



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

Spring 2018

EDSE 842 001: Application of Research Methodology in Special Education

CRN: 16700, 3 – Credits

Instructor: Dr. Peggy King-Sears	Meeting Dates: 01/22/18 – 05/16/18 [Semester v. course start/end dates]
Phone: 703.993.3916 <i>best method for communication is email or "Ask the Instructor" on the Bb site</i>	Meeting Day(s): Tuesday
E-Mail: mkingsea@gmu.edu	Meeting Time(s): 7:20 pm - 10:00 pm
Office Hours: Tuesdays 4:00 to 6:00 by appointment only. Please schedule 24 hours in advance. Flexibility for appointments exists–please ask!	Meeting Location: Fairfax
Office Location: Finley 218	Other Phone: NA

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

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

Co-requisite(s): None

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. Offered by Graduate School of Education. May not be repeated for credit.

Registration Restrictions:

Enrollment is limited to students with a major in Education.

Enrollment is limited to Graduate level students.

Schedule Type: Seminar

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 teacher candidates/students should contact

the Special Education Advising Office at (703) 993-3670 for assistance. All other teacher candidates/students should refer to their faculty advisor.

Course Delivery Method

Learning activities include the following:

1. Class lecture and discussion
2. Application activities
3. Small group activities
4. Video and other media supports
5. Research and presentation activities
6. Written plans for a research study using the APA format
7. Electronic supplements and activities via Blackboard

Learner Outcomes

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

1. Describe the strengths and limitations of single subject research designs in special education research.
2. Describe basic procedures involving single subject research designs.
3. Evaluate previous research that has employed single subject research methodology.
4. Design future special education research using single subject methodology.
5. Describe the strengths and limitations of qualitative research designs in special education research.
6. Evaluate previous research that has employed qualitative research methodology.
7. Design future special education research using qualitative methodology.
8. Describe the strengths and limitations of survey research designs in special education research.
9. Evaluate previous research that has employed survey research methodology.
10. Design future special education research using survey methodology.
11. Describe the strengths and limitations of group-experimental research designs in special education research.
12. Describe basic procedures involving group-experimental research designs.
13. Evaluate previous special education research that has employed group-experimental research methodology.
14. Design future special education research using group-experimental methodology.

Course Relationship to Program Goals and Professional Organizations

Course Relationship to Program Goals and Professional Organizations This course is part of the George Mason University, College of Education and Human Development (CEHD), Graduate School of Education, Special Education, CEHD PhD in Education Program. This program complies with university and program standards.

Required Textbooks

None (refer to APA Manual and required readings)

Recommended Textbooks

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

Required Resources

An article readings list (to be downloaded from GMU library) provided below and posted on Blackboard will correspond to the syllabus schedule.

Additional Readings

Additional readings may be provided by the instructor throughout the semester as appropriate to support discussions.

Course Performance Evaluation

Students are expected to submit all assignments on time in the manner outlined by the instructor (e.g., Blackboard, Tk20, hard copy).

Tk20 Performance-Based Assessment Submission Requirement

For EDSE 842, there is NO ASSESSMENT REQUIRED FOR THIS COURSE). Failure to submit the assignment to Tk20 will result in reporting the course grade as Incomplete (IN).

Assignments and/or Examinations

Performance-based Assessment (Tk20 submission required)

None

College Wide Common Assessment (TK20 submission required)

None

Performance-based Common Assignments (No Tk20 submission required.)

None

Other Assignments

Class Participation (7.5 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 (e.g., not for surfing the web, checking email).

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.**

Comparative Methodological Table (20 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.

One Methods Section (47 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 methods. The paper should be about 8-10 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 (47 points for content; 10 points for mechanics, grammar, APA)

Exemplary Paper (Content - 37 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 9 to 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 – 29 to 36.9 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 6 to 8 points):** Not entirely clear and thorough, minor writing style or APA format errors may be present.

Marginal Paper (Content – 25 to 28.9 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 to 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- 0 to 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 (5.5 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 Exam (20 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.

Unacceptable response (0 point): Totally inaccurate and/or mostly incomplete.

Course Policies and Expectations

Attendance/Participation

Students are expected to attend **all** classes, arrive on time, remain in class for the duration of each session, demonstrate professional behavior in the classroom, and complete all assignments with professional quality and on time. When absence from class is unavoidable, it is the student's responsibility to make arrangements to obtain notes, handouts, and lecture details from another student (it is recommended that you have *two colleagues* in the course for this). Please be sure to notify the classmate(s) in sufficient time for them to be of assistance for you.

Please notify the Instructor about absences in advance or within 24 hours after an absence. Be aware **any points earned for participation in class activities, during a time of absence, will not be earned and cannot be made up.**

If you need to miss, for any reason, more than two class sessions, contact the Instructor immediately (within 48 hours) with notification of when your course withdrawal will be completed. If you realize after the first class session that this course's requirements are not a match for you for this semester, process your withdrawal immediately (within 48 hours) and notify the Instructor at the same time.

Students must **follow the university policy stating that all sound emitting devices shall be turned off** during class unless otherwise authorized by the instructor.

- a) The use of electronic devices that produce sound or otherwise interfere with the learning of others (such as cell phones, pagers, etc.) is prohibited during class. Please turn these devices off or to vibrate before the start of class.
- b) Do not read or send texts during class time. Doing so is not only in violation of university policy, it is distracting to other students and the instructor.

- c) Computers may be used to take notes during class, but they may not be used for internet exploration, to send or receive emails, or other non-class activities during class time.
- d) Screens on laptops and any other electronic devices must be in full view of the instructor (e.g., do not have screen face the wall; do not put cell phone on your lap) at all times.

With apologies for operationalizing the above specific behaviors; if these had not become issues in previous classes, there would not have been a need to be so clear here. *Please respect our limited instructional time together; distractions such as the above impede the quality and quantity of that time.*

Late Work

To successfully complete this course, students need to adhere to all due dates for readings and assignments. Full earned credit for assignments turned in on time. Anticipate point deductions for late work. For example, for every 24-hour period that an assignment is late, a 5% point deduction will occur.

Grading Scale

95 – 100 = A+
90 – 94.9 = A
85 – 89.9 = B+
80 – 84.9 = B
70 – 79.9 = C
< 70 = F

An Incomplete grade is not an option except under extreme extenuating circumstances. Contact the instructor immediately; a course withdrawal may be appropriate in some situations.

*Note: The George Mason University Honor Code will be strictly enforced. Students are responsible for reading and understanding the Code. “To promote a stronger sense of mutual responsibility, respect, trust, and fairness among all members of the George Mason University community and with the desire for greater academic and personal achievement, we, the student members of the university community, have set forth this honor code: Student members of the George Mason University community pledge not to cheat, plagiarize, steal, or lie in matters related to academic work.” Work submitted must be your own or with proper citations (see <https://catalog.gmu.edu/policies/honor-code-system/>).

Feedback on Assignment Using APA Numeric Codes

Throughout your document, there may be numbers that correspond to the feedback below.

This # on your	...corresponds to this section of the APA Manual Sixth Edition. Please review your paper in light of the APA writing style. Contact the Instructor if you have questions.
1	Chapter 3 on writing style (3.01 to 3.11)
2	Chapter 3 on guidelines to reduce bias in language (pp. 70-76, particularly 3.15)
3	Chapter 3 on grammar (3.18 to 3.23)
4	Chapter 4 on punctuation, spelling, capitalization, italics, abbreviations, numbers (4.01 to 4.38)
5	Chapter 6 on plagiarism and quotations (6.01 to 6.10) <i>For all assignments in this course, <u>do not quote</u>. Always paraphrase.</i>
6	Chapter 6 on reference citations in text (6.11 to 6.21)
7	Chapter 6 on Reference list (6.22 to 6.32) All of Chapter 7 provides Reference Examples. You will likely use 7.01 the most for articles from peer-reviewed journals (periodicals) and 7.02 for books and book chapters.
An arrow or “check throughout” indicates that a pattern of this type of feedback has evolved, and the writer needs to self- check the remaining portions of paper for that error type. The reader is no longer noting every instance of that feedback from that point on, but will mark some content intermittently. <i>The writer should focus on reducing this type of error in subsequent papers</i> in order to enhance meaning and increase the score for excellent written language and sound content.	

Professional Dispositions

Students are expected to exhibit professional behaviors and dispositions at all times. See <https://cehd.gmu.edu/students/policies-procedures/>

Class Schedule

*Note: Faculty reserve the right to alter the schedule as necessary, with notification to students.

Date	Class Topic	Reading & Assignments Due
Tuesday, January 22	Introduction/organization: research traditions; common methodological concerns; nomothetic vs ideographic methods; causation; internal and external validity; dependent and independent variables; what's published in special education?	
Tuesday, January 29	Evidence-Based Practices in Special Education: Quality Indicators	Odom, Brantlinger, Gersten, Horner, Thompson, & Harris (2005) Cook, Tankersley, & Landrum (2009) Mastropieri, et al. (2009)
Tuesday, February 5	Qualitative Research designs: Quality Indicators	McDuffie & Scruggs (2008) Braitlinger, Jiminez, Klinger, Pugach & Richardson (2005)
Tuesday, February 12	Qualitative Research: Application of the QIs and NVivo demo	Leko & Brownell (2011)
Tuesday, February 19	Survey Research	Weston, Curran, Majsterek, & Prigge (2010) Burns & Ysseldyke (2009)
Tuesday, February 26	Single-Subject Research: QIs	Horner, Carr, Halle, McGee, Odom, & Wolery (2005) Tankersley, Harjusola-Webb, & Landrum (2008) Regan, Mastropieri, & Scruggs (2005)
Tuesday, March 5	Single Subject Research: Application of QIs	Lane, Kalberg, & Shepcaro (2009) Evmenova et al. (2015) Moeller, Dattilo, & Rusch (2015)
<i>No Class – Tuesday, March 12th (Spring Break)</i>		
Tuesday, March 19	Mixed Methods Research Special Education Technology Research Reviews of Research	Klingner & Boardman (2011) Bishop, Brownell, Klingner, Leko, & Galman (2010) Gersten & Edyburn (2007) Talbot, Maggin, Van Acker, & Kumm, (2017)
Tuesday, March 26	Fidelity of Intervention: Fidelity measurements and quality	Swanson, Wanzek, Haring, Ciullo, & McCulley (2013) Comparative Table Due
Tuesday, April 2	Group Experimental and Quasi-Experimental research designs overview (pre-existing groups)	Mastropieri, Scruggs, Norland, Berkeley, McDuffie, Tornquist, & Connors (2006)

Tuesday, April 9	Group Experimental: QIs; Assumptions of ANOVA, SPSS tutorials: Descriptive Percent, One- Way ANOVA, Paired t-tests, Paired samples t-test	Gersten, Fuchs, Compton, Coyne, Greenwood, & Innocenti (2005) Cook, Cook, Landrum, & Tankersley (2008)
Tuesday, April 16	Group Experimental: Application of QIs	Marshak, Mastropieri, & Scruggs (2011)
Tuesday, April 23	Peer Feedback	Method Section Drafts Due
Tuesday, April 30	Pulling it all together	Method Sections are Due
Tuesday, May 7	Final Exam	Final Exam

Core Values Commitment

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

GMU Policies and Resources for Students

Policies

- Students must adhere to the guidelines of the Mason Honor Code (see <https://catalog.gmu.edu/policies/honor-code-system/>).
- Students must follow the university policy for Responsible Use of Computing (see <http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/>).
- Students are responsible for the content of university communications sent to their Mason 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 with disabilities who seek accommodations in a course must be registered with George Mason University Disability Services. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor (see <http://ods.gmu.edu/>).
- Students must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.

Campus Resources

- Support for submission of assignments to Tk20 should be directed to tk20help@gmu.edu or <https://cehd.gmu.edu/aero/tk20>. Questions or concerns regarding use of Blackboard should be directed to <http://coursesupport.gmu.edu/>.
- For information on student support resources on campus, see <https://ctfe.gmu.edu/teaching/student-support-resources-on-campus>

For additional information on the College of Education and Human Development, please visit our website <https://cehd.gmu.edu/students/>.

Required Readings *

*Any changes to this listing will be announced during the semester.

- 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., Behrmann, 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., & Edyburn, D. (2007). Defining quality indicators for special education technology research. *Journal of Special Education Technology, 22*, 3-18.
- 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*, 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*, 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
- Moeller, J. D., Dattilo, J., & Rusch, F. (2015). Applying quality indicators to single-case research designs used in special education: A systematic review. *Psychology in the Schools, 52*, 139-153.
- 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.

Stodden, R. A., Yamamoto, K. K., Folk, E., Kong, E., & Otsuji, D. N. (2013). Pursuing quality evidence: Applying single-subject quality indicators to non-experimental qualitative educational research. *Education and Training in Autism and Developmental Disabilities, 48*, 491-503.

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

Talbott, E., Maggin, D. M., Van Acker, E. Y., & Kumm, S. (December 7 2017 online first). Quality indicators for reviews of research in special education. *Exceptionality*, 1-21.

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*, 125-132.