



Weaving Meaning in the Digital Age: A Meta-Meta-Ethnography Enhanced by AI

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Abstract

This study explores the evolving landscape of ethnographic synthesis in the digital age. It combines a pilot meta-meta-ethnographic study with an AI-augmented analysis using ChatGPT. Drawing on 14 published meta-ethnographies in education, the pilot study applies Noblit & Hare's, (1988) framework alongside post-qualitative theories of Agential Realism, Sociomateriality and Rhizomatic Thinking. The aim was to investigate methodological convergence and divergence across 14 studies. In parallel, a second analysis was conducted using ChatGPT to examine the feasibility and credibility of large language models (LLMs) in supporting thematic synthesis. This AI-assisted analysis generated open codes, clustered themes and applied theoretical lenses to offer a triangulated perspective. This was applied to validate and expand the pilot findings. Together, the two approaches reveal the complementary strengths of human-led and AI-supported meta-synthesis: the former provides depth and theoretical nuance, while the latter enhances efficiency, scalability and pattern detection. This combined study affirms the value of methodological pluralism and critically reflects on the implications of integrating AI into interpretive qualitative research.

Keywords: Agential Realism, AI in qualitative research, ChatGPT, Digital ethnography, Ethnographic methodology

1. Introduction

Ethnographic research is evolving in response to the increasing influence of digital technologies. It prompts the scholars to reexamine how ethnographic knowledge is synthesized and interpreted (Aslan et al., 2024). Meta-ethnography offers a powerful method for synthesizing qualitative studies and preserves the interpretive richness (Beach & Vigo-Arrazola, 2021; Noblit & Hare, 1988). This study builds on that foundation by piloting a *meta-meta-ethnographic* synthesis of 14 previously published meta-ethnographies in education. It explores how layered qualitative syntheses can surface deeper patterns across existing interpretive research. In a second phase, this study integrates an AI-assisted analysis using ChatGPT to test the scalability, reliability and reflexivity of large language models (LLMs) as supportive tools in qualitative synthesis. Framed through Agential Realism, Sociomateriality, and Rhizomatic Thinking, this dual-method analysis offers insights into the

interplay between human interpretation and machine-assisted pattern detection in the evolving landscape of digital ethnography.

1.1 Purpose and Objectives

The purpose of this study is to explore how meta-meta-ethnography can synthesise findings across traditional and digital ethnographies to support holistic, theory-informed qualitative research. As digital technologies reshape ethnographic practices, there is a need for methods that integrate diverse data while maintaining interpretive depth. Meta-ethnography, using reciprocal, refutational, and line-of-argument translation, preserves theoretical richness, and extending it to meta-meta-ethnography offers higher-order insights yet remains underexplored. This study aims to evaluate the methodological potential of meta-meta-ethnography within education-focused research, examining its capacity to bridge traditional and digital ethnographic data while ensuring contextual and theoretical coherence.

1.1.1 Theoretical Frameworks

Three interrelated theoretical frameworks guide the current inquiry. Agential Realism has been proposed by Barad, (2007). It is to rethink knowledge production as emerging from entangled intra-actions among human and nonhuman agents. This challenges representationalism and emphasizes the role of material-discursive practices. Sociomateriality, advanced by Orlikowski, (2007) and (Orlikowski & Scott, 2021, 2023), highlights the co-constitutive relationship between technological tools and social structures. It reveals how research practices are shaped by digital systems. Rhizomatic Thinking was drawn from Deleuze & Guattari, (1994) and offers a non-hierarchical, non-linear understanding of knowledge creation. It complements meta-ethnography by emphasizing multiplicity, flow and the transversal connections across studies (Britten et al., 2002; Toyé et al., 2014).

Methodology and Approach

This study employed a dual approach to qualitative synthesis. First, it conducted a meta-meta-ethnography using Noblit and Hare's (1988) seven-stage framework to synthesize 14 published meta-ethnographies in the field of education. Studies were selected based on their explicit use of meta-ethnography, methodological transparency and thematic relevance to inclusion, pedagogy and digital learning. Agential realism, sociomateriality & rhizomatic thinking informed the selection, reading and translation of studies. It allowed for an entangled and non-linear synthesis.

The second component used AI-assisted qualitative data analysis. The same 14 studies were analyzed using ChatGPT for open coding and thematic clustering. This process focused on identifying second-order constructs and latent patterns, following best practices in human-AI collaboration ((Hayes, 2025; Zhang & Orlikowski, 2022). The AI-supported process was triangulated with the meta-ethnographic findings, enabling a hybrid analysis that drew on both interpretive synthesis and computational efficiency.

Figure 1: Study Plan of Dual Analytical Routes as Triangulation: Human vs. AI-Supported Synthesis of Meta-Ethnographies

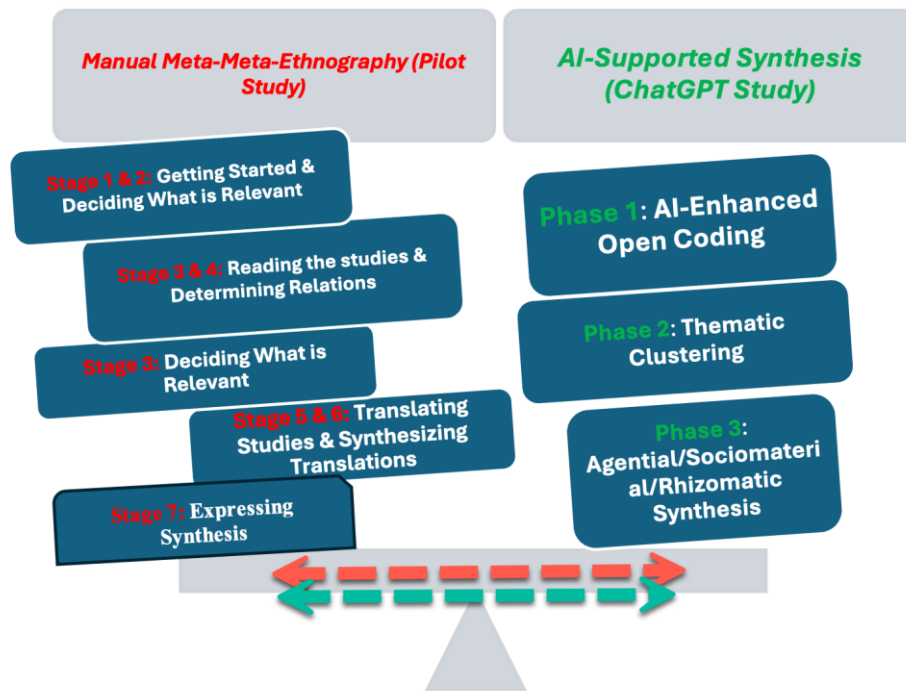


Fig. 1 illustrates the two parallel analytic pathways used in this study: the traditional manual meta-meta-ethnographic workflow from the pilot study (left) and the AI-supported synthesis using ChatGPT (right). The manual approach follows Noblit and Hare’s (1988) 7-phase structure and the AI-assisted process is organized into three streamlined phases modeled after recent innovations in LLM-supported qualitative analysis. The figure visualizes how these workflows differ in structure but converge in their analytical intent to synthesize second-order constructs from 14 meta-ethnographies. The bidirectional arrows at the base symbolize triangulation, highlighting how both methods were used to validate and enrich findings through complementary epistemic lenses.

Together, these approaches allowed for a nuanced, reflexive and theoretically grounded synthesis of how educational themes such as inclusion, fairness, identity and critical pedagogy emerge across diverse qualitative studies.

Findings and Results

The data analysis was conducted in two distinct but complementary phases to enhance analytical rigor through methodological triangulation.

Using Noblit and Hare’s (1988) seven-stage framework, 14 published meta-ethnographies were systematically read, translated into one another and synthesized. Thematic relationships were established through reciprocal, refutational and line-of-argument translations across five educational domains: pedagogy, student learning, technology, inclusion and fairness. The analysis was deeply informed by *agential realism*, which foregrounds how meanings emerge through intra-actions; *sociomateriality*, which explores how material-discursive forces shape knowledge; and *rhizomatic thinking*, which allowed for a non-linear mapping of connections among studies.

Table 1: AI-Supported Sociomaterial, Agential Realism & Rhizomatic Insights Across Four Meta-Ethnographic Themes

Theme	Studies included	Sociomaterial Insights	Agential Realism insights	Rhizomatic insights
Theme 1: Language, Identity & Inclusion	(Jeon et al., 2025) (Pérez-Castejón & Vigo-Arazola, 2024) (Yao, 2021)	Identity emerges through language practices, institutional discourse, and peer interaction. Translanguaging and NNES writing are intra-actions within these assemblages.	Agential cuts draw boundaries between native/non-native speakers. Inclusion requires reconfiguring discursive-material norms.	Language practices spread horizontally across contexts; multilingualism deterritorializes standard norms, creating new rootless formations of identity becoming.
Theme 2: Metaphors & Creative Expression	(Baker & Harter, 2015) (Compton- Lilly et al., 2020)	Metaphors and digital media enact learning through affect, representation, and sociotechnical entanglements.	Metaphors and media are material-discursive apparatuses that shape what can be said, felt, and recognized in classrooms.	Creativity moves as a line of flight—escaping the rigid curriculum and sprouting alternative, multimodal literacies beyond fixed classroom roots.
Theme 3: Structures, Resilience & Systems	(Hu & Chan, 2024) (Rasooli et al., 2018) (Gummeson & Sjö Dahl Hammarlund, 2024) (Ang et al., 2021) (Mertala, 2019)	Fairness, resilience, and participation are produced through systems: tools, environments, supports, and feedback loops.	Inclusion and exclusion emerge from material infrastructures—rubrics, routines, and institutional scaffolding.	Support systems form assemblages—interdependent nodes that grow with and around learners rather than above them. They are not rooted hierarchies but adaptive pathways.
Theme 4: Risk, Resistance, and Critical	(Beach & Vigo-Arazola, 2021) (López Fuentes, 2024) 9/24/2025 1:49:00 PM	Students resist through creativity, glitch, silence, and collaborative expression; power shifts with new practices.	Agency is not possessed—it emerges from intra-actions between students, materials, and pedagogical structures.	Resistance is rhizomatic—erratic, nonlinear, and rupturing normalized schooling through silences, glitches, and subversive practices that grow sideways, not upward.

Tab. 1 summarizes four themes from 14 meta-ethnographies, interpreted through sociomateriality, agential realism, and rhizomatic thinking. Together, the themes illustrate how AI-supported analysis can reveal the complex, entangled and emergent nature of educational realities. The table demonstrates that AI-supported analysis can do more than cluster data. It can facilitate a relational and non-binary reading of educational ethnographies. By drawing from posthuman theory, the synthesis resists fixed categories and instead maps the flows, tensions and becomings that constitute the complex realities of educational experience.

In parallel, the same 14 studies were analyzed using ChatGPT as a coding assistant. Drawing on methods from recent literature (e.g., Zhang et al., 2025; Hayes, 2025), AI-supported open

coding helped extract second-order constructs (authorial interpretations rooted in participant experiences). The model surfaced preliminary codes, which were refined by the researcher and clustered into four meta-themes: (1) Language, Identity & Inclusion, (2) Metaphors & Creative Expression, (3) Structural & Environmental Supports, and (4) Risk, Resistance & Critical Agency. The analysis proceeded through iterative interpretation, with AI serving as a tool for pattern recognition and not as a substitute for human judgment.

Findings from both phases were then brought into dialogue. The meta-ethnographic process offered deep theoretical translation across studies. The AI-enhanced coding surfaced nuanced constructs and supported theme validation. This hybrid approach allowed for richer insights into how knowledge, agency and structure manifest across educational contexts, affirming the value of combining interpretive synthesis with AI-supported pattern detection.

Table 2: Evaluating Meta-Meta-Ethnography and AI-Supported Synthesis as Analytical Tools: A Comparative Framework

Dimension	Pilot Study	AI Analysis
Approach	Manual meta-meta-ethnography	AI-augmented meta-synthesis
Coding	Human-led coding of second-order constructs	ChatGPT-generated conceptual codes reviewed by researcher
Synthesis	Reciprocal, refutational, line-of-argument translation	Thematic clustering agential/sociomaterial/rhizomatic mapping
Theoretical Framework	Agential realism, rhizome, sociomateriality	Same, applied in final phase
Output	Reflexive, rich translations	Thematic clarity, speed, broader pattern detection
Findings	Demonstrated the methodological richness and philosophical depth of meta-meta-ethnography for synthesizing complex qualitative literature. Offered high validity, but time- and labor-intensive.	Demonstrated that AI (ChatGPT) can serve as a supportive analytic tool—efficiently surfacing themes, patterns, and connections. Less contextually nuanced but scalable, transparent, and reflexively useful.

Tab. 2 presents a comparative framework of manual meta-meta-ethnography and AI-supported synthesis as tools for qualitative data analysis. It outlines six key dimensions (approach, coding, synthesis method, theoretical framework, output, and findings) used to evaluate the analytical contribution of each method.

The pilot study yielded context-rich and theoretically layered interpretations but required extensive time and human effort. In contrast, the AI-supported approach enabled rapid thematic synthesis and surfaced broad conceptual patterns with notable consistency, though with reduced sensitivity to nuanced context.

Together, the comparison demonstrates that both approaches are methodologically valuable: meta-meta-ethnography offers depth and theoretical rigor, while AI provides scalability, pattern recognition and reflexive support. When used in tandem, they create a powerful triangulated lens for analyzing complex qualitative literature.

Despite the difference in tools and flow, both analyses revealed converging thematic structures, notably:

- *The entanglement of language, identity, and inclusion*
- *The performative function of metaphor and creativity*
- *The influence of structural affordances and constraints*
- *The emergence of critical agency and resistance*

Minor divergences occurred in the depth of theoretical interpretation, with the pilot study providing greater *contextual nuance*, while the AI-supported review offered *conceptual breadth and efficiency*. These differences were complementary rather than contradictory, supporting the findings' credibility.

This triangulation illustrates how AI can act as an interpretive companion that enhances but does not replace human analytical judgment. It affirms the feasibility of using large language models to co-produce meaning with researchers in complex qualitative syntheses.

Conclusion, Implications and Recommendations

The combined analysis of 14 meta-ethnographic studies revealed rich and multi-dimensional insights into how educational practices, technologies, and institutional structures shape knowledge, inclusion, and student experience.

Across both methods, it became evident that educational knowledge is not linear or singular but emerges through the entanglement of social, material, and discursive elements. The *meta-ethnographic synthesis* demonstrated how different studies translate into one another through themes of pedagogy, equity, technology, and student agency. The *AI-supported coding* process reaffirmed these themes while surfacing deeper subthemes such as self-regulated adaptation, metaphorical layering, and professional identity development.

Both analyses highlighted that language is central to identity formation and institutional belonging. Studies on translanguaging and NNES students revealed how linguistic hierarchies impact learning and participation. AI helped surface nuanced constructs around professional identity, while the meta-ethnographic process emphasized the need to reconfigure institutional boundaries for true inclusion.

The use of metaphors and multimodal learning emerged as powerful pedagogical tools. In both approaches, creativity—whether through metaphors or digital media—enabled new ways of meaning-making. Rhizomatic analysis positioned these as “lines of flight,” allowing students and teachers to escape rigid structures and foster transformative practices.

Themes of resilience, assessment fairness, and institutional scaffolding appeared prominently. The meta-synthesis showed how educational systems both enable and constrain agency. AI-supported coding reinforced this by clustering constructs around support strategies, fairness domains, and teamwork infrastructures. Together, they highlighted that student success relies on both individual agency and structural conditions.

Resistance, voice, and disruption surfaced as essential aspects of critical educational engagement. Meta-ethnographic interpretations showed how educational research challenges normative practices, while AI revealed how students use digital tools and silence as forms of agency. This theme illustrated how power is negotiated in everyday educational encounters.

Finally, integrating AI-assisted thematic analysis with interpretive meta-ethnography provided complementary perspectives. While the meta-ethnographic method allowed for

conceptual translation and theoretical synthesis, AI facilitated pattern recognition and enhanced reflexivity. The hybrid approach affirmed that human-AI collaboration can enrich qualitative research without sacrificing depth or critical insight.

This study demonstrates how combining a traditional meta-meta-ethnographic synthesis with AI-assisted thematic analysis can offer depth and efficiency in qualitative research. By synthesizing 14 meta-ethnographic studies and analyzing them through interpretive and AI-enhanced methods, the study reveals new ways of engaging with large bodies of qualitative data in education.

Meta-ethnography remains a valuable methodology for preserving the interpretive richness of qualitative studies. Applied at a meta-level, it allowed this study to trace how educational concepts (identity, inclusion, and fairness) are constructed across research contexts. The addition of ChatGPT-supported coding enhanced the speed and consistency of initial theme development and allowed broader thematic patterns to emerge. AI cannot replace human interpretation, but it effectively assisted in identifying second-order constructs and potential thematic clusters.

The study was guided by posthuman theoretical frameworks (agential realism, sociomateriality, and rhizomatic thinking) which helped reframe data not as static, but as emergent and relational. These theories emphasized how educational meanings materialize through intra-actions among people, technologies and institutional contexts. Rhizomatic thinking, in particular, encouraged a non-linear, interconnected reading of studies, resisting fixed hierarchies and embracing complexity.

By triangulating human and AI-supported methods, this study showcased a hybrid analytical approach that preserved conceptual depth and improved scalability and transparency. Key themes (language and identity, metaphor and creativity, structural supports, and critical resistance) highlight the complex realities of educational research. These findings suggest the need for inclusive, adaptable educational models that account for individual agency and structural constraints.

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References

- Abidin, C., & De Seta, G. (2020). *Private messages from the field: Confessions on digital ethnography and its discomforts*. <https://doi.org/10.33621/jdsr.v2i1.35>
- Ang, W. H. D., Shorey, S., Hoo, M. X. Y., Chew, H. S. J., & Lau, Y. (2021). The role of resilience in higher education: A meta-ethnographic analysis of students' experiences. *Journal of Professional Nursing*, 37(6), 1092–1109. <https://doi.org/10.1016/j.profnurs.2021.08.010>
- Aslan, A., Mold, F., Van Marwijk, H., & Armes, J. (2024). What are the determinants of older people adopting communicative e-health services: A meta-ethnography. *BMC Health Services Research*, 24(1), 60. <https://doi.org/10.1186/s12913-023-10372-3>
- Atkins, S., Lewin, S., Smith, H., Engel, M., Fretheim, A., & Volmink, J. (2008). Conducting a meta-ethnography of qualitative literature: Lessons learnt. *BMC Medical Research Methodology*, 8(1), 21. <https://doi.org/10.1186/1471-2288-8-21>
- Baker, K., & Harter, M. E. (2015). A Living Metaphor of Differentiation: A Meta-Ethnography of Cognitively Guided Instruction in the Elementary Classroom. *Journal of*

Mathematics Education at Teachers College, Vol. 6 No. 2: Fall 2015.
<https://doi.org/10.7916/JMETC.V6I2.616>

Bano, M., Zowghi, D., & Whittle, J. (2024). AI and Human Reasoning: Qualitative Research in the Age of Large Language Models. *AI Ethics Journal*, 4(2).
<https://doi.org/10.47289/AIEJ20240122>

Barad, K. (2007). *Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning*. duke university Press. <https://doi.org/10.2307/j.ctv12101zq>

Barendregt, B. (2021). Digital ethnography, or ‘deep hanging out’ in the age of big data. In *Audiovisual and Digital Ethnography* (pp. 168–190). Routledge.
<https://doi.org/10.4324/9781003132417-8>

Barros, C. F., Azevedo, B. B., Neto, V. V. G., Kassab, M., Kalinowski, M., Nascimento, H. A. D. do, & Bandeira, M. C. G. S. P. (2024). *Large Language Model for Qualitative Research—A Systematic Mapping Study* (Version 4). arXiv.
<https://doi.org/10.48550/ARXIV.2411.14473>

Beach, D., & Vigo-Arazola, M. B. (2021). Critical Ethnographies of Education and for Social and Educational Transformation: A Meta-Ethnography. *Qualitative Inquiry*, 27(6), 677–688. <https://doi.org/10.1177/1077800420935916>

Bhaduri, S., Kapoor, S., Gil, A., Mittal, A., & Mulkar, R. (2024). *Reconciling Methodological Paradigms: Employing Large Language Models as Novice Qualitative Research Assistants in Talent Management Research* (Version 1). arXiv.
<https://doi.org/10.48550/ARXIV.2408.11043>

Bijker, R., Merkouris, S. S., Dowling, N. A., & Rodda, S. N. (2024). ChatGPT for Automated Qualitative Research: Content Analysis. *Journal of Medical Internet Research*, 26, e59050. <https://doi.org/10.2196/59050>

Britten, N., Campbell, R., Pope, C., Donovan, J., Morgan, M., & Pill, R. (2002). Using meta ethnography to synthesise qualitative research: A worked example. *Journal of Health Services Research & Policy*, 7(4), 209–215. <https://doi.org/10.1258/135581902320432732>

Cellard, L. (2022). Algorithms as figures: Towards a post-digital ethnography of algorithmic contexts. *New Media & Society*, 24(4), 982–1000.
<https://doi.org/10.1177/14614448221079032>

Chowdhury, J., Haris Abd. Wahab, Mohd. Rashid Mohd. Saad, Roy, P., & Wronka, J. (Eds.). (2022). *Practices, challenges, and prospects of digital ethnography as a multidisciplinary method*. Information Science Reference. <https://doi.org/10.4018/978-1-6684-4190-9>

Compton- Lilly, C. F., Rogers, R. L., & Lewis Ellison, T. (2020). A Meta- Ethnography of Family Literacy Scholarship: Ways With Metaphors and Silence. *Reading Research Quarterly*, 55(2), 271–289. <https://doi.org/10.1002/rrq.272>

Deleuze, G., & Guattari, F. (1994). *What is philosophy?* Columbia University Press.

France, E. F., Cunningham, M., Ring, N., Uny, I., Duncan, E. A., Jepson, R. G., Maxwell, M., Roberts, R. J., Turley, R. L., Booth, A., Britten, N., Flemming, K., Gallagher, I., Garside, R., Hannes, K., Lewin, S., Noblit, G. W., Pope, C., Thomas, J., ... Noyes, J. (2019). Improving reporting of meta- ethnography: The EMERG e reporting guidance. *Journal of Advanced Nursing*, 75(5), 1126–1139. <https://doi.org/10.1111/jan.13809>

Grigoryan, T. (2024). Short essay: Current issues in digital ethnography: is all ethnography digital? *Journal of Organizational Ethnography*, 13(1), 19–28. <https://doi.org/10.1108/joe-02-2024-0008>

Gummesson, C., & Sjö Dahl Hammarlund, C. (2024). Scaffolding structures to promote widening participation in higher education – a meta-ethnographic analysis of qualitative studies. *Physical Therapy Reviews*, 29(4), 167–176. <https://doi.org/10.1080/10833196.2024.2392066>

Hayes, A. S. (2025). “Conversing” With Qualitative Data: Enhancing Qualitative Research Through Large Language Models (LLMs). *International Journal of Qualitative Methods*, 24, 16094069251322346. <https://doi.org/10.1177/16094069251322346>

Hine, C. (2020). *Ethnography for the internet: Embedded, embodied and everyday*. Routledge. <https://doi.org/10.4324/9781003085348>

Hu, W., & Chan, C. K. Y. (2024). Evaluating technological interventions for developing teamwork competency in higher education: A systematic review and meta-ethnography. *Studies in Educational Evaluation*, 83, 101382. <https://doi.org/10.1016/j.stueduc.2024.101382>

Jeon, J., Coronel-Molina, S. M., & Lee, S. (2025). Conceptualizing foreign language teachers’ translanguaging practices: A meta-ethnography of qualitative literature. *International Journal of Bilingual Education and Bilingualism*, 1–18. <https://doi.org/10.1080/13670050.2024.2433144>

Kapania, S., Agnew, W., Eslami, M., Heidari, H., & Fox, S. (2024). “*Simulacrum of Stories*”: Examining Large Language Models as Qualitative Research Participants (Version 1). arXiv. <https://doi.org/10.48550/ARXIV.2409.19430>

Kozinets, R. V. (2015). *Netnography: Redefined* (2nd edition). Sage.

López Fuentes, A. V. (2024). Student voices in creative teaching practices with digital media: A meta-ethnographic research. *Ethnography and Education*, 19(4), 411–429. <https://doi.org/10.1080/17457823.2024.2368034>

Markham, A. (2012). FABRICATION AS ETHICAL PRACTICE: Qualitative inquiry in ambiguous Internet contexts. *Information, Communication & Society*, 15(3), 334–353. <https://doi.org/10.1080/1369118X.2011.641993>

Mertala, P. (2019). Teachers’ beliefs about technology integration in early childhood education: A meta-ethnographical synthesis of qualitative research. *Computers in Human Behavior*, 101, 334–349. <https://doi.org/10.1016/j.chb.2019.08.003>

Murphy, S., & Headley, M. (2020). The role of digital technology in teen mothers’ and their children’s literacy. *Journal of Early Childhood Literacy*, 20(4), 755–782. <https://doi.org/10.1177/1468798418783326>

Noblit, G. W., & Hare, R. D. (1988). *Meta-ethnography: Synthesizing qualitative studies*. Sage Publications.

Orlikowski, W. J. (2007). Sociomaterial Practices: Exploring Technology at Work. *Organization Studies*, 28(9), 1435–1448. <https://doi.org/10.1177/0170840607081138>

Orlikowski, W. J., & Scott, S. V. (2021). Liminal innovation in practice: Understanding the reconfiguration of digital work in crisis. *Information and Organization*, 31(1), 100336.

Orlikowski, W. J., & Scott, S. V. (2023). The digital undertow and institutional displacement: A sociomaterial approach. *Organization Theory*, 4(2), 26317877231180898.

Pérez-Castejón, D., & Vigo-Arrazola, M. B. (2024). Investigating the education of preservice teachers for inclusive education: Meta-ethnography. *European Journal of Teacher Education*, 47(1), 178–195. <https://doi.org/10.1080/02619768.2021.2019702>

Pink, S., Horst, H. A., Postill, J., Hjorth, L., Lewis, T., & Tacchi, J. (2016). *Digital ethnography: Principles and practice*. SAGE.

Rasooli, A., Zandi, H., & DeLuca, C. (2018). Re-conceptualizing classroom assessment fairness: A systematic meta-ethnography of assessment literature and beyond. *Studies in Educational Evaluation*, 56, 164–181. <https://doi.org/10.1016/j.stueduc.2017.12.008>

Roberts, J., Baker, M., & Andrew, J. (2024). Artificial intelligence and qualitative research: The promise and perils of large language model (LLM) ‘assistance.’ *Critical Perspectives on Accounting*, 99, 102722. <https://doi.org/10.1016/j.cpa.2024.102722>

Toye, F., Seers, K., Allcock, N., Briggs, M., Carr, E., & Barker, K. (2014). Meta-ethnography 25 years on: Challenges and insights for synthesising a large number of qualitative studies. *BMC Medical Research Methodology*, 14(1), 80. <https://doi.org/10.1186/1471-2288-14-80>

Turobov, A., Coyle, D., & Harding, V. (2024). *Using ChatGPT for Thematic Analysis* (Version 1). arXiv. <https://doi.org/10.48550/ARXIV.2405.08828>

Yan, L., Echeverria, V., Fernandez-Nieto, G. M., Jin, Y., Swiecki, Z., Zhao, L., Gašević, D., & Martinez-Maldonado, R. (2024). Human-AI Collaboration in Thematic Analysis using ChatGPT: A User Study and Design Recommendations. *Extended Abstracts of the CHI Conference on Human Factors in Computing Systems*, 1–7. <https://doi.org/10.1145/3613905.3650732>

Yao, H.-Y. (2021). Constructing a conceptual framework for professional identity development in international social work students: A meta-ethnographic review. *Qualitative Social Work*, 20(4), 928–949. <https://doi.org/10.1177/1473325020912831>

Zhang, A., & Orlikowski, W. J. (2022). *Regenerative Coordination: Working with Algorithms to Produce Live Services*. 2022(1), 12864.

Zhang, H., Wu, C., Xie, J., Lyu, Y., Cai, J., & Carroll, J. M. (2025). Harnessing the power of AI in qualitative research: Exploring, using and redesigning ChatGPT. *Computers in Human Behavior: Artificial Humans*, 4, 100144. <https://doi.org/10.1016/j.chbah.2025.100144>