

Introduction to Educational Research

COURSE MATERIALS PACKET

This Course Materials Packet (CMP) has been designed specifically for EDUC 7021 to take the place of a traditional textbook and align with the course curriculum. Each module contains tailored readings and resources along with Guided Reading Notes to help you better understand what you are learning and see examples in action. Materials range from module to module and include:

- **Explanatory Texts:** Articles that explain the learning content of the module. These take the place of a traditional textbook.
- **Mentor Texts:** Academic journal articles that embed the approach explained in the overviews so you can see what it looks like in action.
- **Short Videos:** Quick explanations of the learning content or helpful tips and strategies.
- **Guided Reading Notes:** Each module contains commentary from the professor and two alumni from the course who explain what is important to notice in the materials and what they found particularly helpful.

To access each open resource, click on the provided link. This CMP serves as your textbook and will accompany your professor's lectures, learning tasks, and assignments. Please see your course schedule for your full list of course requirements.

*All included articles retain their own individual rights

Module 1: Intro to Ed Research

Foundations of research approaches and academic thinking for educators.

- ☐ Read Explanatory Text: [Raberger et al. \(2024\)](#) – Developing a research mindset
- ☐ Read Explanatory Text: [Taherdoost \(2022\)](#) – Different research approaches
- ☐ Watch: [UNCLibraries \(2018\)](#) – Gray literature introduction (4 min)

GUIDED READING NOTES

Explanatory Text 1: Raberger, J., Konstantinos G., & Froehlich, D. E. (2024). Empowering educators: The impact of reverse mentoring on developing scientific mindset and research skills. *Education Sciences*, 14(9), 993–993. <https://doi.org/10.3390/educsci14090993>

Professor’s Note: This article encapsulates the essence of the course where we encourage our students/educators to address problems of practice that they are encountering in their teaching with a research mindset. This qualitative article additionally serves as a mentor text for the types of articles that we will be reading throughout the semester. As you read this article pay attention to:

- This first sentence situates the whole ed research course: “An important aspect of professional teaching is the ability to incorporate educational research into practice” (p. 1). Read the rest of the Introduction and the Background sections and think about what it means for teachers to have a “scientific mindset.”
- This article is an empirical qualitative research study. Read sections 3, 3.1, 3.2, and 3.3 to understand what research methods were used.
- Read section 4 to see the study’s findings. Notice how they use quotes from the interview data to substantiate their results.
- Read section 5 to see why the findings are important and what they mean for teachers. This is the most important section for takeaways. How might these points transfer to your own teaching/work?

Student Alum’s Note: This article is a great way to start the course and first module with its focus on teaching and research. As a teacher it grabbed my attention because of its title-Empowering Educators. Ed research creates a way for teachers (no matter where they are in their career) to not only “be informed and guided by empirical research findings but also empowers teachers to conduct practitioner research to foster continuous improvement in their practice” (p. 1).

- The focus on 'Scientific Mindset' also stood out to me because it introduces this idea of what is involved in our everyday work and why it is valuable to drive educational research.
- The impact-focused practitioner research projects and their topics (Table 1) stood out to me because each topic is highly applicable to teachers which the article highly relatable. I can engage with this article as I'm making connections to my own practice as I read it. Table 1 also aligns with the problem of practice work that comes later in 7021.
- The research also reminded me of the collaborative work done in 7021 where we are teamed up with others around a determined POP. The most effective team projects were among those who communicated effectively - this was one of the notes made in this paper also. Overall, it is a strong article to start 7021 - it ties in key ideas about teachers as researchers, discusses scientific mindset and ties into POP and effective group work.

Explanatory Text 2: Taherdoost, H. (2022). What are different research approaches? Comprehensive review of qualitative, quantitative, and mixed method research, their applications, types, and limitations. *Journal of Management Science & Engineering Research*, 5(1), 53–63. <https://doi.org/10.30564/jmser.v5i1.4538>

Professor's Note: This is a perfect overview article to keep by your side as you begin to sift through more articles later in the semester. It concisely explains various research terminology that you will undoubtedly encounter as you read empirical articles. Pay attention to:

- All the terminology and bolded headings to guide your reading and take notes about. They will come up again in each of our modules.
- Compare the initial qualitative, quantitative, and mixed method explanations in sections 2.1, 2.2 and 2.3.
- In section 3, take note of the six qual approaches and think about how they are different from each other. Log these to refer back to for your Lit Matrix project later on in the semester.
- In section 4, review the 5 presented quantitative approaches. These terms will be important for your Lit Matrix project. Notice that "Survey" and "Descriptive" research are explained here as quantitative approaches. Students often assume these are qualitative. Read how they are not.
- Review Table 1
- In section 6, make sure to read the different types of mixed methods.

Student Alum's Note: This article is written in a very approachable manner making it easy to understand and follow along with. I liked that the author starts with a

clear definition of the qual, quan and mixed methods. Overall, a good intro article for this course.

- Section 3 stood out to me because the author takes a closer look at all three types of research approaches (similar to chapters 4, 5, and 6 of the textbook).
- Table 1 - advantages and disadvantages of qual and quan stood out to me because it served a summary of each before moving into mixed methods.
- This article provides an overview of the three types of research approaches and clearly explains and compares each. As an educator coming into the field of research, this article is a great resource to help with understanding the types of research we will be looking at so that I can carefully select articles for my literature review and POP.

Online Resource 3: 4-minute Video: UNCLibraries. (2018, May 1). *Gray literature: an introduction* [Video]. Youtube. <https://www.youtube.com/watch?v=Zop3EggBhzk>

Professor's Note: This short video highlights the fact that gray literature is not well understood. The video provides helpful visuals to draw your attention to what you can use and what you will need to avoid in scholarly work. It is important to understand what gray literature is so that you can use it to support your learning, but avoid it in formal literature reviews, citations in papers, and in this class, the lit matrix.

Student Alum's Note: Before taking this class, I did not know there was a difference in citation sources and initially I was quite confused as to what gray literature was. This video helped me better wrap my mind around it...which was important since we had to avoid gray literature for our lit matrix and final project.

Module 2: Building Blocks of the Research Report

Understanding structure, analysis, and IMRaD.

- ☐ Read Explanatory Text: [Kumar \(2023\)](#) – Improving IMRaD structure
- ☐ Read Explanatory Text: [Dibekulu Alem](#) (2020) – Data analysis & interpretation
- ☐ Read Mentor Text: [Mabulana \(2025\)](#) – Academic belonging & learning approaches

GUIDED READING NOTES

EXPLANATORY TEXT 1: Kumar (2023): Improving IMRaD for writing research articles in social, and health sciences. International Research Journal of Economics and Management Studies, 2(1), 50-53. <https://irjems.org/Volume-2-Issue-1/IRJEMS-V2I1P107.pdf>

Professor’s Note: This short 3-page article introduces the IMRaD format of a research article and gives a concise explanation of each of the sections of an article. It also presents a graphic to help visualize the building blocks. Pay attention to:

- What is IMRaD? Why do you think I’m introducing this to you? Look for this quote on p. 50: The well-designed research article offers modular reading through a set of sections meant for specific information (Sollaci, & Pereira, 2004). It helps researchers in the organized presentation of evidenced-based facts and output and allows readers to look for specified information instantly” (p. 50).
- While the author leads each section with “Writing,” ignore that part and instead focus on what the author says goes into that section of the research report. This will help you know what to look for and where to find it in a research report.
- Use Figure 1.1 on p. 52 to help you visually see the building blocks of a research report.
- Think back to the Raberger et al. (2024) article on mentoring that you read in the previous module. Can you now see the IMRaD framework?

Student Alum’s Note: This article aligns with Module 2 of 7021 where students take a look at the structure of the Research Report - this article brings to light the importance of some of the other areas that also are important and worthy of consideration.

- Reading this article helps me understand how to read and approach a research article. It serves as a roadmap as I read my articles so aligning the headings and their explanations while I read an article is a great way to guide me through those earlier articles of research.

- I liked the conciseness of the article - it is digestible and makes sense and an overall great article for module 2.

EXPLANATORY TEXT 2: Dibekulu Alem, D. (2020). An overview of data analysis and interpretations in research. International Journal of Academic Research in Education and Review, 8(1), 1–27.

<https://www.academicresearchjournals.org/IJARER/PDF/2020/March/Dawit.pdf>

Professor’s Note: This article provides an overview of various types of quantitative and qualitative data analyses. Don’t be scared by all the vocabulary—instead treat this as a fantastic reference sheet that will make reading articles easier for you (especially quantitative ones). It presents easy to understand explanations of statistical tests and qualitative approaches that will help students recognize terms that they are reading in research articles.

- Start highlighting all the vocab and explanations you come across in this article. You’ll want this next to you when you read quantitative articles in the future. It will help demystify them.
- Jump to the Concept of Data Analysis section on page 2 and read about what constitutes “data.” Then look for this sentence and the ones following for more helpful explanation: “Simply, data analysis is changing the collected raw data into meaningful facts and ideas to be understood either qualitatively or quantitatively” (p. 2).
- Read #2 Coding since this term will come up frequently in research articles.
- Read about the different types of Qualitative data analysis and the advantages (pp 5-7). You do not need to memorize the various approaches, but knowing they exist will be helpful as you come across them in articles.
- Same for the Quantitative data analysis section starting on p. 7. This section will prove quite useful to you because it introduces important quantitative statistical vocabulary and explanations that tend to trip up students. You do not need to become a stats expert in this class, but this cheat sheet will really help.
- I love that this article explains ANOVA and ANCOVA and then in the Correlation section you’ll find Pearson r among other types of statistical tests. You will surely come across these tests as you begin reading research articles, so now you’ll know what they are and it will make more sense.

Student Alum’s Note: Data analysis is the overarching idea of this paper, so it builds onto Module’s 1 introductory ideas well by explaining the concept of data analysis and processing steps and then leads into quant and qual data analysis.

- The "concept of data analysis" section stood out to me because it defines data analysis and how it is interpreted.

- This paper is a helpful read because it discusses the different stages necessary to analyze the data. It is a good reference (again the road map analogy) because it serves as a guide when reading papers for the Lit Review Matrix.
- The focus on vocabulary stood out to me because the author clearly explained each category of data analysis within their respective approaches (quant / qual).
- Overall, this is another great resource. As a 7021 student, this is the type of article I would download and have sitting at my desk to use alongside my readings so that I can easily go back and forth as I become familiar with ed research terms.

Mentor Text 3: Mabulana, K. (2025). Learners' preparedness for higher education in South Africa: developing a sense of academic belonging through the selective learning approach. *Frontiers in Education*, 10, 1-9. <https://doi.org/10.3389/feduc.2025.1465786>

Professor's Note: This short qualitative article clearly breaks down the various sections of an empirical research study in well-labeled sections. While not all articles are this clear and concise, this provides a good starting point for seeing the building blocks in action. As you read, think about:

- Notice how this report follows the general IMRaD structure. Also think back again to the Raberger et al. (2024) article on mentoring and notice how the layout is similar. Research reports tend to include: Intro, Lit Review, Methods/Methodology (participants, data collection, analysis, trustworthiness/validity), ethics, limitations, findings/results, discussion, recommendations/implications, conclusion.
- While this article is about learner preparedness for going to college, use the lit review, findings, discussion, and recommendations to inform yourself as a teacher regardless of what subject or what level you teach. Ask yourself how you can apply this new knowledge and the theory of multiple intelligences to your own work.

Student Alum's Note: This article was so easy to read and break down due to the clearly labeled headings.

- While not every article I read for my POP was this easy, I found this article essential at the beginning stages of learning how to digest a research article. It made it easier for me to break down other more challenging articles later on.
- Even though I don't teach high school or higher ed, I found myself still thinking about multiple intelligences and how I could the Selective Learning Approach to improve student belonging.

Module 3: The PoP & Locating the Literature

Defining problems of practice and learning to locate the literature.

- ☐ Read Explanatory Text: [Durbin \(2009\)](#) – How to read a scientific paper
- ☐ Review: Leanlab – [Problems of Practice examples](#)
- ☐ Review: Cowan – [Search engines vs. Google scholar vs. library databases](#)
- ☐ Watch: [Scribbr – What is a literature review?](#) (2 min)
- ☐ Watch: [Scribbr – Boolean search strategies](#) (3 min)

GUIDED READING NOTES

EXPLANATORY TEXT 1: Durbin, C. G. (2009). How to read a scientific research paper. Respiratory Care, 54(10), 1366–1371.
<https://www.liebertpub.com/doi/epdf/10.4187/respcare.09541366>

Professor’s Note: We spent the previous modules breaking down the articles to understand the structure of a research article. Now that you are familiar with the components, you can quickly pick out the pieces to determine if the article is relevant to your topic. Despite being an older publication, this article is still helpful in its advice on how to quickly read an article to determine if it is relevant to your research problem. Unlike what students would normally think, we do not start out reading an article from the first page to the end. This article walks you through the quickest and easiest method to identify if articles are worth a full read-through. Pay attention to:

- Table 2! The presented reasons will help you initially determine relevance. Note that the table says “the title suggests it may disprove your belief”—yes! We want to also search for articles that go against what we are looking for.
- Find this sentence on p. 74: “Unfortunately, reading a research paper is hard work and it takes time to do well” and read the whole paragraph that follows.
- I love the first 2 sentences under Organization of Research Papers on p. 74...and the whole paragraph is on point. Exactly!
- Table 3 confirms what you’ve been learning.
- Just keep reading starting with What’s in a Title? and then have learning about how you don’t actually read a research paper straight through. This will teach you a method for jumping around in the report to quickly help you determine if it’s relevant or not.

Student Alum's Note: This article is a good reading to get teachers ready for their Literature Review and Matrix. It serves as a reminder for what was covered in Modules 1 and 2 and then sets them up to begin researching their problem of practice.

- Table 1 (competencies of lifelong learning) stood out to me because it serves as a reminder of our purpose for seeking further education while also causing me to reflect on my perspective of lifelong learning.
- Table 2 is a great referral for 'why am I reading this?' - Super helpful as educators get ready to tackle their lit reviews. I also loved that the article revisits previously discussed IMRaD (reinforces Module 2's Kumar's reading).

Student Alum's Note: I like this article! It was simple and a great read from a data analysis perspective. I noted on page 1369 that it can be helpful for the Lit Matrix assignment. I thought table 5 was very helpful because I didn't know how the correct tests were chosen for accurate analysis.

- I like how it discussed the sections of a research paper, the suggested order of reading a research paper, and the basic statistics used in scientific publications. On page 1368, I like the chart on the identifiable components of the research paper. Very easy to read. I thought the information in this article was very helpful to either read or write a research article.

Online Resource: Problem of Practice: Leanlab Education (2022, December 9). *3 examples of problems of practice in education and how Codesign can help address them*. Codesign. <https://www.codesignframework.com/blog/problems-of-practice-in-education>

Professor's Note: This short webpage provides a quick introduction to the problem of practice that will help students better conceptualize what we are doing in this course. Pay attention to:

- The bullet points they provide to explain what a problem of practice are helpful. I also like the key questions they present below that section.
- The examples and questions asked are helpful to get you thinking about POPs.
- While this page is for a particular type of Codesign framework, read for the problem of practice details.

Student Alum's Note: This is a great resource that outlines the expectations for the POP work done in 7021. I like the flow of the information, and the examples used are relatable to my practice to get me thinking about POPs.

Student Alum's Note: I like how it differentiates a PoP from a problem statement, how it explains what a PoP is and how it focuses on core instruction, and questions educators can ask themselves to identify PoP. I also like how there were examples of PoP.

Online Resource (2-min video): Scribbr. (2020, March 25). *What is a literature review? Explained with a REAL example* [Video]. YouTube.
<https://www.youtube.com/watch?v=KkAnKGuX7fs>

Professor's Note: This video will help prepare you to research a POP. Don't be misled by the title...instead think about this quick video as a fantastic explanation of what you are doing in this course by researching your problem of practice. You are indeed conducting a literature review even if you are not completing the written version of it. Our aim in this course is for you to identify a POP and then, as the video says, "find out what is already known about your topic and how other researchers have approached it" and to "give your reader a critical overview" and then "add to it."

Student Alum's Note: I had heard of literature reviews before but didn't fully understand what they were. This video helped me understand what a lit review is which has helped me in other courses and importantly, I understood the type of research I was doing for my POP: Reviewing existing literature to see what has already been done and what we can learn from it.

Online Resource (3-min video): Scribbr. (2020, April 14). *How to search for relevant literature FAST using Boolean operators* [Video]. YouTube.
<https://www.youtube.com/watch?v=u0KVJ0lj8rw>

Professor's Note: Again, we are not writing an actual literature review as an end goal, however, we are absolutely conducting a lit review and this video will help you think about searching with keywords and pro-tips on how to improve this process.

Student Alum's Note: This was so helpful! I had no idea that you can use these "Boolean" shortcuts to search for what you need in different databases.

Online Resource: Cowan, S. (n.d.). *Search engines vs. google scholar vs. library databases. Search Engines vs. Google Scholar vs. Library Databases* | Leddy Library.
https://leddy.uwindsor.ca/get-help/guides/search-engines-vs-google-scholar-vs-library-databases?utm_source=

Professor's Note: This webpage explains how to tag team both Google Scholar and research databases to help find relevant literature. It also provides a helpful

comparison table for students to consider when starting their search for research literature.

Student Alum's Note: This is a great quick reference to get an overall sense of the value of each and very helpful for students in 7021.

Student Alum's Note: Overall, I like this article because it first talks about the differences between Google Scholar, search engines, and library databases. This is very relevant to the course because it will help students find the resources they need to complete the Lit Matrix for their PoP.

- The charts were very helpful from my perspective to have the side-by-side comparison of these different resource tools.

Module 4: Quantitative Research

Numbers, measurement, and interpretation.

- ☐ Read Explanatory Text: [Lim \(2025\)](#) – Quantitative research overview
- ☐ Review Explanatory Text: [Kemp & Kissane \(2010\)](#) – Interpreting graphs/tables
- ☐ Read Excerpt (pp. 597-600): [Golafshani \(2003\)](#) – Reliability & validity excerpt
- ☐ Read Mentor Text: [Paige et al. \(2024\)](#) – Critical thinking in reading comprehension

GUIDED READING NOTES

Explanatory Text: Lim, W. M. (2025). What is quantitative research? An overview and guidelines. *Australasian Marketing Journal*, 33(3), 325-348.
<https://doi.org/10.1177/14413582241264622>

Professor’s Note: This article provides a comprehensive overview of quantitative research, including a clear chart outlining the scope (e.g., measurable variables), objectivity (e.g., generalizability beyond participant sample), goal (e.g., examining relationships between variables), data (e.g., numerical data using structured instruments), and methods (e.g., statistics for correlations, prediction). Pay attention to:

- Page 2’s “What is and is not quantitative research”
- Notice Figure 1’s “shortcomings of quantitative research” to help you understand that quant is not necessarily better than qual OR vice versa...they have different objectives, strengths, and limitations. Read further about this on 1. 82.
- The Design considerations on p. 5 are helpful in breaking down quantitative approaches.
- Several sections of this article are beyond the scope of EDUC 7021 and you can skip or skim over them: “Data collection: Sample size,” “checking for assumptions,” “Figure 2. Quantitative research analysis.”
- Page 15 describes four main quant analyses and these brief descriptions might help you understand various objectives. Notice that Descriptive analysis is indeed quantitative.

Student Alum’s Note: As a student new to ed research, the article walked me through the strengths and shortcomings of Quant research and in doing so, gave me the opportunity to revisit vocabulary that is new to me (thinking about the ideas of

generalizability / causality etc). I also liked that this article references Kumar from Module 2 - weaving previously learned ideas.

- Table 3 strengths and shortcomings of the Quant is helpful in a snapshot view (I also liked the ease of view of Figure 1 that supported this table). This also serves a roadmap (that is my word of the week :) - so made the article easy to follow.
- Design considerations, pretest / pilot study - included tables with a breakdown of information in a manageable way to read.
- Data considerations - this section stood out to me because it explained the aspects to be considered.
- Overall impressions: the tables throughout this article were extremely helpful as a reference and guide and this is a really thorough article that considers all of the components of quant research. It is a strong article to use for 7021 that will help when reviewing and reading articles for the Lit Matrix.

Explanatory Text: Kemp, M., & Kissane, B. (2010). A five step framework for interpreting tables and graphs in their contexts. *International Association of Statistical Education*.
<https://researchportal.murdoch.edu.au/esploro/outputs/conferencePaper/A-five-step-framework-for-interpreting/991005543545807891/filesAndLinks?index=0>

Professor's Note: This brief 6-page article provides a quick 5-step framework for interpreting quantitative tables and graphs. Students will come across hundreds of visuals as they read articles throughout the program. This article will help students unpack these tables quickly so they can interpret the data on their own. In addition, the article provides a detailed example in which the 5-step framework is applied to a data table.

- There is a major misconception that quantitative research is bias free and entirely objective. This paragraph explains how and why this is not true. Find this sentence and read the entire paragraph after it: "Many people seem not to engage adequately with quantitative information, rather choosing to rely on an author's interpretation...Indeed many people seem not to be aware that data may be chosen carefully to support an author's points of view." (p. 1).
- Table 1 presents the Five Step Framework in an easy-to-follow way.
- On page 3 of the article, read Interpreting Tables and then look at the example in Table 2 and use Table 3 to evaluate it. It might help you to open two copies of the article and have the Table 3 questions side by side the Table 2 graph. This is a fascinating example that should really make you pause.
- Do the same thing with the Interpreting Graphs section and learning how to interrogate Figure 1 and Table 4.

Student Alum's Note: This is a great paper to support the quant module - it provides a step-by-step overview of how to interpret visuals (graphs/charts, etc.) found in research.

- I liked that the approach/tone by the authors feels very welcoming (not condescending) to the novice researcher while they provide a framework to 'statistical literacy.'
- This stood out to me as extremely useful to the work done in 7021 - "The Five Step Framework presented in this paper was developed in the context of helping university students to develop strategies to read tables and graphs, and to critically interpret the information presented in a range of contexts."
- I especially loved the ease of this paper and that the authors presented the framework along with examples of how to apply the framework to tables and graphs.
- The questions for each part of the framework can be implemented with any age group (as mentioned by the authors) so I can see it as helpful for teachers in their research as well as having their own students apply it to their work.

Article Excerpt (pp. 597 - 600): Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *The Qualitative Report*, 8(4), 597–606.
<https://doi.org/10.46743/2160-3715/2003.1870>

Professor's Note: While this article is focused on qualitative research, the section introducing reliability and validity in quantitative research (pp. 597 - 600) is important to help understand reliability and validity in quantitative research.

- If you are an audio or visual learner, I recommend also watching this brief 3-min video that differentiates the terms with clear and relatable examples, "Reliability & Validity Explained":
<https://youtu.be/KuT2n1w0lxc?si=jZ2cj6ahDxrRZWQI>
- Read the 3-page excerpt and pay attention to how they discuss Reliability and Validity.
- While you only need to read the short excerpt on quantitative validity for this module, you would also learn quite a bit from the rest of it since you will learn how to evaluate the trustworthiness and validity of qualitative articles. I therefore recommend reading the rest of the article if you have the time.

Student Alum's Note: The quant excerpt from this article serves as a great reminder of reliability and validity.

- I like that the author captured the main idea of reliability and validity in a concise manner making it easy to review and apply when reviewing articles and research. The importance of reliability and validity in research cannot be understated. It also helped serve as a reminder to the previous readings.

Mentor Text: Paige, D., Rupley, W. H., & Leily Ziglari. (2024). Critical Thinking in Reading Comprehension: Fine Tuning the Simple View of Reading. *Education Sciences*, 14(3), 225–225. <https://doi.org/10.3390/educsci14030225>

Professor's Note: The quantitative research report is clearly organized with headings and a helpful reading scaffold.

- Now that you have read all the explanatory and how-to articles, it's time to read an actual quantitative article and test out your new interpretation skills.
- Read the Intro and lit review to understand the problem of practice and what other scholars have said about critical thinking and it's relationship to reading comprehension.
- In section 7, notice the 3 research questions guiding this current study.
- Carefully comb through the Methods section. Who are the participants and how/why were they chosen? What is the context?
- Notice in sections 8.2-8.8 that they explain all the existing validated tests (with cited support) they use to assess different components related to their research questions.
- In the Results, look for the quantitative vocab you have studied so far, e.g., correlations, MANOVA, regression analysis.
- Review the graphs and tables in the Results using what you learned from Kemp & Kissane's article.
- Read the Discussion to see how much you understood from the results. Also, look for the "surprising result" of the study.
- In the Conclusion, what do the authors recommend that educators do?
- Where there any limitations that might impact the veracity of the data?

Student Alum's Note: This is a great mentor text that exemplifies quant research and provides a model for students to refer back to.

- A couple of things that stand out to me with this mentor text: IMRaD structure that is referred to earlier in the course is easily noted within this paper. Likewise, the tables throughout the paper serve as a great way to practice the previously mentioned 'five-step framework'.
- Overall, this mentor text fits well into this module where students can read a quant study/apply the 5-step process to read the graphs and tables and consider validity and reliability (Questions stated at the beginning are then addressed with data at the end in the results section).

Module 5: Qualitative Research

Meaning-making, narrative, and lived experience.

- ☐ Read Explanatory Text: [Lim \(2025\)](#) – Qualitative research overview
- ☐ Read Mentor Text: [Moreno \(2025\)](#) – Empathy in teacher education
- ☐ Watch: Creswell (2013) – Qualitative & mixed methods story ([7 min YouTube](#))

GUIDED READING NOTES

Explanatory Text: Lim, W. M. (2025). What is qualitative research? An overview and guidelines. *Australasian Marketing Journal*, 33(2), 199-229.
<https://doi.org/10.1177/14413582241264619>

Professor’s Note: This is the second Lim article that you are reading—this time to explain qualitative research. The similar format to the quantitative version may help you read through this. Lim explains why qualitative research is a necessary research paradigm and an important complement to quantitative research. This article also introduces and explains some of the more common qualitative methodologies, data collection and data analysis methods, along with a discussion of trustworthiness and ethical considerations, which will help students recognize and understand terminology as they read qualitative articles.

- Table 1 on p. 200 that presents what qualitative research is and is not, is quite helpful.
- The entire section on Conceptualizing qualitative research on p. 200 and then again in the Reasons section on 201 are important to read to understand the gap that qual research fills and why it is an essential and complementary research approach to quant.
- Students often erroneously discredit qual because they label it as “inferior” and “too subjective.” This is a novice reaction so make sure to read how Lim responds to this in “Common misconceptions about qualitative research.”
- I love Table 3 because it marries qual strengths and shortcomings with mitigation strategies. Excellent way to consider qualitative research.
- Page 204 is the start of the different methodology explanations such as Grounded theory, Phenomenology, Action research, Case study, Narrative inquiry, and more.
- Do a quick review of the data collection and data analysis techniques starting on 1. 214. These will help you know what to look for as you fill out your lit matrix for qual articles.

- To ensure that qual research is credible, qual scholars must take certain steps to conduct systematic, rigorous, and trustworthy research. Read about these steps starting on p. 222.

Student Alum's Note: The author does a nice job of explaining qual research and I like their use of 'complementary' work with quant research rather than contradictory. I like the selection of this article for this Module as the author's previous work in Module 4 serves (as they say) as a complement.

- What stood out to me is 'Qual in a nutshell' - this is written in a very straightforward manner making it easy to read and understand.
- Misconceptions is a great paragraph as well as Table 2: both are clear and to the point giving 7021 students an understanding of Qual research.
- Overall, the clearly the author communicated their ideas around qual research and how this article will help 7021 students as they read and select qual articles for their lit review. This article can serve as a guide to decipher new language and vocabulary as they navigate qualitative research studies.

Mentor Text: Moreno, R. (2025). Centering empathy through embodied experiential learning in teacher education. *TESOL Journal* 16(1) <https://doi.org/10.1002/tesj.70000>

Professor's Note: This qualitative study used a composite narrative approach to understand empathy development in teachers. This article demonstrates the value of qualitative research in how it narratively communicates the feelings and visceral reactions of participants. The Discussion and Implications translate the findings into actionable recommendations for teachers and teacher educators.

- Read the intro to understand the problem and how the author (who was also a teacher) came to this POP: "I came to this pedagogical intervention following a problem of practice that I had noticed while teaching a course..." (p. 2)
- The Lit Review (section 1) is important background knowledge and research to help you understand the current study. Think about how this connects to your own research process looking for literature.
- Section 2.1 explains the teaching intervention that is the basis of this study.
- The Methods section provides a clear overview of this study. Look for the participants, demographics, context, data collection, and analysis.
- Look at section 2.3. How does this section contribute to the analysis of the data?
- As explained in 2.2.1 and 2.2.3, this study uses a specific narrative methodology which shapes how the findings are presented as a single narrative formed from different participants. When you read the findings starting in section 3, do they resonate with you in a different way than other types of article findings/results?

- As educators, make sure to read the Discussion and Implications and think about how you each teach or will teach students who do not speak English as a first language. Ask yourself how this research informs you even if you teach a different subject or level. Also jump to the very last paragraph of the Conclusion to help you think about transferring this research to your own professional context.

Student Alum's Note: This resource focuses on experiential learning, equity driven pedagogy, and culturally and linguistically responsive instruction. The research focuses on using qualitative research with a narrative approach, framed by Dewey's theory of experience, for equitable teaching practice for multilingual learners and for students to learn by doing.

- Overall, this a great empirical article because it shows what a narrative methodology looks like in action.
- I also appreciated reading about how the author founding meaning in different types of data collection methods that felt somewhat new to me (reflections, participant observation, and artifacts).
- Reading the findings really made me understand what Lim was saying about the value of qualitative research and how participants' reactions and perspectives are necessary to consider.

Online Resource: Sage. (2013, March 1). *Telling a complete story with qualitative and mixed methods research - Dr. John W. Creswell* [Video]. Youtube.
<https://www.youtube.com/watch?v=l5e7kVzMlfs>

Professor's Note: Noted research scholar in the field, John Creswell, walks us through the value of qualitative research as a way to understand the life experiences of Holocaust survivor Paula Levin. This 7-minute video is powerful in its explanation and examples.

Student Alum's Note: This is a great video that brings to life the value of qual research. I liked that it tells a story to engage the audience allowing you to connect with the subject while understanding the work of the researcher.

Module 6: Mixed Methods & Practitioner Research

Combining approaches and practitioner inquiry.

- ☐ Read Explanatory Text: [Dawadi et al. \(2021\)](#) – Mixed methods overview
- ☐ Mentor Text (Mixed Methods): [Fox et al. \(2020\)](#) – What makes teachers well?
- ☐ Read Explanatory Text: [Mertler \(2021\)](#) – Action research in practice
- ☐ Mentor Text (Action Research): [Hamilton et al. \(2024\)](#) – Participatory action research

GUIDED READING NOTES

Mixed Methods

Explanatory Text: Dawadi, S., Shrestha, S., & Giri, R. A. (2021). Mixed-methods research: A discussion on its types, challenges, and criticisms. *Journal of Practical Studies in Education*, 2(2), 25–36. <https://doi.org/10.46809/jpse.v2i2.20>

Professor’s Note: This article provides an overview of the main types of mixed-methods research, reasons for choosing a mixed-methods approach, and challenges.

- The authors provide a brief, but helpful overview of three prevalent paradigms that undergird research: positivism (e.g., knowledge gained through objective facts), interpretivism (e.g., reality is a product of human interaction with world), and pragmatism (e.g., values both objective and subjective knowledge for research goals). While these are not necessary to understand for this course, if you are considering doing a doctorate in the future, you could read these for an early introduction.
- On p. 27 read the six justifications for the use of mixed-methods (e.g., expansion of the study and understanding of the problem).
- Page 29 gives a great discussion of the three main types of mixed-methods research: Convergent Parallel Mixed-Methods Design, Explanatory Sequential Design, and Exploratory Sequential Design. Pay attention to how they also provide an example for each one. This will help clarify mixed methods.

Student Alum’s Note: I like how the article defines the MMR paradigm and introduces the characteristics of MMR, reasons for using it, and its major types; how to decide if MMR is appropriate, key considerations and potential challenges.

- I also like how the article discussed different paradigms (positivism/post-positivism, interpretivism/constructivism, and pragmatism and how it either relates to quantitative, qualitative, or mixed methods research. These concepts were new to me, but I found them interesting to ponder.
- It also explained that MMR could have limitations and that “mixing data from different sources can sometimes lead a researcher nowhere” and that “triangulated research may run the risk of taking on too many unfocused quotations all at once.” As a novice and student learning about research, this stood out to me because I believed that MMR has the benefits of both the quantitative and qualitative paradigms, but I never considered the limitations/challenges of MMR.

Mentor Text: Fox, H. B., Tuckwiller, E. D., Kutscher, E. L., & Walter, H. L. (2020). What makes teachers well? *Journal of Interdisciplinary Studies in Education*, 9(2), 233–257. <https://doi.org/10.32674/jise.v9i2.2170>

Professor’s Note: This article reports on a convergent mixed methods study. The article is well organized with clear headings (e.g., “Study Purpose and Research Questions,” “Participants”) that serve as helpful reading scaffolds and clearly delineates quantitative and qualitative aspects of the project.

- The lit review covers teacher stress, burnout, and well-being which may be relevant to you and possibly your POP as well.
- Read the research design section to understand the author’s choices for mixed methods.
- Figure 1 is also helpful to visualize the process.
- Notably, this article includes a separate section, “Integrated Analysis,” that explicitly states at what stage the approaches were integrated (i.e., the integration stage), and a separate section, “Integrated Results,” that provides two themes developed from where the results of the quantitative and qualitative approaches diverged.
- The Discussion and Recommendations for Practice are helpful for thinking about the implications of the findings.

Student Alum’s Note: I liked that this article focused on the SEL component of teachers and is relatable for the 7021 students.

- What stood out to me: I liked that the research questions were explicitly stated as quant or qualitative and then the author also stated how these were integrated. This is a good article that supports the 'integrating' article.
- The research design is clearly stated and explained - 7021 students can use the explanatory text to guide as they read (I had the 'strategies to perform' open as I read the mentor text).

- Overall, this is great exemplar of a mixed methods approach in educational research. It is clearly outlined and structured to determine the quat and qual portions as well as the integration of these results.

Practitioner Research

Explanatory Text: Mertler, C. A. (2021). Action research as teacher inquiry: A viable strategy for resolving problems of practice. *Practical Assessment, Research & Evaluation*, 26(19), 1-12.

<https://openpublishing.library.umass.edu/pare/article/1565/galley/1516/view/>

Professor's Notes: This article discusses action research as an approach for examining practitioner-based problems of practice, defining action research, identifying applications and benefits, and rigor in action research. In addition, the articles describes the 4-stage action research cycle: 1) planning, 2) acting, 3) developing, and 4) reflecting stage.

- This article does a great job of introducing teacher inquiry based on a problem of practice. It's good to come back to a definition of the POP as you are getting closer to the end of this course. As you are now starting to prepare for the final project, you'll want to remind yourself that a problem of practice needs to be actionable. You have to keep asking yourself...so what? What can we do based on what the research tells us?
- In this course we have not focused on conducting research, but with this article we invite you to begin to think about how you might start applying a research lens to your own teaching. Perhaps you may move forward with your own action research projects after being exposed to so much research around problems of practice.
- Look for the examples provided in this article on action research and think about them in relation to the Figure 1.
- Action Research is the base of a methodological umbrella that also includes Participatory Action Research and Youth Participatory Action Research. An optional expansion to this article is the short video, "Introduction to Youth Participatory Action Research":
<https://youtu.be/h7y0WM829Z8?si=19Guv3MoDqGL9TCn>

Student Alum's Note: This is a great resource and clear and concise. I like how the article discussed teacher inquiry and the main goal of action research to address local-level problems in practice and to find immediate answers to questions or solutions to those problems. After taking both EDUC 7021 and 7910, I believe that this is a great resource because it relates to the Literature Matrix assignment and identifying a problem of practice in our classroom and finding research that

discusses solutions and strategies to resolve our problem of practice. I like how it defines the PoP as a complex yet sizable, still actionable problem.

- The article also discussed that many teachers do not engage in a systematic step-by-step process of action research to reflect on their practice but state that the daily reflections of teachers are a launching off point for action research. I like the example of the sixth-grade teacher, Ashlene, who engaged in action research during the pandemic and how she used journal articles, small group learning, peer feedback, student surveys, reflection, and re-evaluation, to reflect on her practices for two cycles of teacher inquiry to improve student engagement and learning. In closing, I like how the article stated that action research gives teachers voice while empowering educators to be knowledge generators.

Mentor Text: Hamilton, A., Morgan, S., Murphy, B., & Harland, K. (2024). Taking boys seriously: Utilising participatory action research to tackle compounded educational disadvantage. *Action Research*, 23(1), 26 - 47.
<https://doi.org/10.1177/14767503241226894>

Professor's Notes: This empirical research article utilizes participatory action research methods. The introduction outlines the five successive phases employed in the PAR approach (e.g, reinvestment and co-creation, regional trial), and the following sections discuss those phases in more depth and contextualized within the findings.

Student Alum's Note: This resource focused on PAR to address a social issue and to make a difference. It begins with a 17-year initiative, explains PAR methodology, introduces compounded educational disadvantage, relational education, and educational ecosystem. Because the article focuses on marginalized boys from disadvantaged communities, I believe that it is a good resource and relevant because it is equity-focused and empirical. The article is accessible and academically dense because it demonstrates equity-centered PAR in action, relational pedagogy (p. 34), educational ecosystems (p. 34), systematic change theory, and youth agency. As a student that completed the 7007 culturally responsive pedagogy course, this resource (p. 31) relates to the deficit narratives as a problem marginalized boys face in education.

Student Alum's Note: This is a great Mentor text to highlight YPAR. I liked that the authors were reflective on what worked as they produced this longitudinal study. I liked figure 4 where the authors create a visual to outline how the cycle looked (how long and what happened during each phase).

Module 7: Synthesis

Bringing ideas and findings together.

☐ Review: [What is Synthesis?](#) (UAGC Writing Center)

☐ Review: [Synthesis Matrix](#) (UAGC Writing Center)

GUIDED READING NOTES

Online Resource: WHAT IS SYNTHESIS: The University of Arizona Global Campus Writing Center. (2025). *Synthesis*. <https://writingcenter.uagc.edu/synthesis-matrix>

Professor's Note: This very brief resource defines synthesis and delineates it from summary. The article links to a "synthesis matrix chart," provides guiding questions (e.g., Does one author extend the research of another?), and a one-paragraph example of synthesis.

Student Alum's Note: A great snapshot of synthesis - it gets straight to point and explains synthesis while providing an example. This resource/video briefly defines synthesis, compares/contrasts it from summarizing, the steps/strategies for synthesis, examples, and the need for synthesis in educational research.

Online Resource: SYNTHESIS MATRIX: The University of Arizona Global Campus Writing Center. (2025). *Synthesis Matrix*. <https://writingcenter.uagc.edu/synthesis-matrix>

Professor's Note: This brief resource also from the University of Arizona builds on the prior explanation of synthesis and includes an example of a partially completed matrix.

Student Alum's Note: Great resource to include because it is simple to read, includes a sample synthesis matrix with commentary, defines, explains the purpose, the steps to complete the matrix, and describes what a synthesis matrix looks like.