

Integrating Universal Design for Learning in Scenario-Based Corporate eLearning for travel agents

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Remote, home-based travel agents working within nationwide agencies often develop client communication skills informally through observation, peer modeling, and trial-and-error practice rather than through structured instructional programs. While mentorship and shadowing provide valuable exposure, the lack of standardized, accessible training often results in inconsistent client experiences and variable performance outcomes. New travel agents entering client-facing roles frequently demonstrate inconsistent inquiry practices, including incomplete needs assessment and premature product recommendations. This performance gap directly impacts booking alignment, client satisfaction, and revenue outcomes. Although informal mentorship structures exist, there is limited structured training that supports consistent inquiry skill development in remote environments.

The purpose of this project is to design and evaluate a structured, scenario-based eLearning module that supports travel agents in practicing effective client inquiry techniques. This module integrates Universal Design for Learning (UDL) principles to promote accessibility and learner engagement within a distributed workforce. The primary research question guiding this study is: How can Universal Design for Learning (UDL) principles be intentionally integrated into a performance-based corporate eLearning module to support accessibility while improving first-call booking readiness among newly hired travel agents? A secondary, applied question examines how a UDL-informed, AI-supported

call simulation influences structured inquiry behaviors and booking readiness performance prior to supported practice.

This project addresses a measurable workplace performance gap during a critical stage of onboarding, specifically the transition from training to supported practice. Current onboarding trends indicate that new agents frequently fail to confirm and validate client questionnaire information during live inquiry calls, contributing to incomplete booking readiness, increased follow-up calls, and inconsistent customer experiences. By targeting first-call booking readiness behaviors before agents enter supported practice, this module is positioned to reduce onboarding friction and improve operational efficiency. Additionally, this project contributes to the field of training and development by demonstrating how UDL can be embedded within a performance-based corporate eLearning intervention. While UDL is often discussed in terms of accessibility and engagement, fewer applied projects explicitly connect UDL-informed design decisions to measurable workplace performance outcomes.

This study is grounded in multiple learning theories that support performance-based skill development. Constructivist learning theory supports the use of scenario-based learning, as learners build understanding through active participation in authentic tasks rather than passive information consumption. In the context of client inquiry calls, agents develop stronger decision-making and communication skills through repeated practice and reflection. Scenario-based environments allow learners to test decisions and receive feedback in a safe setting, which improves skill acquisition and transfer (Sitzmann, 2011).

Cognitive Load Theory also informs this design, as new agents often experience high mental demand during live calls. Multimedia learning research suggests that instructional materials should reduce unnecessary cognitive load through clear visuals, structured

guidance, and concise explanations (Clark & Mayer, 2016; Mayer, 2021). By organizing inquiry frameworks visually and embedding guided prompts within scenarios, the design helps learners focus on essential decision-making behaviors. Situated learning principles further support the inclusion of authentic context, as practice environments that mirror real workplace conditions are more likely to transfer to actual performance. Simulation-based training environments are particularly effective for developing applied skills and decision-making in professional contexts (Sitzmann, 2011). Additionally, adult learning principles emphasize the importance of practical application, workplace relevance, and flexibility, all of which are embedded within this training design (Bastoni, 2024).

The development of this module aligns with the ADDIE instructional design model, which provides a structured framework for analyzing needs, designing objectives, developing materials, implementing the solution, and evaluating outcomes. This approach ensures alignment between identified performance gaps, instructional strategies, and measurable outcomes. Research on organizational training highlights the importance of aligning training design with workplace performance metrics, as effective training programs must directly support organizational goals (Salas et al., 2012).

Current trends in corporate eLearning emphasize interactive, performance-based modalities rather than passive content delivery (Clark & Mayer, 2016). Scenario-based learning and simulation are widely used in roles requiring communication and decision-making under time pressure (Sitzmann, 2011). Branching scenarios, in particular, have been shown to increase learner engagement by allowing learners to make decisions and experience consequences within realistic contexts (Pimblett et al., 2025). Multimedia learning principles further support the use of structured visuals paired with concise

explanations (Mayer, 2021). Additionally, the integration of artificial intelligence is an emerging trend that enhances realism and interactivity in training environments, allowing for adaptive feedback and increased authenticity (Holmes et al., 2022). UDL has also gained recognition as a critical framework for ensuring accessibility and inclusivity in digital learning environments (CAST, 2018; Gronseth & Hutchins, 2020).

Despite these advancements, many onboarding programs continue to focus heavily on content delivery rather than applied practice opportunities. While UDL has been widely explored in K-12 and higher education, fewer studies examine its intentional integration within performance-based corporate eLearning. Limited research directly connects inclusive design strategies to measurable operational metrics such as booking readiness rates and onboarding efficiency. This gap highlights the need for applied research examining how UDL-informed, simulation-based eLearning can support both accessibility and performance outcomes. The Booking Brilliance module addresses this gap by integrating UDL principles within a scenario-based training environment designed to improve first-call booking readiness.

This study employs a design-based research (DBR) approach within a professional onboarding context. DBR is appropriate because it supports the iterative development and evaluation of an instructional intervention in a real-world setting. The module will be designed, implemented, and evaluated prior to agents entering the supported practice phase, allowing findings to inform refinements and contribute to applied research on UDL-informed training. This approach aligns with the project's dual focus on improving workplace performance while examining accessibility and learner preparedness.

Participants will include newly hired travel agents completing onboarding training. These learners are adult professionals with foundational knowledge but limited experience applying inquiry frameworks during live calls. The training is delivered asynchronously in a remote environment, requiring clear, accessible design that supports independent engagement. The instructional design process follows ADDIE phases. During analysis, performance data identified gaps in validating client information and achieving booking readiness. During design, learning objectives were aligned to structured inquiry behaviors, and UDL principles were embedded through multiple means of representation, engagement, and action and expression. Development includes building interactive scenarios, structured feedback mechanisms, and accessible design features.

Multiple instruments will be used to measure success, including a simulation performance scoring rubric, scenario decision tracking, self-efficacy surveys, and booking readiness performance data. Data collection will occur during onboarding, with simulation data collected automatically and performance tracked during supported practice. Data analysis will include descriptive statistics, comparative analysis of confidence measures, and thematic analysis of qualitative feedback. These methods allow for evaluation of both perceived readiness and observable performance outcomes.

Several limitations shape this study, including its focus on a single organization, a limited sample size, and reliance on historical baseline data rather than a randomized control group. Additionally, AI-supported simulations may not fully replicate real client variability. Despite these limitations, the study provides meaningful insight into how structured, UDL-informed, simulation-based training can influence early onboarding performance and booking readiness behaviors.

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