



Roberto Rojas-Alfaro¹ 

Salt Lake Community College,
Salt Lake City, Utah, USA

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Non-formal interviews as model interfaces: A case for deep learning in workplace instructional design research

Extended summary

This study examines non-formal interviews as a qualitative data collection method in instructional design research (IDR), particularly in workplace-based lifelong learning interventions. Traditional qualitative methods, such as formal interviews, rely on retrospective reflections, which may obscure real-time complexities of workplace learning and behavior change. This research proposes non-formal interviews as model interfaces to capture immediate, context-sensitive insights into workplace language use, communication challenges, and professional interactions. Drawing on a case study of Costa Rican airport customs officers learning vocational English, this study explores how real-time, embedded inquiry can enhance instructional design methodologies for workplace training.

Grounded in critical qualitative research (Creswell, 2013), this study advances discussions in IDR (Shernoff et al., 2020), emphasizing deep learning in professional environments (Jones & Sharma, 2021). Workplace learning requires dynamic, behavior-driven interventions (Gunderson, 1999; Bello-Bravo et al., 2022). However, existing IDR methodologies rely heavily on formal interviews, which introduce a reflective buffer—the gap between the event and the participant's recollection (Seidman, 2013). This delay can obscure spontaneous, in-the-moment insights essential for capturing real-world learning challenges. The study aligns with research that underscores the necessity of flexible, adaptive data collection methods in professional environments (Lobe et al., 2020) and builds on previous work on situated workplace learning (Holland, 2019).

¹ roberto.rojas-alfaro@slcc.edu,

 <https://orcid.org/0000-0003-1600-4578>

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Employing an autoethnographic case study (Ellis et al., 2011), the researcher revisited prior research on Costa Rican customs officers who interact daily with English-speaking travelers yet lack formal occupational English training (Rojas-Alfaro, 2021). Non-formal interviews were used to document workplace communication strategies and adaptation through:

- *Shadowing* – Observing customs officers as they execute tasks, interact with travelers, and navigate workplace demands, mapping real-time language use.
- *Observational Conversations* – Engaging officers in situated, informal dialogues that elicit immediate reflections on language barriers and training needs.
- *Researcher-Participant Collaboration* – Adjusting inquiry focus in response to emergent workplace realities, allowing officers to co-construct knowledge about their language use and propose training solutions.

Through this integration, non-formal interviews bridge structured interviews with embedded ethnographic methods (Hamada, 2019), enhancing qualitative insights, ecological validity, and instructional interventions tailored to professional needs.

The study identifies four key affordances of non-formal interviews in workplace instructional design:

1. *Real-Time Data Collection* – Unlike formal interviews, which rely on memory, non-formal interviews capture workplace dynamics as they unfold, providing accurate representations of task execution and language use.
2. *Reduction of the Reflective Buffer* – Asking questions during task execution (e.g., “Why did you do that?”) elicits responses grounded in immediate workplace realities, preventing post-hoc rationalization.
3. *Workplace-Specific Adaptability* – Non-formal interviews accommodate dynamic environments, documenting linguistic adaptation in response to workplace demands and evolving professional practices.
4. *Participant-Driven Insights* – Through shadowing and conversational engagement, participants actively shaped the research process, highlighting emergent needs in vocational English training that structured interviews may not reveal.

Officers frequently relied on informal learning strategies, such as peer-to-peer language exchange and spontaneous role-play with travelers, to develop English proficiency. These findings highlight the need for instructional design models that support real-time workplace learning rather than relying solely on pre-scripted, classroom-based training. Shadowing and observational conversations create essential feedback loops for refining training programs, ensuring greater relevance and engagement.

Additionally, the study highlights the ethical dimension of real-time inquiry in instructional design, emphasizing that transparency, participant agency, and academic integrity must remain central to ensure embedded data collection respects professional boundaries while still yielding actionable insights. By formalizing a structured yet flexible approach to non-formal interviews, this research provides a methodological model that can be adapted for other workplace learning contexts, ensuring instructional design research remains responsive to real-world professional challenges.

Keywords: instructional design research, occupational English, non-formal interview, shadowing, airport customs

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