

Research Methods in Education
Master of Educational Leadership and Management Development
College of Education, National Chung-Cheng University

Course code : 3955001 Title : Research Methods in Education (教育研究法) Time: Tuesday, 09:10 – 12:00 (Credits: 3, Required) Classroom: Room 335	Instructor: Professor Aaron Koh (aaronkoh@ccu.edu.tw) Contact: Ext.36323 (R535, Education Building) TA: Mr. Ricky Kurniawan (ricky.kurniawan93@yahoo.com) Platform: www.ecourse2.ccu.edu.tw
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Course Description

This course equips students with research methods know-how for a strong capstone thesis and future publishable papers. It begins with the nature of educational research and the logic of qualitative inquiry. Students learn how to turn educational issues into researchable problems and craft focused research questions. They learn how to make ethically sound methodological choices. The course introduces the nuts-and-bolts of a basket of qualitative methods, including methodological considerations such as sampling and access, tool design, responsible data management, and the analysis and interpretation of evidence, leading to clear academic writing. It also builds a firm grasp of research quality across traditions, including credibility, trustworthiness, validity, and reliability, and introduces selected quantitative approaches and mixed methods to support coherent research designs and defensible analysis plans.

Learning Outcomes

By the end of this course, participants will:

- Formulate researchable educational problems and craft focused research questions that guide methodological choices.
- Select and justify appropriate qualitative or quantitative methodologies for specific research questions, demonstrating ethical decision making and awareness of researcher positionality.
- Design and implement qualitative or quantitative data collection plans, including sampling and access strategies, and develop fit for purpose data collection tools while managing data responsibly.
- Analyse and interpret qualitative and quantitative data using transparent procedures, and evaluate the quality of research using credibility and trustworthiness, with an informed understanding of validity and reliability across traditions.
- Practice reflexivity throughout the research process by articulating researcher positionality, examining how choices shape evidence and interpretation, and presenting findings in clear academic writing.

Course Schedule:

Week	Date	Topic
1	8 Sep	The nature of research, and qualitative research
2	15 Sep	Paradigms, designs, and ethics
3	22 Sep	From topic to researchable problem and questions
4	29 Sep	Sampling, validity, and reliability
5	6 Oct	Self-directed Learning
6	13 Oct	In-depth interviews
7	20 Oct	Focus group interviews
8	27 Oct	Case study research
9	3 Nov	Action Research and practitioner inquiry
10	10 Nov	Self-directed Learning
11	17 Nov	Ethnography
12	24 Nov	Discourse analysis

13	1 Dec	Content analysis
14	8 Dec	Social media research
15	15 Dec	Survey research and questionnaires
16	22 Dec	Mixed methods
17	29 Dec	Revision and consultation Week
18	5 Jan	Capstone Study Research Design Writing Week

Required text

Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2025). *How To Design and Evaluate Research in Education*. 12th Edition. McGraw Hill

Course Schedule, Topics & Weekly Readings

Wk	Date	Topics	Readings
1	8 Sep	The nature of research and qualitative research	Textbook Chapter 1 and 18
2	15 Sep	Paradigms, designs, and ethics	Textbook Chapter 4
3	22 Sep	From topic to researchable problem and questions	Textbook Chapter 2 and 3
4	29 Sep	Sampling, validity, and reliability (Guest taught by Mr. Ricky Kurniawan)	Textbook Chapter 6, 8 and 9
5	6 Oct	Self-directed Learning	
6	13 Oct	In-depth interviews (Guest taught by Mr. Ricky Kurniawan)	- Textbook Chapter 19 - Forsey, M. (2012). Interviewing individuals. In S. Delamont (Ed.), <i>Handbook of Qualitative Research in Education</i> (pp.364-376). Cheltenham, U.K.: Edward Elgar.

7	20 Oct	Focus Group interview	- Robinson, Jude (2020) Using focus groups. In: Ward, Michael R.M. and Delamont, Sara (eds.) <i>Handbook of Qualitative Research in Education</i>. Edward Elgar Publishing: Cheltenham ; Northampton Massachusetts, pp. 338-348. ISBN 9781788977142 (doi: 10.4337/9781788977159.00040) - Roulston, Kathryn (2022, Chapter 2). <i>Interviewing: A Guide to Theory and Practice</i>. Sage.
8	27 Oct	Case study research	- Stake, R., & Visse, M. (2023). Case Study Research. In R. J. Tierney, F. Rizvi, & K. Ercikan (Eds.) <i>International Encyclopedia of Education</i>, 4th Edn, Vol 12, pp.85-91. Elsevier. - Flyvbjerg, B. (2006). Five misunderstandings about case-study research. <i>Qualitative Inquiry</i>, 12(2), 219-245.
9	3 Nov	Action research and practitioner inquiry	Textbook Chapter 24
10	10 Nov	Self-directed Learning	
11	17 Nov	Ethnography	Textbook Chapter 21

12	24 Nov	Discourse analysis	Canning, P., & Walker, B. (2024). Chapter 12: Doing a project in discourse analysis, in <i>Discourse Analysis: A Practical Introduction</i> . Routledge.
13	1 Dec	Content analysis	Textbook Chapter 20
14	8 Dec	Social media research	- Wilson, A., Morton, J., & Simeonova, B. (2023). Chapter 11: Social media qualitative research vignettes, in B. Simeonova and R. D. Galliers (Eds.). <i>Cambridge Handbook of Qualitative Digital Research</i>. Cambridge University Press. - Harrington, C. (2025). Making ethical judgement calls about qualitative social media research on sensitive issues, <i>International Journal of Social Research Methodology</i>, 28:4, 397-409, DOI: 10.1080/13645579.2024.2393796
15	15 Dec	Survey research and questionnaires (Guest Lecturer)	Textbook Chapter 17
16	22 Dec	Mixed-methods research (Guest Lecturer)	Textbook Chapter 23
17	15 Dec	Revision and Consultation	
18	29 Dec	Capstone Study Research Design Writing Week	

Assessment Components

Students are expected to participate in on-line class discussions and e-Course Forum. The following is an overview of assessment components and percentage allocated for each assessment component.

	Assessment	Percentage
1	On-line Class and e-Course Forum Participation	20%
2	Online Quiz (MCQ) (Week 4 – 14 topics)	30%
3	Capstone Study Research Design	50%

Assessment & Evaluation

Evaluation will be based on students' individual performance in the following three areas:

Assessment 1: On-line class and e-Course Forum Participation (20%)

A maximum of 20 marks (20% of your course grade) will be given for on-line class and e-Course Forum participation. Thoughtful responses and evidence of having read prescribed readings for each week will be generously rewarded with a good participation mark.

Assessment 2: Online Quiz Week 4 – 14 Topics (30%)

You will have to attempt online quiz for Week 4 – 14 topics. It is important to read your textbook and/or prescribed readings.

Assessment 3: Capstone Study Research Design (50%)

Develop a capstone ready research design by producing the core written components needed for a Master's thesis, including a clear problem and research questions, a justified methodology, workable instruments, an ethics plan, and a defensible analysis plan.

One compiled document with six sections, 3500 to 4000 words total, plus appendices for instruments and templates. Students focus on one education issue from their workplace or a chosen educational setting.

- Section 1 Research problem and questions (~400 words)
 - ◆ Context and problem statement
 - ◆ Purpose statement
 - ◆ Two to three research questions
 - ◆ Brief justification of significance for education or school leadership

- Section 2 Methodology choice and design fit (~700)
 - ◆ Chosen methodology and qualitative design, with an optional quantitative or mixed methods element if justified
 - ◆ Rationale for design fit, how the approach answers the questions
 - ◆ Researcher positionality and reflexivity, 200 to 300 words embedded here

- Section 3 Sampling and access plan (~ 700 words)
 - ◆ Proposed participants or data sources
 - ◆ Sampling strategy, inclusion criteria, and sample size rationale
 - ◆ Recruitment plan and access considerations, including gatekeepers
 - ◆ Feasibility and timeline

- Section 4 Data collection toolkit (~900 words plus appendices)
 - ◆ Students submit two instruments or tools, chosen from the list below
 - ◆ In depth interview protocol with 8 to 10 questions and prompts
 - ◆ Focus group guide with 6 to 8 prompts and moderator notes
 - ◆ Observation plan, including what to observe, how to record, and a fieldnote template
 - ◆ Document or media corpus selection plan with inclusion rules
 - ◆ Content analysis codebook draft with categories and examples
 - ◆ Social media data capture plan, including sampling logic and archiving approach
 - ◆ Questionnaire draft, 12 to 18 items, if using a quantitative component
 - ◆ In the main text, explain how each tool links to the research questions and how it will be piloted or refined

- Section 5 Ethics and data management (~400words)
 - ◆ Consent procedures, confidentiality, anonymisation
 - ◆ Risk assessment, including power relations and vulnerability
 - ◆ Data storage, security, retention, transcription and handling of recordings or screenshots

- Section 6 Analysis plan and quality criteria (~700words)
 - ◆ Step by step analysis plan suited to the chosen approach
 - ◆ Quality criteria, credibility and trustworthiness strategies such as triangulation, audit trail, reflexive memos, and member checks where appropriate

- ◆ If using a quantitative element, address validity and reliability and how results will be interpreted responsibly
 - ◆ Expected outputs, what counts as a finding, and how it will be presented
- Submission format
- ◆ Single document with references. Instruments and templates in appendices and not counted in the word limit.
- Deadline is **11 Jan 2027**. **Your term paper must be written in good, clear English.**
- Format of final paper: MS Word Format in the APA (American Psychological Association) Manual Style, A4-size (Margin: 2.54cm on all sides), Times New Roman (Font size: 12 point), double spaced.
- Please state clearly on the cover of your paper:
- ◆ (1) the course code & title of this course.
 - ◆ (2) the title of your paper and
 - ◆ (3) your name and student number.
 - ◆ Submit your paper on e-Course.
 - ◆ Please upload your assignment on e-Course, but before uploading ensure that you have done a plagiarism check using Turn-it-in. *It is advisable to keep a copy of your final paper for your own record. You are to declare whether you have used ChatGPT or any AI tools on the declaration sheet and explain how you have utilized these tools on the front page of your research proposal.

*****Grades for late submission will be deducted: one sub-grade per three days, one grade per week; lateness of submission up to TWO weeks will NOT be marked.***

Marking criteria:

1. Coherence and design fit, alignment of questions, method, sampling, tools, and analysis (25%).
2. Methodological justification and reflexivity (20%).
3. Data collection quality and feasibility of instruments (20%).
4. Ethics and data management (15%).
5. Analysis plan and research quality criteria (20%).

Grading rubric:

Grade	Mark	Description
A+	100-90	Outstanding: The level of research, thinking, and communication are outstanding.
A	89-85	Very good: The level of research, thinking, and communication are superior. Well done!
A-	84-80	Good: The level of research, thinking, and communication are very good.
B+	79-77	Satisfactory: The level of research, thinking, and communication are satisfactory.
B	76-73	Acceptable but average at best: The level of research, thinking, and communication are acceptable.
B-	72-70	Acceptable but definitely below average: The level of research, thinking, and communication are barely acceptable.
C or below	69 or below	Not acceptable: The work is not appropriate for this class.

Online Resources:

- Exploring Online Research Methods: <https://www.restore.ac.uk/orm/site/home.htm>
- Sage Research Design Community: <https://researchmethodscommunity.sagepub.com/research-design>
- Imperial Educational Development Unit: <https://www.imperial.ac.uk/staff/educational-development/teaching-toolkit/educational-research-methods/analysing-and-writing-up-your-research/>
- Stanford Qualitative Research in Education: https://guides.library.stanford.edu/qualitative_research_in_ed/background

Suggested Readings:

- Atkinson, P. (2015). *For Ethnography*. London: SAGE.
- Banks, M. (2001). *Visual Methods in Social Research*. London: SAGE.
- Berg, B. (2007). *Qualitative Research Methods for the Social Sciences*. Boston: Pearson
- Bogdan, R. C. & Biklen, S. K. (2007). *Qualitative Research for Education: An Introduction to Theories and Methods*. Boston: Pearson.
- Brinkmann, S., & Kvale, S. (2015). *InterViews: Learning the Craft of Qualitative Research Interviewing*. 3rd edn. London: SAGE.
- Creswell, J. W. (2007). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*. Thousand Oaks: Sage.
- Cohen, L., Manion, L. & Morrison, K. (2001). *Research Methods in Education*. London: RoutledgeFalmer.
- Crotty, M. (1998). *The Foundations of Social Research: Meaning and Perspective in the Research Process*. London: SAGE.
- Delamont, S. (Ed.)(2012). *Handbook of Qualitative Research in Education*. Cheltenham, U.K.: Edward Elgar.
- Deniz, N. K. & Lincoln, Y. S. (Eds.)(2005). *The SAGE Handbook of Qualitative Research*. Thousand Oaks: SAGE.
- Denzin, N., & Lincoln, Y. S. (Eds.)(2018). *The SAGE Handbook of Qualitative Research*. 5th edn. London: SAGE.
- Emerson, R. M., Fretz, R. I. & Shaw, L. L. (1995). *Writing Ethnographic Fieldnotes*. Chicago: The University of Chicago.
- Fetterman, D. M. (1998). *Ethnography: Step by Step*. Thousand Oaks: SAGE.
- Freebody, P. (2003). *Qualitative Research in Education: Interaction and Practice*. London: SAGE.

Goghlan, D., & Brannick, T. (Eds.)(2010). *Doing Action Research in Your Own Organization*. London: SAGE.

Hammersley, M. & Atkinson, P. (1997). *Ethnography: Principles in Practice*. London: Routledge.

Hammond, M., & Wellington, J. (2013). *Research Methods: The Key Concepts*. Abington, Oxon: Routledge.

Jackson, A. Y., & Mazzei, L. A. (Eds.)(2009). *Voice in Qualitative Inquiry: Challenging Conventional, Interpretative, and Critical Conceptions in Qualitative Research*. Abington, Oxon: Routledge.

Jones, R. H. (2012). *Discourse Analysis: A Resource Book for Students*. Abington, Oxon: Routledge.

Johnson, A. R. (2012). *A short guide to Action Research*. 4th ed. Upper Saddle River, N. J: Person.

Kozinets, R. (2010). *Netnography: Doing Ethnographic Research Online*. London: SAGE.

Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative Research: A Guide to Design and Implementation*. 4th Ed. San Francisco, CA: Jossey-Bass.

Lambert, M. (Ed.)(2019). *Practical Research Methods in Education: An Early Researcher's Critical Guide*. London Routledge.

O'Reilly, K. (2009). *Key Concepts in Ethnography*. London: SAGE.

Pole, C., & Morrison, M. (2003). *Ethnography for Education*. Maidenhead: Open University Press.

Roulston, K. (2022). *Interviewing: A Guide to Theory and Practice*. London: SAGE.

Silverman, D. (2000). *Doing Qualitative Research: A Practical Handbook*. London: Sage.

Somekh, B., & Lewin, C. (Eds.)(2005). *Research Methods in the Social Sciences*. London: SAGE.

Thomas, G. (2016). *How to Do your Case Study*. 2nd Ed. London: SAGE.

Wellington, J. (2000). *Educational Research: Contemporary Issues and Practical Approaches*. London: Continuum.

Willis, P. (2000). *The Ethnographic Imagination*. Cambridge: Polity.

Wyse, D., Selwyn, N., Smith, E., & Suter, L. E. (Eds.)(2017). *The BERA/SAGE Handbook of Educational Research*. London: SAGE.

Yin, R. K. (2018). *Case Study Research and Applications: Design and Methods*. 6th Ed. London: SAGE.

Useful e-journals:

Ethnography & Education

Qualitative Inquiry

International Journal of Qualitative Studies in Education

Qualitative Research

Educational Action Research

Educational Research

International Journal of Research and Method in Education