="list-style-type: none"> • Braintlinger, Jiminez, Klinger, Pugach & Richardson (2005)
Week 3 Feb 3	<p>Qualitative Research designs: Quality Indicators</p> <p>Read for next week:</p> <ul style="list-style-type: none"> • Leko & Brownell (2011)

Week 4 Feb 10	Qualitative Research: Application of the QIs and NVivo demo Read for next week: Weston, Curran, Majsterek, & Prigge (2010) Burns & Ysseldyke (2009)
Week 5 Feb 17	Survey Research Read for next week: <ul style="list-style-type: none"> • Horner, Carr, Halle, McGee, Odom, & Wolery (2005) • Tankersley, Harjusola-Webb, & Landrum (2008) • Regan, Mastropieri, & Scruggs (2005)
Week 6 Feb 24	Single-Subject Research: QIs Read for next week: <ul style="list-style-type: none"> • Lane, Kalberg, & Shepcaro (2009) • Evmenova, Behrmann, Mastropieri, Baker, Graf (2011)
Week 7 March 3	Single Subject Research (GUEST PRESENTER): Application of QIs Read for next week: Swanson, E., Wanzek, J., Haring, C., Ciullo, S., & McCulley, L. (2013)
Week 8 March 17	Fidelity of Intervention: Fidelity measurements and quality Read for next week: Klingner & Boardman (2011) Bishop, Brownell, Klingner, Leko, & Galman (2010)
Week 9 March 24	Mixed Methods Research Read for next week: <ul style="list-style-type: none"> • Mastropieri, M. A., Scruggs, T. E., Norland, J., Berkeley, S., McDuffie, K., Tornquist, E. H., & Connors, N. (2006)
Week 10 March 31	Group Experimental and Quasi-Experimental research designs overview (pre-existing groups) Read for next week: <ul style="list-style-type: none"> • Gersten, Fuchs, Compton, Coyne, Greenwood, & Innocenti (2005) • Cook, Cook, Landrum, & Tankersley (2008)
Week 11 April 14	Group Experimental: QIs; Assumptions of ANOVA, SPSS tutorials: Descriptive Percent, One-Way ANOVA, Paired <i>t</i> -tests, Paired samples <i>t</i> -test Read for next week: <ul style="list-style-type: none"> • Marshak, Mastropieri, & Scruggs (2011)

Week 12	Group Experimental: Application of QIs
April 21	Comparative Table is DUE TODAY. Peer Exchange: Provide Feedback of methods paper to peer by April 24th
Week 13	Final Exam
April 28	Paper due to instructor by end of day.