

George Mason University College of Education & Human Development/Graduate School of Education Secondary Education Program

EDUC 675 (Section 007)/EDCI 597 (Section 005) "Research in Secondary Education"/Spring 2020 (3 credits)

Key Information

Instructor: Rory Dippold, PhD, Adjunct Professor Office hours: By appointment, via phone, or virtually Office Location: Thompson Hall, 1800 Tuesdays, 4:30 – 7:10, Innovation Hall 317, Fairfax Campus

Email: rdippold@gmu.edu

Class Meetings

Tuesdays, 4:30-7:10 pm/ Innovation Hall 317

Our class will meet using a variety of structures. We will gather on campus in Innovation Hall 317 for ten sessions, and we will also meet each of these sessions for 1:1 and/or small group conferences. Ultimately I will be meeting with students more frequently than expected for a hybrid class, but you will have less class face-to-face time and more of the independent writing, writing conference time, and peer feedbacking time you need to be successful with the good work of this course.

<u>Instructor Introduction and Theoretical Framework</u>

I believe that the best teachers know themselves as literate people in the broadest sense. I will ask you also to know yourselves as professionals with a variety of literacies, including those of photographers, visual sociologists, and community constituents. Teachers and those who work with children and youth must be resilient individuals who are willing to take risks to let school literacies matter to themselves, their students, and the broader community. I will expect you to be your best, brightest, most thoughtful, and most creative selves. I intend that this course will be one that you remember, and that you will care passionately about the work we do. I will have uncompromising professional standards for your behavior, participation, and openness. At the same time, I will do everything possible to ensure that you meet these standards. My hope is that we will experience much intellectual camaraderie, engaging discussion, and laughter as we proceed. I encourage you to take risks and celebrate the risks taken by your colleagues.

I bring the perspectives of a veteran teacher, administrator and teacher educator. I approach all educational experiences with the goal of helping students to learn to be active, creative, "real world" members of a just society. It is important for us as educators to approach our teaching with a simultaneously critical and creative perspective: when we assess current teaching practices, we also begin to develop new ones.

I will ask you to think of the teaching strategies we use in class and that you plan to use as research interventions in your own classroom in three categories, which are framed by an assessment-driven, "backwards" design:

- 1) "Ways Out": What is the student's "way out" of the text or activity with which you are asking them to engage? That is, what artifacts and demonstrations will the student complete to exhibit her/his comprehension of the key ideas that they are encountering? How will you assess students' knowledge, skills, and attitudes? How will students demonstrate their retention of and relationship to the material?
- 2) "Ways In": What is the student's "way in" to this text or activity? That is, how are you approaching the student's natural interests in or motivations for this assignment? Think about how you might use the student's existing "literacies" to do this. What specific strategies will you use?
- 3) "Ways Through": What are students' "ways through" this text or activity? That is, what strategies and tools are you giving students to make sense of and understand the sources you are using with this assignment? How will students <u>translate</u> the material into their own terms?

Prerequisites/Corequisites

Pre-requisites: EDCI 790 and licensure (enforced by registration system) for EDUC 675; Methods I (prerequisite) and Methods II (corequisite) for EDCI 597 students

Catalogue Description

The exit requirement (the Action/Teacher/Practitioner Impact Presentation) is submitted during the semester the candidate is enrolled in EDUC 675. This course helps beginning teachers become more effective by critiquing various research paradigms, reviewing the research literature, and systematically collecting and interpreting evidence to improve practice. EDUC 675 emphasizes linking evidence of student learning to make informed instructional decisions. Specifically, this course is designed to help beginning teachers understand and enact concepts and principles of action, teacher, or practitioner research in secondary classrooms. Students will learn how to identify and use research literature and systematic evidence to improve practice with a focus on students' learning.

Notes: 1) This course <u>requires</u> that you have access to a classroom or appropriate research site to conduct your research. If you do not have your own classroom, you will need to let me know during our first class. I will suggest alternative arrangements, but these will still require that you conduct research in a classroom setting on a teaching strategy; 2) Students enrolled in EDCI 597 will complete the exit requirement when they finish the "Impact on Student Learning" project while enrolled in EDCI 790.

Course Overview

Teachers are often encouraged to implement "research-based" practices, required to attend workshops where research findings are presented, provided with lists of books that synthesize research, and asked to suggest changes in practice based on the implications of research. Although these practices have their usefulness, the assumption implicit in much of the discourse surrounding educational research is that teachers are *consumers* and/or *objects* of research, rather than *producers* of research. The past two decades have seen a growing movement to upend those assumptions through an emphasis on the importance of action, teacher, or practitioner research. Thus, the research and theory we will read and the methodologies with which we will engage are those associated with action, teacher, or practitioner research (i.e., research conducted by teachers

for professional purposes). Action, teacher, or practitioner research positions teachers as *producers* of knowledge—professionals who can learn about and improve their practice by studying important questions that grow from their own experiences and observations.

This class is designed to support you in using and building on the ideas and content you have encountered in your previous coursework. Most importantly, the course assists you as you consider ways to better support children and youth. In other words, your current and future students are at the center of our work. Toward these ends, the course requires you to conceptualize, design, and begin to implement an original research project in your school/classroom. Only if we attempt to live these action, teacher, or practitioner research processes in this course will you be able to use them eventually in your own teaching practices. Thus, for every activity in this course, you must act and study with multiple lenses—as a student, teacher, and advocate. Although the work required to achieve these goals is intensive, the course is designed to provide you with much support. You will need to hit the ground running, starting your research project early, and working on it steadily. Through our readings, we will explore research methodologies, analyses of the history and impact of action, teacher, and practitioner research, and the efforts of other action, teacher, and practitioner researchers. Our readings and discussions will help you develop your own rationale and "road map" for your project. We will dig into readings together, write often and share our writing with one another, and support each other in our research goals.

Course Delivery

The primary purpose of this course is for you to learn how to conduct action, teacher, or practitioner research and apply it in your classroom in order to improve your teaching and your students' learning. As noted above, this course is approximately 75% face-to-face and 25% online and is considered a hybrid course. This course is student-centered and will be conducted using a project-based approach. Your research questions and methodology will be the focus of the course and will drive readings, classroom discussions, peer review activities, reflections, and the action, teacher, or practitioner research project that you complete. The purpose of the draft research project sections and the peer review sessions will be to support completion of our action, teacher, or practitioner research projects and provide opportunities for us to learn about and analyze methods and techniques of action, teacher, or practitioner research. You will have the opportunity to construct knowledge and critically reflect on the research process as you complete the action, teacher, or practitioner research proposal and report, and then prepare your "Action/Teacher/Practitioner Research Impact Presentation" for graduation.

The course will be delivered through a variety of online, face-to-face, and individualized instructional approaches. You will be expected to post your own assignments and respond to peers' feedback by the end of each designated class week (midnight US eastern standard time each Tuesday). During class meetings there will be large group, small group, and individual activities. Online classes are considered regular instructional time and the assignments given are the equivalent of a full in-class session. The online classes involve research, use of professional web sites, peer review, email with the instructor and classmates, readings, writing reflections, and other assignments. GMU's Blackboard course framework will be used regularly throughout the course, and you will also be required to use Google Drive to upload and share drafts of your research project with me and a small group of your peers. Your GMU email address is required for communication with the course instructor and must be active by the first week of class. Please inform me of any accessibility problems the first day of class.

Participants will conduct independent research, as well as communicate with each other and the instructor via electronic media. In general, we will engage in four activities during our time together:

1) Mini-lectures, activities, and discussions related to research methods led by the instructor

- and course participants and supported by course text and selected readings
- 2) Discussions of the week's readings led by the instructor and course participants
- 3) Class and peer review group meetings in which students concentrate on selected readings, provide feedback and support for each other's writing and research processes, and share how they have presented their research efforts to authentic audiences
- 4) Individual, small group, and whole group meetings to discuss research efforts Please note that because you have much to learn from each other, and because teaching is often a collaborative effort, you will frequently work in groups. This will give you a chance to share ideas, be exposed to a range of perspectives and experiences, and support each other as you continue to develop your teaching and researching skills.

Course Outcomes and Objectives

This course is designed to enable students to:

- 1) demonstrate an understanding of the process and components used in action, teacher, or practitioner research by conducting and assessing a chosen scholarly inquiry situated in their classroom and impact on students' learning (research-based practice; innovation)
- 2) prepare a research proposal which makes explicit links between theory and practice (research-based practice)
- 3) examine ethical considerations when conducting action, teacher, or practitioner research (research-based practice; social justice)
- 4) conduct action/teacher/practitioner research which includes: research question(s), research proposal; review of related literature; methods; data collection/analysis; findings; discussion of impact on students, teachers, and the education field (research-based practice)
- 5) participate in critical and collaborative inquiries to gain multiple perspectives in interpreting research and for validation and peer review of research (collaboration; ethical leadership)
- 6) demonstrate integration of national and state standards for content and pedagogy as related to their research question(s) by reflecting on their own teaching practice and its impact on students' learning (SPA standards respective to students' discipline)
- 7) demonstrate skills in the application of technology and use of resources in action, teacher, or practitioner research (innovation)

Students will achieve these outcomes through the following objectives:

- 1) Prepare a research proposal that includes the research context, a problem statement, a research question and outcomes, and a data collection plan that makes explicit links between theory and practice. Students will brainstorm (in whole class and small group settings), give peer feedback online, self-reflect, and post a viable plan to conduct a research study in the classroom. Students will access resources and references, and conduct a review of the literature. The proposal will be judged on its viability and level of practical application, given the time constraints of the semester.
- 2) Conduct an action/teacher/practitioner research project in a local school or classroom. Students will prepare all data collection instruments to conduct the study. Prior to implementation, data collection instruments will be reviewed by peers and the instructor. Students will be assigned to research teams that will troubleshoot and provide support as data is collected. Results will be shared and students will provide feedback to each other on the presentation and interpretation of data.
- 3) Review professional strengths and weaknesses of the action/teacher/practitioner research process through peer review and self-assessment. Students will provide regular online feedback to their peers on their drafts/revisions of their research projects.
- 4) Write an action/teacher/practitioner research report (using APA format) that includes the context for the study, research question(s) and outcomes, a review of related literature, methodology, data collection/analysis, implications, limitations, and an action plan. Students will review example research reports from prior semesters. Students will upload drafts of

- their complete report and its sections to Google Drive for peer and instructor review and feedback using the rubric used to assess the report. Students will present a summary of their report to their peers in brief in-class presentations.
- 5) Work to identify one authentic, alternative, preferably contemporary media-based method through which you will share the results of your action, teacher, or practitioner research findings. Design and enact a presentation that moves the public understanding of your study and its findings along. You might highlight the very importance of action, teacher, or practitioner research or summarize the findings of your research efforts.

Relationships to Professional Standards

By the end of this course students will demonstrate an understanding and application of subject area standards aligned with the National Content Standards and identified by their Specialized Professional Association (SPA):

- Social studies teachers: National Council for the Social Studies, http://www.ncss.org
- English teachers: National Council of Teachers of English, http://www.ncte.org
- Math teachers: National Council of Teachers of Mathematics, http://www.nctm.org
- Science teachers: National Science Teachers Association, http://www.nsta.org

Students should also have an understanding of and be able to apply the standards of the Interstate New Teacher Assistance and Support Consortium (INTASC):

 https://ccsso.org/sites/default/files/2017-12/2013 INTASC Learning Progressions for Teachers.pdf

Required Texts and Materials

Textbooks/General Readings

- Bautista, M.A., Bertrand, M., Morrell, E., Scorza, D., Matthew, C. (2013). Participatory action research and youth: Methodological insights from the Council of Youth Research. *Teachers College Record*, *115*, 1-23. Note: This article will be provided electronically.
- Kimball, V. (2019). The Importance of Teaching Dialectic Diversity in the American English Classroom. Unpublished master's action/teacher/practitioner research project. Note: This paper will be provided electronically.
- Lattimer, H. & Caillier, S. (2015). Surviving and thriving with teacher action research: Reflections and advice from the field. New York: Peter Lang.
- Rooney, K. (2017). The Neverending Reflection Story, Math Edition: Students see themselves as learners. Unpublished master's action/teacher/practitioner research project. Note: This paper will be provided electronically.
- Zenkov, K., Pellegrino, A., Sell, C., Biernesser, S., & McCamis, M. (2015). Picturing kids and "kids" as researchers: Preservice teachers and effective writing instruction for diverse youth and English language learners. *The New Educator*. Note: This article will be provided electronically.
- *Note: Other text readings will be provided electronically. Additional readings available online and/or in class. Teacher research projects will also be provided electronically and free-of-charge. You will also need access to a computer, with web, email, and printing privileges.

Recommended Texts

American Psychological Association (2009). *Publication manual* (6th ed.). Washington, DC: American Psychological Association.

Note: APA guidelines are available online at http://owl.english.purdue.edu/owl/resource/560/01/

Resources

Articles and Books

- Arhar, J., Holly, M. & Kasten, W. (2008). *Action research for teachers: Traveling the yellow brick road*, (3rd ed.). Upper Saddle River, New Jersey: Merrill Prentice Hall.
- Bell, J. (2005). Doing your research project: A guide for first-time researchers in education and social science (4th ed.). Buckingham, England: Open University Press.
- Bruce, S.M. & Pine, G. J. (2010). Action research in special education: An inquiry approach for effective teaching and learning. New York: Teacher's College Press.
- Chiseri-Strater, E. & Sunstein, B. (2006). What works? A practical guide for teacher research. Heinemann. Note: Intro and sample chapter can be found at http://books.heinemann.com/shared/onlineresources/E00713/chapter9.pdf and ordered online at http://books.heinemann.com/products/E00713.aspx.
- Cochran-Smith, M. & Lytle, S.L. (2009). *Inquiry as stance: Practitioner research in the next generation (practitioner inquiry)*. New York: Teachers College Press.
- Cook-Sather, A. (2009). Learning from the student's perspective: A methods sourcebook for effective teaching. Boulder, CO: Paradigm Publishers.
- Dick, B. (2011). Action research literature 2008—2010: Themes and trends. *Action Research*, 9(2), 122-143. doi: 10.1177/1476750310388055
- Friedman, V. J., & Rogers, T. (2009). There is nothing so theoretical as good action research. *Action Research*, 7(1), 31-47. doi: 10.1177/1476750308099596
- Hubbard, R. & Power, B. (1999). *Living the questions: A guide for teacher researchers*. NY: Stenhouse Publishers.
- Hubbard, R. & Power, B. (2003). *The art of classroom inquiry: A handbook for teacher-researchers*. Portsmouth, NH: Heinemann.
- Kosnik, C., Beck, C., Freese, A.R., & Samaras, A.P. (Eds.), (2006). *Making a difference in teacher education through self-study: Studies of personal, professional, and program renewal.*Dordrecht, The Netherlands: Springer.
- Lebak, K. (2010). Can inquiry and reflection be contagious? Science teachers, students, and action research. Journal of Science Teacher Education. 21 (8), 953 970. Doi: 10.1007/s10972-010-9216-x
- Leedy, P.D., and Ormrod, J.E. (2012). *Practical research: Planning and design* Upper Saddle River, NJ: Merrill.
- Marquez-Zenkov, K. (2007). Through city students' eyes: Urban students' beliefs about school's purposes, supports, and impediments. *Visual Studies*, *22*(2), 138-154.
- Marquez-Zenkov, K., & Harmon, J.A. (2007). "Seeing" English in the city: Using photography to understand students' literacy relationships. *English Journal*, 96(6), 24-30.
- McNiff, J., & Whitehead, J. (2011). *All you need to know about action research* (2nd ed.). Thousand Oaks, CA: Sage.
- Mertler, C.A. (2013). *Action research: Improving schools and empowering* educators (4th ed.). Thousand Oaks, CA: Sage.
- Meyers, E. & Rust, F. (2003). Taking action with teacher research. Heinemann.
- Mills, G. E. (2010). Action research: A guide for the teacher researcher (4th ed.). Pearson
- Mitra, D. (2007). Student voice in school reform: From listening to leadership. In D. Thiessen & A. Cook-Sather (Eds.), *International handbook of student experience in elementary and secondary school*. Dordrecht, The Netherlands: Springer Publishers.
- Morrell, E. (2007). *Critical literacy and urban youth: Pedagogies of access, dissent, and liberation*. New York: Routledge.
- Pahl, K., & Pool, S. (2011). 'Living your life because it's the only life you've got': Participatory research as a site for discovery in a creative project in a primary school in Thurnscoe, UK. *Qualitative Research Journal*, 11(2), 17-37.
- Parsons, J., Hewson, K., Adrian, L, & Day, N. (2013). Engaging in action research: A practical guide to teacher-conducted research for educators and school leaders. Brush Education
- Razfar, A. (2011). Action research in urban schools: Empowerment, transformation, and

- challenges. *Teacher Education Quarterly*, 38(4), 25-44. Retrieved from http://search.proquest.com/docview/923754407?accountid=14541
- Rodgers, C. (2006). Attending to student voice: The role of descriptive feedback in learning and teaching. *Curriculum Inquiry*, 36(2), 209-237.
- Sagor, R. (2010). Collaborative action research for professional learning communities. Solution Tree.
- Samaras, A. P. (2011). Self-study teacher research: Improving your practice through collaborative inquiry. Thousand Oaks, CA: Sage.
- Samaras, A. P., Freese, A. R., Kosnik, C., & Beck, C. (Eds.) (2008). *Learning communities in practice*. The Netherlands: Springer Press.
- Seidman, I. (2012). Interviewing as qualitative research: A guide for researchers in education and the social sciences (4th ed.). New York: Teachers College Press.
- Shagoury, R. & Power, B. (2012). Living the questions: A guide for teacher researchers (2nd ed.). NY: Stenhouse Publishers
- Singer, Jessica. (2006). Stirring up justice: Writing and reading to change the world. Portsmouth, NH: Heinemann. ISBN: 0325007470
- Strambler, M. J. (2013). Promoting student engagement through evidence-based action research with teachers. *Journal of Educational and Psychological Consultation*. 23(2), 87-114.
- Temple, C., Ogle, D., Crawford, A., Frepon, P. (2008): *All children read: Teaching for literacy in today's diverse classrooms*. Upper Saddle River, NJ: Pearson/Allyn & Bacon.
- Whitford, B. L. & Wood, D.R. (2010). *Teachers learning in community: Realities and possibilities*. Albany, NY: SUNY.
- Wyatt, M. (2011). Teachers researching their own practice. *ELT Journal*. 65(4), 417 42. doi: 10.1093/elt/ccq074
- Yonezawa, S., & Jones, M. (2007). Using student voices to inform and evaluate secondary school reform. In D. Thiessen & A. Cook-Sather (Eds.), *International handbook of student experience in elementary and secondary school* (pp. 681-710). The Netherlands: Springer Publishers.
- Zenkov, K., Harmon, J., van Lier, P., & Marquez, M. (2008). Picture this: Seeing diverse city students' ideas about schools' purposes, impediments, and supports. *Multicultural Perspectives*.

Qualitative Analysis

- Bogdan, R. C., & Biklen, S. K. (2011). *Qualitative research for education: An introduction to theory and methods* (5th ed.). Boston, MA: Allyn & Bacon.
- Blair, J. Czaja, R., & Blair, E. A. (2014). *Designing surveys: A guide to decisions and procedures* (3rd ed.). Thousand Oaks, CA: Pine Forge Press.
- Maxwell, J.A. (2005). *Qualitative research design: An interactive approach* (2nd ed.). Thousand Oaks, CA: Sage.
- Miles, M. B., & Huberman, A. M. & Saldaña, J. (2013). *Qualitative data analysis* (3rd ed.). Thousand Oaks, CA: Sage.
- Strauss, A., & Corbin, J. (1990). Basics of qualitative research: Grounded theory procedures and techniques. Newbury Park, CA: Sage.

Quantitative Analysis and Statistics

- Bartz, A. E. (1999). Basic statistical concepts (4th ed). Upper Saddle River, NJ: Merrill.
- Cronk, B. C. (2002). How to use SPSS: A step-by-step guide to analysis and interpretation (2nd ed). Los Angeles, CA: Pyrczak Publishing.
- Rovessi, C., & Carroll, D. J. (2002). Statistics made simple for school leaders. Lanham, MD: Scarecrow Press.
- Salkind, N. (2010). Statistics for people who (think they) hate statistics (4th ed.). Thousand Oaks, CA: Sage.

Research and Writing

Booth, W.C., Colomb, G.G., & Williams, J.M. (2008). *The craft of research* (3rd ed.). Chicago, IL: The University of Chicago.

General Websites

- George Mason University Library: http://library.gmu.edu/
- What Kids Can Do: www.whatkidscando.org
- Through Students' Eyes: www.throughstudentseyes.org

Action/Teacher/Practitioner Research/Research Websites

- http://gse.gmu.edu/research/tr/tr_action/
- http://www.lupinworks.com/jn
- http://www.drawntoscience.org/educators/action-research/what-is-action-research.html
- http://www.accessexcellence.org/LC/TL/AR/
- http://www.standards.dfes.gov.uk/ntrp/
- http://www.teacherresearch.net/

Data Collection Tools

- Go to Googledocs, then "spreadsheets" to create survey
- Survey Monkey: http://www.surveymonkey.com

National Reports and Test Reporting Centers

- The Nation's Report Card/National Assessment of Educational Progress: http://nces.ed.gov/nationsreportcard/
- National Center for Educational Statistics: http://nces.ed.gov/help/sitemap.asp
- TIMSS and PIRLS (The International Math and Science Study and International Literacy Study): http://www.timss.org/

Virginia State Standards

 State of Virginia Standards of Learning Test Information: http://www.doe.virginia.gov/testing/index.shtml

Tk20 Performance-Based Assessment Submission Requirement

Every student registered for any Secondary Education course with a required Tk20 performance-based assessment(s) (designated as such in the syllabus) is required to submit this/these assessment(s), the Teacher Research Project and Impact Presentation, to Tk20 through 'Assessments' in Blackboard (regardless of whether a course is an elective, a one-time course or part of an undergraduate minor). Failure to submit the assessment to Tk20 (through Blackboard) will result in the course instructor reporting the course grade as Incomplete (IN). Unless this grade is changed upon completion of the required Tk20 submission, the IN will convert to an F nine weeks into the following semester.

Course Requirements

General

All assignments should be turned in via Blackboard and/or Google Drive on the due date indicated in the schedule below. The submission deadline for assignments is Tuesday 11:59 pm (US eastern standard time) each week. All projects must be typed, in 12-point font, with one-inch margins, double-spaced, in Times New Roman font, and follow APA guidelines. Writing quality (including mechanics, organization, and content) is figured into the overall points for each writing assignment, so please proofread carefully. Late papers and projects will not be accepted without penalty, excepting extraordinary circumstances. I am happy to clarify and lend assistance on projects and assignments, but please contact me within a reasonable timeframe. I reserve the right to add, alter, or omit any assignment as necessary during the course of the semester.

Note: Please title each assignment with your last name, the name of the project/assignment, and the date you are submitting it (e.g., Smith_Literature_Review_Draft_2-1-20).

Attendance and Participation (10 points)

Students are expected to attend *all* class periods of courses for which they register. Class attendance and participation—in online and face-to-face settings, with the whole group and our small "Peer Review Groups"—is important not only to the individual student, but to the class as whole. Class participation is a factor in grading; instructors may use absences, tardiness, or early departures as de facto evidence of non-participation and as a result lower the grade. Participants are expected to read the assigned materials, arrive promptly, attend all class meetings for the entire session, and participate in class discussions. It is your responsibility to offer insights, questions, comments, and concerns from the readings; I suggest that you keep a reading log that includes both notes on and reactions to each reading. This log could also contain the field notes that you will take on your classroom as you complete your research project. If, due to an emergency, you will not be able to participate during a given week of class, please contact me as soon as possible and certainly prior to any face-to-face class time; it's best to do so via my email (rdippold@gmu.edu). Students are responsible for obtaining information given during class discussions despite attendance. Demonstration of positive and collaborative professional dispositions toward colleagues during peer reviews, along with a willingness to accept constructive criticism, is a course expectation.

By virtue of agreeing to work together in this course we instantly formed a new community. This community will be rooted in mutual respect and shared responsibility; these foundations translate into consistent and punctual attendance and active participation in all class activities. My goal is to develop a comfortable online and face-to-face classroom community where risk-taking is encouraged; we can only grow through such open-heartedness. Your attendance, thoughtfulness, clarity, and active sharing of responsibility for our classroom community will affect your grade. It is your responsibility to share and respond with insights, questions, comments, concerns, and artifacts from the readings and your teaching and research experiences. Absences and tardies—in both online and campus class sessions—will impact your grade. Two tardies are equal to one absence, and missing 30% or more of class sessions will result in automatic course failure. Please turn off all mobile phones, computers, and pagers when you participate in our class.

Draft Research Project Components (20 points)

According to the timeline in the schedule below, students will submit to Google Drive draft sections of each of the five research project sections—the introduction, literature review, methodology, findings, and discussion. These will be shared with your Peer Review Group and the instructor.

- 1) Introduction Draft (due Tues, Jan. 28th)
 In your draft introduction, briefly describe yourself, your professional background, your teaching (and learning) experiences, and your experience with reading and or participating in education research studies, reports or articles—also briefly describe some of the lessons you've drawn from this reading/participation. Very briefly speculate about what you believe the benefits of conducting research in your own classroom might be, about what your research questions and/or interests are, and about how (and why) you will involve your students in your project in a "Youth Participatory Action Research" way—in the design, question selection, implementation, strategy selection, data collection, data analysis, and/or presentation of findings.
- 2) <u>Literature Review Draft (due Tues, February 25th)</u>
 What have you read about any of the strategies you might want to try with your students?
 What are some of the big ideas about these strategies of which you're aware? How do these ideas fit with your own teaching (or learning) experiences? What are the intersections between researchers' findings? What are the tensions between researchers' findings? On whose shoulders do you want to stand, as a teacher and a teacher researcher? What research questions might you address with your project?
- 3) Methodology Draft (due Tues, March 24th) What learning challenges are your students facing? What teaching challenges are you and/or your colleagues encountering? What strategies are you interested in trying out? How might you consider collecting data on your students' achievement, engagement, and efficacy with your teaching and subject area? What sort of timeline might you follow to complete your project? How might you involve your students in the identification of a teaching/research challenge, in the identification of research questions, in data collection methods, in data analysis methods, and/or in sharing findings of your project? Who might your 5-7 potential case study students be? Action, teacher, or practitioner research is often criticized because the outcomes are not generalizable—how might you respond to this concern in defending action, teacher, or practitioner research as a viable research method? What will be your specific teaching interventions? What will be your primary data collection methods? How might you triangulate the data collection in your study? How might you ensure that your study is valid and your data collection techniques are reliable? How might you ensure that you have met any ethical challenges associated with conducting research on your teaching and followed your school's ethics policy regarding the collection of data? Note: Your methodology is your teaching/research PLAN; you will report on what you actually did—and learned—in your findings section.

4) Findings Draft (due Tues, April 14th)

What initial sense (analysis!) have you made of any data you have collected thus far? What is an example of the most interesting, surprising, consistent, or representative data you have gathered thus far? What patterns do you already recognize in your data? What patterns do you notice in your potential case study student data? What stories could you tell about these students' experiences with your study? What can you tell us about your students' achievement, engagement, and efficacy with your study and your subject area? What outliers do you see in your data—that still inform your teaching?

Note: EDCI 597 students will plan to pilot their research project during the Fall 2019 semester of our course and draft a preliminary "Findings" section this semester; they will complete full—likely modified—versions of their projects during their internships in a following semester. They will "translate" the results of their "Impact on Student Learning" projects into the revised, final version of their teacher research projects, including "Findings" and "Discussion" sections. Due to the preliminary nature of their "Findings" sections, they may not receive full credit for these until they complete the full project during their internship semesters.

5) <u>Discussion Draft (due Tues, April 21st)</u>

What do the patterns and outliers in your data tell you about the implications of your project—for you as a teacher, for your colleagues, for teacher education, and for educational policy? What should happen in your classroom, based on the results of your project so far? With whom might you share your project methods and results? What sense have your students made of your project methods and results?

Note: EDCI 597 students will plan to pilot their research project during the Fall 2019 semester of our course and draft a preliminary "Discussion" section this semester; they will complete full—likely modified—versions of their projects during their internships in a following semester. They will "translate" the results of their "Impact on Student Learning" projects into the revised, final version of their teacher research projects, including "Findings" and "Discussion" sections. Due to the preliminary nature of their "Discussion" sections, they may not receive full credit for these until they complete the full project during their internship

Peer Review Group Feedback (10 points)

semesters.

You will have the chance to work with peers across the semester as you draft and craft your research project. A peer reviewer is a colleague whom you trust personally and professionally, as well as a kind but courageous about asking provocative questions about your work and your perspective. In our course, a significant amount of time will be spent considering each other's work, and I will offer you tools to use to support the creation and revision of each section of your research reports. These activities will require that you follow the outlined procedures quite closely—not religiously or without modification. Let's keep in mind that peer reviewers intend not just to know their own work but to understand the contexts, circumstances, and settings of their peers' efforts. Let us also be advocates for each other's critical reflections on our teaching practices. We will establish nonnegotiables for our work as a class and for each of our peer interactions. You will be expected to offer substantive Google Drive and hard copy feedback on all of your peer review group members' draft research project components—two points per each of the five research project sections.

Revised Research Project Components (10 points)

You will submit revised versions of your introduction/contexts, literature review, methodology, findings, and discussion/action plan sections. Due dates of these revised sections are listed in the schedule below. Assessment of your revisions will be based on your documented responses to the feedback your peers and Dr. Dippold provide. Completing these revised elements will scaffold you toward completion of your final project—a very good thing.

Note: Due to the preliminary nature of their "Findings" and "Discussion" sections, EDCI 597 students may not receive full credit for these until they complete the full project during their internship semesters.

Action/Teacher/Practitioner Research Project (50 points)

Participants will design and conduct an action, teacher, or practitioner research project that is relevant to their present or future teaching positions. Outlines, examples, descriptions, and rubrics of these projects will be provided. You will write a literature review and proposal for this project, collect and analyze preliminary data, and share the results of your study with both our class (and an outside audience) in a (PowerPoint or otherwise) presentation. It is possible to partner with another student for the purpose of sharing data and researching different aspects of a common topic; each partner, however, must submit an original, stand-alone report. Each participant will make an in-class maximum ten-minute presentation (ungraded) on her/his project; an outline and examples of these presentations will be provided. Please note that projects or papers submitted for credit in another course cannot also be used for a grade in this course. When considering research topics, you should identify a research question that really matters to you. It should be something about which you are curious and with which you are willing to spend time researching and learning. In the words of a former Mason student, "If you aren't eager to spend several days curled up reading about your topic, then it's not love, and you need to ditch it and find another topic."

Note: Due to the preliminary nature of the project completed during the Spring 2020 semester, EDCl 597 students may not receive full credit for these until they complete the full project during their internship semesters.

Action/Teacher/Practitioner Research Impact Presentation

Working independently you will identify an authentic, alternative, preferably contemporary media-based method through which you will share the impact of your teacher research—to an audience you care about and/or to an audience that you think should care about your teacher research work. While you will make a brief presentation of your individual research findings in class, the mission of this assignment is for you to design and enact a presentation that moves the public understanding of your study along. You might choose to create a presentation that highlights your project and findings. You might highlight the very importance of action, teacher, or practitioner research. You are encouraged to display and present these findings in an alternative setting and through creative means, with your primary goal being engaging in an exercise in demonstrating the significance of your research to the broader world. You may potentially share your project with the Secondary Program Faculty and members of the larger college or educational community.

Assessment and Mastery Grading

All assignments will be evaluated holistically using a mastery grading system; the general rubric is described below, and a specific rubric provided with each assignment. A student must demonstrate "mastery" of each requirement of an assignment; doing so will result in a "B" level score. Only if a student additionally exceeds the expectations for that requirement—through quality, quantity, or the creativity of her/his work—will she/he be assessed with an "A" level score. With a mastery grading system, students must *choose* to "go above and beyond" in order to earn "A" level scores.

"A" level score = Student work is well-organized, exceptionally thorough and thoughtful, candid, and completed in a professional and timely manner. Student followed all format and component guidelines, as well as including additional relevant component. Student supports assertions with multiple concrete examples and/or explanations. Significance and/or implications of observations are fully specified and extended to other contexts. Student work is exceptionally creative, includes additional artifacts, and/or intentionally supports peers' efforts.

- "B" level score = Student work is well organized, thorough, thoughtful, candid, and completed in a professional and timely manner. Student followed all format and component guidelines. Student supports assertions with concrete examples and/or explanations. Significance and/or implications of observations are fully specified.
- "C" level score = Student provides cursory responses to assignment requirements. Student did not follow all format and component guidelines. Development of ideas is somewhat vague, incomplete, or rudimentary. Compelling support for assertions is typically not provided.
- "F" level score = Student work is so brief that any reasonably accurate assessment is impossible.

Grading Scale

A = 95-100%

A = 90-94%

B+ = 87-89%

B = 83-86%

B- = 80-82%

C = 70-79%

F = Below 70%

Incomplete (IN): This grade may be given to students who are passing a course but who may be unable to complete scheduled course work for a cause beyond reasonable control. The student must then complete all the requirements by the end of the ninth week of the next semester, not including summer term, and the instructor must turn in the final grade by the end of the 10th week. Faculty may grant an incomplete with a contract developed by the student with a reasonable time to complete the course at the discretion of the faculty member.

Assignments/Possible Points

Attendance and Participation = 10 points

Draft Research Project Components = 20 points

Peer Review Group Feedback = 10 points

Revised Research Project Components = 10 points

Action/Teacher/Practitioner Research Project (including presentation) = 50 points

Total = 100 points

Professional Dispositions

See https://cehd.gmu.edu/students/polices-procedures/

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: http://cehd.gmu.edu/values/.

GMU/CEHD 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 https://ds.gmu.edu/).
- Students must silence all sound emitting devices during class unless otherwise authorized by the instructor.

Campus Resources

- Support for submission of assignments to Tk20 should be directed to <u>tk20help@gmu.edu</u> or <u>https://cehd.gmu.edu/aero/tk20</u>. Questions or concerns regarding use of Blackboard should be directed to http://coursessupport.gmu.edu/.
- For information on student support resources on campus, see https://ctfe.gmu.edu/teaching/student-support-resources-on-campus
- Notice of mandatory reporting of sexual assault, interpersonal violence, and stalking: As a faculty member, I am designated as a "Responsible Employee," and must report all disclosures of sexual assault, interpersonal violence, and stalking to Mason's Title IX Coordinator per University Policy 1202. If you wish to speak with someone confidentially, please contact one of Mason's confidential resources, such as Student Support and Advocacy Center (SSAC) at 703-380-1434 or Counseling and Psychological Services (CAPS) at 703-993-2380. You may also seek assistance from Mason's Title IX Coordinator by calling 703-993-8730, or emailing titleix@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 http://cehd.gmu.edu/.

GSE/CEHD Information

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

Human Subjects Research Review Process

Any research or action, teacher, or practitioner research that will be publicly disseminated must have prior approval of the GMU Human Subjects Review Board (HSRB). Action, teacher, or practitioner research that is used solely for the purpose of studying pedagogical aspects may be conducted without additional permission but cannot be disseminated. Detailed information on what is involved in submitting a proposal to the Review Board is available from the following web site: http://oria.gmu.edu/

Whole Group meetings are highlighted in grey

Details	Topic/Activity	Assignment due	Reading
Week #1 Tues, Jan. 21st Whole Class 4:30-7:10 pm	 Introductions, course overview, syllabus, requirements Introduction to action/teacher/practitioner research and Youth Participatory Action Research (YPAR) Dissecting an action research project and research timeline Differentiating between 675 and 597 projects 	• None!	None!
Week #2 Tues, Jan. 28th Whole Class 4:30-7:10 pm	 What is action research? Integrating YPAR Dissection of a sample Introduction "Finding Your Research Passion" and "Starting with a Problem" 	Introduction draft Teaching journal Other baseline data	 Surviving, Introduction and Ch. 1-2 Bautista, et al article Zenkov, et al YPAR project
Week #3 Feb. 4 th Whole Class 5:00-6:30 Peer Review Group Conferences Round #1 4:30-5:00 pm	 What teaching/learning questions might we address? Developing research questions and research plan Dissection of 2-3 teacher researchers' Introduction drafts Dissection of a sample literature review Surviving, Ch. 3-7 topics Gathering baseline data on your class/students 	 Peer Review Group Feedback: Introduction drafts Teaching journal Other baseline data 	 Surviving, Ch. 3-7 Action Research, Ch. 3 Kimball "Introduction" Rooney "Introduction" Exemplar Papers: Select two from Atallah, Bradshaw, Collis, Denicola, Aguirre, Araneo, Baney, Lancia
Week #4 & #5 Feb. 11 th & Feb. 18 th Independent Work Session	 What teaching/learning questions might we address? Gathering baseline data on your class/students 	 Introduction revision Teaching journal Other baseline and ongoing data 	• None

Details	Topic/Activity	Assignment due	Reading
Week #6 Feb. 25th Whole Class	 What teaching/learning questions might we address? Developing research questions and research plan "Taming the Beast: Researching and Writing a Literature Review" and "Emergent Research" and "Making Time for Research" 	Literature review draft Teaching journal and other ongoing data	 Surviving, Ch. 8-10 Rooney "Literature Review" Kimball "Literature Review" Exemplar Papers: Select two from Dwyer, Golobic, Hannon, Howick, Barton, Green, Leathart, McNeive, Brand, McCusker
Week #7 March 3rd Whole Class 5:00-6:30 pm Peer Review Group Conferences 4:30-5:00 pm	 Dissection of 2-3 teacher researchers' literature review drafts Dissection of a sample methodology Data collection! 	 Peer Review Group Feedback: Literature review drafts Teaching journal and other ongoing data 	 Surviving, Ch. 11-13 Exemplar Papers: Select two from Kendrick, Lima-Whitney, Mitro, Newman, Travis, Viccora, Polen, Snow, Hahne, Sharp
Week #8 March 10 th Spring Break	No class!	None!	None!
Week #9 March 17 th Independent Work Session	No class! Data collection!	Literature review revision	• Surviving, Ch. 14-18
Week #10 March 24th Whole Class 5:00-6:30 pm Peer Review Group Conferences 4:30-5:00 pm	 Our research plans, interventions, and data collection plans "Engaging Student Voice" Dissection of a sample findings section Data collection! 	Methodology draft Teaching journal and other ongoing data	 Surviving, Ch. 14-18 "Rooney" Methodology "Kimball" Methodology Exemplar Papers: Select two from Patterson, Slater, Steele, Weatherholtz, Sutton, Koca, Stone
Details	Topic/Activity	Assignment due	Reading

Week #11 March 31st Whole Class 5:00-6:30 pm Peer Review Group Conferences 4:30-5:00 pm	 Our research plans, interventions, and data collection plans "Trusting the Process" Dissection of 2-3 teacher researchers' methodology sections Data collection! 	 Peer Review Group Feedback: Methodology drafts Teaching journal and other ongoing data 	 Surviving, Ch. 19-24 Exemplar Papers: Select two from Tate, Townsend, Walsleben, Vranas
Week #12 April 7th Independent Work Session Whole Class 5:00-6:30 pm Peer Review Group Conferences 4:30-5:00 pm	No class! Data collection!	• None!	• None!
Week #13 April 14th Whole Class 5:00-6:30 pm Peer Review Group Conferences 4:30-5:00 pm	 Our data analyses, patterns, and outliers Dissection of sample findings section 	 Methodology revision Findings draft Teaching journal and other ongoing data 	Rooney "Findings"Kimball "Findings"
Week #14 April 21st Whole Class 5:00-6:30 pm Peer Review Group Conferences 4:30-5:00 pm	 Our data analyses, patterns, and outliers Dissection of 2-3 teacher researchers' findings sections The qualitative analysis process Dissection of a sample discussion section "Sharing the Work" Data collection! 	 Teaching journal and other ongoing data Discussion draft 	 Surviving, Ch. 25-30 Rooney "Findings" Kimball "Findings" Exemplar Papers: Select two from any of previously encountered exemplars

EDUC 675, "Research in Secondary Education"/Fall 2019 (Zenkov)

Details	Topic/Activity	Assignment due	Reading
Week #15 April 28 th Independent Work Session	Data collection!	 Peer Review Group Feedback: Findings draft Peer Review Group Feedback: Discussion drafts 	Rooney "Discussion"Kimball "Discussion"
Week #16 May 5th Whole Class 4:30-7:10 pm	Research presentationsCourse evaluations	 Research presentations Final research projects and presentations due to Blackboard/TK20 due Wed, May 6th 	None!

EDUC 675/EDCI 597, "Research in Secondary Education" Teacher Research Project Description and Assessment Rubric (50 points)

(Includes suggested page lengths for each section)

Title Page and Abstract (2 points possible)

Your title can be as creative as you like—take researcher/artistic license with this. In 125 to 150 words, what was your study about? What was your major finding? An abstract writing strategy: take one sentence from each section of your final project (introduction, literature review, methodology, findings, and discussion) to craft the perfect abstract. Consider the following questions as you draft your title and abstract:

- 1) Have you provided a single, articulate, concise paragraph of no more than 150 words?
- 2) Does your abstract concisely describe your purpose and the context, method, key findings, and significance of your research?

	Suggested 2 pages: 1 page for title, 1 page for abstract					
Rubric Score	Does not meet expectations	Approaches expectations 2	Meets expectations 3	Exceeds expectations 4		
Grade Score	F	С	B to B+	A- to A		
	Less than 1.4 points	1.4 - 1.5 points	1.6 - 1.7 points	1.8 – 2 points		
Title and	Project is so brief,	Project includes only general	Project includes an	Project includes a concise (max		
Abstract	incomplete, or off-topic	statements about the study.	identifiable summary (max	150 words) summary that		
	that any reasonably	Information on methods and	150 words) that addresses	reports factually on the purpose		
	accurate assessment	procedures to be followed is	the purpose of the study.	of the study and the methods		
	is impossible.	sketchy or missing. Falls short of	Touches on methods and	and procedures to be followed.		
		150 words or greatly exceeds the	procedures to be followed,			
		150-word limit	but is not sharply focused.			

Introduction, Rationale, Area of Focus, and Research Questions (5 points possible)

Briefly describe the setting, including the community, school, students, and other relevant information. Demographic information in your introduction should focus on your school, while demographic information in your methodology should focus specifically on the students you worked with in your study. What is the purpose of your study? What problem or issue are you addressing? Describe why the concerns are important to you and what your research might help you learn as a result of its conduct. What is its background and significance? What is (are) your research question(s)? Do you have a hypothesis? If so, what is it and how did you formulate it? Be sure that your research questions steer you toward a descriptive response. *Please note that your project must focus on student engagement, efficacy, and achievement in/with your subject matter*. Consider the following questions as you draft your introduction, rationale, area of focus, and research questions:

- 1) Have you explained the outgrowth of your study?
- 2) Have you offered perspectives that shaped this question for you?

- 3) Have you situated the study in terms of explaining the outgrowth of these questions in the context of your work? (e.g., your students, classroom, school, district)
- 4) Have you clearly and concisely explained why this research is important? Have you addressed the broader educational and social significance of this research?
- 5) Have you clearly and concisely stated the research problem?
- 6) Have you clearly and concisely stated your main research question and any sub-questions?
- 7) Have you offered a transition into your literature review?

Approaches expectations 2 C 3.5 - 3.9 points	Meets expectations 3 B to B+	Exceeds expectations 4 A- to A
C 3.5 – 3.9 points	B to B+	A- to A
3.5 – 3.9 points		11 35 11
	4.0 – 4.4 points	4.5 - 5 points
Project includes minimal information on the context/theoretical framework for the study. Does not offer a rationale for the study's execution, or does so only superficially. Explicitly states the research	Project includes an adequate context/theoretical framework for the study and a defensible rationale for its execution, though one or both may be weakly developed. Explicitly states the research question and purpose of	Project includes a sound context/theoretical framework for the study and a compelling rationale for its execution. Clearly and explicitly states the research question and purpose of the
	the study. Does not offer a rationale for the study's execution, or does so only superficially. Explicitly states the research	the study. Does not offer a rationale for its execution, though one or both may be weakly developed. Explicitly states the

Literature Review (7 points possible)

In order to properly address a research question you need to be familiar with previous investigations of your topic. You should conduct a literature review in which you cite and synthesize a minimum of ten (10) sources and discuss how they informed your design. At least half of these must be from peer-reviewed journals from the past ten years. Teacher research appeals to a broad range of research resources, including reports of teachers' experiences. Transitions should connect one annotated source with the next. At the end of the literature review, include a one-paragraph summary of the major discoveries in your review, connecting these to the focus of your study. References can be from refereed journals, books (generally not textbooks), curriculum resources, and scholarly compilations. NOTE: The literature review should emphasize synthesis and analysis (Bloom, 1956, 1984). Use direct quotes very sparingly. Craft your literature review as a story of the study of your topic—as a dialogue between you and these other scholars. Consider the following questions as you draft your literature review:

- 1) Did you conduct an ongoing literature review which informed your research?
- 2) Is the review relevant and connected to your study?
- 3) Is the review adequate, coherent, and analytical?
- 4) Does the review include references from a variety of sources?

- 5) Is the review integrated into a conceptual framework with a mapping of the theories, literature, and phenomena that help to inform your study?
- 6) Do you make connections between the studies, their methods, and their findings and your own study?
- 7) Did you provide a transition into your methodology section?

	Suggested 4-6 pages					
Rubric Score	Does not meet expectations	Approaches expectations 2	Meets expectations 3	Exceeds expectations 4		
Grade Score	F Less than 4.9 points	C 4.9 – 5.5 points	B to B+ 5.6 - 6.2 points	A- to A 6.3 – 7 points		
Literature Review	Project is so brief, incomplete, or off-topic that any reasonably accurate assessment is impossible.	Project includes fewer than 8 peer-reviewed cites, published reports of empirical research. Does not explicitly highlight gaps in the literature to which the proposed study will respond. Summarizes cited works sequentially, rather than synthesizes and organizes them thematically. Relies heavily on direct quotes.	Project includes at least 8 peer- reviewed cites, published reports of empirical research. Highlights gaps in the literature to which the proposed study will respond. Organizes the literature by identifiable themes, although organization within themes may follow no clear or consistent pattern of presentation. Attempts to synthesize referenced sources. Uses few direct quotes.	Project includes at least 10 peer-reviewed cites, published reports of empirical research. Highlights gaps in the literature to which the proposed study will respond. Organizes the literature by clearly identifiable themes, proceeding from general to more specific within each theme. Effectively synthesizes referenced sources, using few, if any, direct quotes.		

Description of the Method (12 points possible)

In this section describe how you implemented your research, including the type of research approach you used—that is, to what extent did you involve your students in your research project and/or use a "Youth Participatory Action Research" method? Include a description of subjects (i.e., students, teachers, administrators), the context of the research, the strategies and materials (put sample material in an appendix), the number and total time of each research session, and a complete description of the methodologies. Repeat your question(s) in this section—remind us often what you are studying. Describe how you selected your subject sample—why did you choose these individuals and who are they, in terms of gender, ethnicity, age, grade level, language/culture, and educational achievement? Describe ALL of your methods, including what influenced the selection of your methodology and design, what measures you took to assure the validity of your study, and how you triangulated your data. Be sure to include a table and timeline of your methods—what you collected and when. Be sure to describe what type of data you collected—for example, did you do a needs assessment (e.g., via a test) to address student achievement, and then design and implement a new instructional strategy? Or did you observe a group of students to see how they behaved in a particular context, and then interview them to ascertain their reasons? Did you do a series of in-depth interviews with students or teachers? How do the data relate to your research question? Finally, describe how you planned to make sense of—analyze—your data in light of your research question(s). Will you use a case study approach to making sense of your data—making sense of your research through

the lens of 3-5 students? Be sure to include a table detailing how your research questions align with your data sources, with a focus on triangulation (i.e., at least three data sources for each research question). Provide rich descriptions of HOW you reviewed your data, the themes that became apparent in your reviews, and your ultimate findings. Consider the following questions as you draft your literature review:

- 1) Have you described your research context, including your community, school, and classroom contexts?
- 2) Have you included demographic information of participants?
- 3) Did you include your reflection of the problem (e.g., behaviors observations, possible causes)?
- 4) Have you explained the reasons for your pedagogies based on your observations of your classroom and the literature reviewed?
- 5) Have you described in detail what data you collected, how you collected it, and when you collected it, including data generated from your pedagogies and strategies?
- 6) Are your data from multiple sources?
- 7) Did you include a description of the pedagogical strategies you enacted?
- 8) Did you explain how you analyzed your data?
- 9) Have you included and explained the role of your peers in your data interpretations and validation?
- 10) Did you explore using visuals and technologies for analyzing and displaying your findings in a coherent manner?
- 11) Did you include a research timeline and triangulation matrix?
- 12) Did you detail your research method—the extent to which you involved your students in your project and/or used a "Youth Participatory Action Research" approach?
- 13) Did you provide a transition into your findings section?

	Suggested 4-6 pages					
Rubric Score	Does not meet expectations	Approaches expectations 2	Meets expectations 3	Exceeds expectations 4		
Grade	F	С	B to B+	A- to A		
Score	Less than 8.4 points	8.4 – 9.5 points	9.6 - 10.7 points	10.8 - 12 points		
Description of the Method	Project is so brief, incomplete, or off-topic that any reasonably accurate assessment is impossible.	Project includes explanation of the study design, procedures followed, sampling methods, and analytical tools (including any statistical tests), given the stated purpose of the study; explanations, however, are not fully developed. Mentions ethical issues raised by the study but addresses them only superficially.	Project includes explanation of the study design, procedures followed, sampling methods, and analytical tools (including any statistical tests), given the stated purpose of the study. Discusses ethical issues raised by the study and how they were addressed.	Project includes explanation and justification of the appropriateness of the study design, procedures followed, sampling methods, data collection and analytical tools (including any statistical tests), given the stated purpose of the study. Discusses ethical issues raised by study and explains how they were addressed.		

Results and Findings (12 points possible)

In this section, indicate what you discovered or found as a result of your data gathering. Focus on results that are related to your research concern and answer your research questions or shed light on your research hypotheses. Introduce your findings before you begin to describe them, and remind us of your research question(s) again. Organize this section in a way that makes sense for your data/findings—by student, by theme, by data source, etc. Use illustrative examples from your data to SHOW us your findings. Use tables to summarize and SHOW us what you've learned. Focus on what's truly interesting in your findings, even if you have limited data to support this. Feel free to use mini case studies to illustrate your findings, considering your research outcomes through the lens of the experiences of a few students. Be sure to report on student achievement, efficacy, and engagement. Remember that the goal is to share what you learned about your teaching for yourself first; our goal is not NECESSARILY to extract findings that will be generalizable across EVERY teaching setting. Interpret your data in as much detail as possible, describing whether or not—or how—your findings corroborated your expectations. Were there any surprises in your findings? Can you think of alternative explanations for your findings? Note that you are primarily reporting on data patterns in this section—you will primarily make sense of these results in your discussion section. Consider the following questions as you draft your results/findings:

- 1) Did you restate your research question and what was found through your research?
- 2) Are the findings thoroughly and adequately presented?
- 3) Is there convincing evidence to support your themes?
- 4) Is there connection and coherence among the separate themes?
- 5) Did you explain your findings to peers and colleagues to gain their perspectives on your interpretations?
- 6) Did you provide a transition into your discussion section?

	Suggested 8-12 pages					
Rubric Score	Does not meet expectations	Approaches expectations 2	Meets expectations 3	Exceeds expectations 4		
Grade	F	С	B to B+	A- to A		
Score	Less than 8.4 points	8.4 - 9.5 points	9.6 - 10.7 points	10.8 - 12 points		
Results and Findings	Project is so brief, incomplete, or off-topic that any reasonably accurate assessment is impossible.	Project includes reporting and interpretation of narrative and numerical data with little apparent concern for accuracy and objectively. Analytical tools are inappropriate to the methodology. Provides, at best, tenuous links between study outcomes, hypotheses (if stated), and the original research question.	Project includes reporting and interpretation of narrative and numerical data accurately, objectively, and concisely. For the most part, analytical tools are appropriate to the methodology. Does not highlight explicit links between study outcomes, hypotheses (if stated), and the original research question; however, such links may logically be implied.	Project includes reporting and interpretation of narrative and numerical data accurately, objectively, and concisely using analytical tools appropriate to the methodology. Highlights explicit links between study outcomes, hypotheses (if stated), and the original research question.		

Discussion, Reflection, Implications, Recommendations, Impact Presentation, and Action Plan (8 points possible)

In this section reflect on the findings of your data collection and discuss what they might mean to you as a teacher and teacher researcher. What did you learn from the study? How will it influence your teaching—that is, based on the results and themes that emerged from the study, what changes will you make in your teaching? How will you share these findings with others—specifically, how did you share your project and its results via your "Impact Presentation"? What are the implications for future research? Speculate on what it would mean if your data pointed in one direction versus another. Again, focus on what's truly interesting in your data/findings, even if you have limited information to support this. Make some bold recommendations for how we might serve students better. Be sure to describe what all of this information—the teacher research process, your data, your findings—mean to you as a professional and a person. Describe how you might share the findings of your paper—with your principal, your grade level team, other teachers who are working with these students, use it in a workshop, claim it as an area of expertise on your resume, etc. Be sure to describe potential implications of your study and its findings for other teachers, for teacher education, and for education policymakers. Consider the following questions as you draft your discussion, reflection, implications, recommendations, and action plan:

- 1) Have you adequately explained the implications of your study for your students' learning and your professional development?
- 2) Have you adequately explained the implications of your study for your teaching and others' teaching?
- 3) Have you adequately explained the implications of your study for the education field, teacher education, and education policy??
- 4) Have you adequately explained the relevance of your study for national and state education standards?
- 5) Have you discussed any limitations and future research possibilities?

	Suggested 4-6 pages					
Rubric Score	Does not meet expectations	Approaches expectations	Meets expectations	Exceeds expectations		
Grade Score	F Less than 5.6 points	C 5.6 - 6.3 points	B to B+ 6.4 - 7.1 points	A- to A 7.2 – 8 points		
Discussion, Reflection, Implications, Recommendati ons, and Action Plan	Project is so brief, incomplete, or off topic that any reasonably accurate assessment is impossible.	Project addresses practical implications of study findings including how they will be shared with others. Attempts to discuss threats to validity, but does so superficially and/or fails to offer antidotes. Does not consistently support assertions or interpretations using sound arguments consistent with study findings. Does not describe recommendations for future research, or how results will be applied in practice.	Project addresses theoretical/practical implications of study findings including how they will be shared with others. Highlights threats to validity, reporting on how they were addressed. Supports assertions/interpretations using sound arguments consistent with study findings. Does not describe recommendations for future research, or how results will be applied.	Project includes evaluation of the study's strengths and weaknesses. Addresses theoretical/practical implications of study findings including how they will be shared with others. Highlights threats to validity, reporting on how they were addressed. Supports assertions/interpretations using sound arguments consistent with study findings. Describes recommendations for future research, and how results will be applied in the practice.		

References, Appendices, Writing Styles, Mechanics, and General Notes (4 points possible)

Include a complete list of references in APA format. Append all appropriate materials, including, if relevant, any questionnaires, inventories, assessments, sample student work, etc. Include at least one example of each tool you use—it's ideal to include one blank version and one version completed by one of your research subjects. In addition, follow these general guidelines:

- The model for your study report is not a master's thesis nor traditional class research paper, but rather paper that focuses more on practicalizing theory for your teaching practice.
- You may find it helpful to select a journal whose research emphasis and readership match your research topic and follow its manuscript submission criteria.
- It is expected that the entire project will be described in a minimum 25-30 page paper
- Write in the past tense as much as it makes sense to do so
- Your paper must be anonymous; do not include names of your school district/division, school, teachers, or students
- Be sure to make a personal and professional connection to your topic and project
- Citations are not necessary in the introduction
- Feel free to revise your questions based on data, to make these questions more focused

Consider the following questions as you draft your references and appendices and consider the overall writing quality of your paper:

- 1) Did you follow the APA style for the report for a running head, page numbering, references, citations, and the appendix?
- 2) Does the report include a title page with project title, author's name, and author's professional affiliation?
- 3) Are references current and from different sources?
- 4) Are all references cited in the research report included in the references? Have you provided a complete reference list of all print and non-print (Internet) references?
- 5) Is the report coherent, concise, and well structured with a clear purpose?
- 6) Is the report grammatically correct with proper usage of language?
- 7) Does the report have your distinctive focus and voice? Have you used professional language (i.e., no jargon)? Have you written in an accessible style and presentation?

Rubric Score	Does not meet expectations	Approaches expectations 2	Meets expectations 3	Exceeds expectations 4
Grade Score	F Less than 2.8 points	C 2.8 - 3.1 points	B to B+ 3.2 - 3.5 points	A- to A 3.6 - 4 points
References, Appendices, Writing Styles, Mechanics, and General Notes	Paper is so brief, incomplete, or off-topic that any reasonably accurate assessment is impossible.	Paper falls short of accepted standards for master's level composition. Drafting errors and error patterns are widespread. Voice, verb tense, and writing style vary from section to section. Technical terms are used incorrectly and/or imprecisely, reflecting only a rudimentary understanding of the underlying concepts. Text is formulaic, relying heavily on paraphrases and "borrowed" materials not formally cited. Transitions are weak, contributing to an apparent lack of direction. Paper does not adhere to formatting specifications provided in course text and materials. Citations and references page do not follow APA style.	Paper is well written with few notable drafting errors. Voice, verb tense, and writing style are generally consistent with few exceptions that do not substantially diminish readability. Most technical terms are used correctly, reflecting adequate understanding of the underlying concepts. Text is original, but opinions and propositions are not consistently supported by logic and references to published research. Transitions do not connect sections seamlessly but do not substantially diminish readability. Paper does adhere to formatting specifications provided in course text and materials. Citations/references page do not follow APA style.	Paper is well written with no notable drafting errors. Voice, verb tense, and writing style are consistent throughout. Technical terms are used precisely and accurately, reflecting a firm understanding of underlying concepts. Text is original; opinions and propositions are supported by strong logic and formal references to published research. Sections are linked with unifying transitions, giving the report a clear sense of direction. Paper adheres to formatting specifications provided in course text and materials. Citations/references page follow APA style.

Grading Scale for Research Project
Please note that B- is not a passing grade