# A2, D2, E2 Instructional Systems Design Model

Dream Team: Brady Davis, Paola Delarosa-Lloret, Leah Willis

Syracuse University

IDE 632: Instructional Design and Development II

Dr. Xiaoxia “Silvie” Huang

April 20, 2025

## Executive Summary

This paper applies the A2, D2, E2 instructional design model to support the effective integration of AI in the hiring process at Orange Peel Lending. While AI tools are in use for screening, interviewing, and immersive candidate assessments, leadership lacks training on how to interpret AI outputs and incorporate them into final hiring decisions. Using this model's iterative framework, the project addresses gaps in adoption, trust, and understanding. A front-end analysis revealed performance barriers including inconsistent training, unclear messaging, and stakeholder resistance.

The proposed solution includes interactive training modules, immersive simulations, and a targeted communication plan designed to increase buy-in and compliance. By equipping HR and hiring managers with practical skills and clarity, the initiative aims to improve hiring consistency, candidate experience and long-term retention, positioning Orange Peel Lending as a leader in ethical, AI-enhanced talent acquisition.

## Table of Contents

## Introduction

Mid and senior-level leaders in the financial industry lack understanding in how their human resources departments integrate Artificial Intelligence (AI) into the hiring process. Many companies utilize AI to develop job postings, screen initial applicants and even conduct opening rounds of interviews. Orange Peel Lending currently employs these tools when hiring across multiple divisions, including origination, underwriting, account management and servicing. These tools are critical to hiring managers' initial applicant assessments, but leaders lack the training to integrate this process into the next round of interviews and ultimately the employment offer. Leaders must undergo professional development to learn how to maximize initial AI integration in the hiring process at Orange Peel Lending.

## Model Background

### Context

Orange Peel Lending experienced a significant increase in turnover rates from 1Q FY 22 to 4Q FY 24, including a 15% year-over-year increase in turnover from 2Q FY 24 as compared to 2Q FY 23. This, combined with a perceived difficulty in assimilating "Post-COVID hires," has led company leadership to assess greater AI integration in the hiring process. The company began AI hiring in 1Q FY 23. These new hires have demonstrated a perceived improvement with department assimilation and a documented decrease in HR-related reports, including tardiness, missed days, and failure to accurately utilize timecards. This population has also shown a willingness to volunteer for additional work hours at a rate that is 18% higher than similarly tenured employees who were hired without the use of full AI integration.

AI integration in the hiring process as defined at Orange Peel Lending includes three specific touchpoints. Touchpoint 1 includes an AI review of resumes and cover letters. This process is common for all new hires, but hiring managers within each department have the ability to "override" these results and move a candidate into the next phase of the hiring process. Touchpoint 2 includes a full AI interview with Ophelia, Orange Peel Lending's AI humanoid hiring expert. Ophelia interviews have occurred at a 72% rate for the last 200 hires. Following Ophelia, department-specific hiring managers and the heads of departments themselves will sit down for a candidate interview. Based on need, Ophelia results may be "waived" to bring candidates on board in times of increased demand as defined by department leadership and approved by HR.

Finally, Touchpoint 3 includes a fully immersive AI experience for the candidate. Each department has created specific scenarios, and upon request, candidates participate in these AI immersions, sharing the results with department leadership. Some departments currently hold the view that Orange Peel Lending's immersive experience is unnecessary and does not add any genuine credibility to the hiring process. Managers have told many candidates, depending on the department, not to worry about the results during their previous interviews.

Perceived and empirical evidence suggests that candidates who are hired after successfully completing all three touchpoints experience more rapid assimilation, improved performance

reviews, and greater retention than similar candidates who were either not exposed to AI at all or had a portion of the AI process waived. Orange Peel Lending, executive leadership has asked for the Dream Team to assist with the perceived lack of buy-in and implementation of the full AI hiring process prior to mandating this for all new employees. The leaders hope that the Dream Team can effectively bridge the gap between those who oppose this process and the data demonstrating a significant improvement in hiring and retention metrics across each department.

**Key Personnel & Their Roles**

Key personnel will include the Instructional Design Lead with their team, Subject Matter Experts, Trainers/Facilitators, Evaluators, and Information Technology Specialists. The Instructional Design Lead and team are responsible for leading the overall design process, ensuring alignment with learning objectives, instructional strategies, and technology integration.

They engage in needs analysis and collaborate with SMEs. Subject Matter Experts provide content expertise, ensuring accuracy and relevance of instructional material, and assist in appraising content and resources. Trainers/Facilitators deliver training sessions, provide instructor-led support, and ensure smooth execution of the learning experience. Evaluators design and conduct formative and summative evaluations, collect feedback, and refine instructional materials, ensuring effectiveness through testing and data analysis. IT Specialists develop e-learning content, multimedia, and interactive elements, and ensure usability and accessibility of digital resources.

**Table 1**
*Key Personnel and Roles*

| Role | Description of the Role |
|---|---|
| Instructional Design Lead/Team | Lead the overall design process, ensuring alignment with learning objectives, instructional strategies, and technology integration. The role also involves engaging in needs analysis and collaborating with SMEs. |
| Subject Matter Experts | Provide content expertise, ensuring the accuracy and relevance of instructional materials. Assist in appraising content and resources. |
| Trainer/Facilitators | Deliver training sessions, provide instructor-led support, and ensure smooth execution of the learning experience. |
| Evaluators | Design and conduct formative and summative evaluations, collect feedback, and refine instructional materials. Ensure effectiveness through testing and data analysis. |
| IT Specialists | Develop e-learning content, multimedia, and interactive elements. Ensure usability and accessibility of digital resources. |

## Environment

The core functions of Orange Peel Lending functions include loan origination, underwriting, servicing, and collections. The company is organized into several departments including sales, customer service, risk assessment, compliance, and IT. The technology infrastructure consists of loan management software, customer databases, and digital banking tools. Key stakeholders include employees, investors, and borrowers.

## Supra System (External Environment)

The external environment includes regulatory bodies such as government agencies like the Federal Reserve, CFPB, FHA, or local banking regulators. Financial markets, including interest rates, housing market trends, and global economic conditions, also impact operations. Competitors include other banks, credit unions, and online mortgage lenders. Technology and innovation factors such as FinTech companies, blockchain, and AI-driven underwriting are relevant considerations. Legal and compliance factors include mortgage laws, anti-money laundering regulations, and fair lending policies. Customers and the real estate market, including borrowers, realtors, property values, and economic conditions, also represent important external factors.

## Intended Audience(s)

The primary audience for this instructional initiative includes Human Resources (HR) professionals and hiring managers who are directly involved in the recruitment process at Orange Peel Lending. This group comprises recruiters responsible for sourcing and screening applications using AI tools and hiring managers who must interpret AI-generated data to make final selection decisions. These individuals require a comprehensive understanding of integrating AI insights ethically and effectively into their workflows.

Secondary audiences include compliance and legal teams who ensure hiring practices align with regulations such as the Equal Employment Opportunity Commission (EEOC) guidelines and the Americans with Disabilities Act (ADA). Their participation is essential in reinforcing transparency, fairness, and legal defensibility of AI-assisted decisions. The instructional design will also support IT and AI administrators managing the technological infrastructure. These stakeholders are critical in ensuring the reliability, interpretability, and security of AI systems used throughout the hiring process.

Executive leadership, such as the Chief Human Resources Officer (CHRO), Chief Technology Officer (CTO), and department heads, form a tertiary audience. While not directly involved in daily hiring decisions, their buy-in and strategic alignment are vital for organization-wide adoption and policy development. Finally, end-users such as current employees and potential new hires indirectly benefit from improved consistency, fairness, and efficiency in the hiring process. Ensuring transparency and communication about AI's role in hiring contributes to trust and a more inclusive candidate experience.

## Rationale for Model

The A2, D2, E2 model provides a strategic framework that supports the integration of AI into the hiring process at Orange Peel Lending. Unlike linear models such as ADDIE, A2, D2, E2 emphasizes iterative reflection and evaluation using each stage, enhancing alignment with complex, evolving systems (Bratton, 1980). The model's emphasis on stakeholder collaboration and real-time feedback mirrors best instructional consultation and design practices.

Drawing from Davies' (1975) theory of advice, the instructional design team should not prescribe rigid solutions but instead act as advisors who co-create pathways with clients, ensuring shared ownership of the solution. Collaboratively negotiating a balance between innovation and tradition is crucial when addressing hesitancy around AI-driven hiring.

The model also addresses key cultural regulatory barriers. Malamed (2019) emphasizes the importance of showing clients the learner perspective and using prototypes to demonstrate impact, an approach integrated into the development phase of this project through immersive simulations. The model's built-in compliance checkpoints at every phase mirror the accountability structures Conant (2012) argues are critical to building high-performing teams grounded in trust, competence, and candor.

## Assumptions

The evaluation of implementing the A2, D2, E2 Model for Orange Peel Lending includes multiple underlying assumptions. The analysis assumes that Orange Peel Lending possesses the infrastructure and technological resources necessary to deploy AI-driven hiring processes while the company's HR, IT, and leadership teams show unified support for this implementation. The reliability and effectiveness of AI systems for hiring depend on their ability to execute fair and unbiased data-driven decisions while accurately evaluating candidate skills and potential performance and having validated algorithms that meet reliability and ethical standards.

The resistance to AI-driven hiring among stakeholders results from unfamiliarity with AI rather than inherent opposition to AI integration and education initiatives can enhance buy-in among HR teams, hiring managers, and employees. The model's evaluation phase depends on ample historical employee performance and retention data while AI hiring tools should process and interpret HR data accurately without substantial errors.

The development and maintenance of the AI hiring system will follow all applicable employment laws such as EEOC and ADA while legal teams will constantly evaluate and resolve potential biases and legal issues. To maintain continuous improvement, the organization must dedicate itself to making iterative enhancements based on evaluation results and provide resources to update the AI system and instructional model as required.

## Constraints

Current constraints include several categories of limitations. AI hiring systems must follow precise legal and ethical standards because of regulatory and ethical restrictions which control data usage and interpretation. The implementation process becomes more complex because organizations must prioritize bias detection and mitigation strategies.

Some departments may oppose complete AI integration due to concerns about automated systems replacing human decision-making. Leadership along with employees need comprehensive training and reassurance to embrace AI-driven hiring methods fully. AI tools demand substantial financial and technical resources for development and maintenance as well as integration with existing HR systems which limit technological implementation. Unresolved AI assessment issues such as system failures and biases can negatively affect hiring decisions. HR staff members and IT experts need to receive training that enables them to manage and interpret results from AI-based hiring systems effectively.

AI hiring systems face scalability and adaptability challenges since they need to adjust to various job roles and organizational changes across different departments. Different industries or company growth stages may necessitate changes to the model. Implementing the A2, D2, E2 model presents major time and budget limitations due to the extensive time needed for its development, testing, training, and evaluation processes. The extent of AI-powered recruitment processes and the creation of complete AI experience for every position may be restricted by financial limitations. Effective AI hiring solutions depend on high-quality data which must remain free of bias and maintain relevance. AI systems can perpetuate existing biases found in historical hiring data which necessitates ongoing system monitoring and adjustments.

It is essential to consider how the long-term effects may remain uncertain. Initial results show better hiring and retention rates, but long-term success remains unconfirmed. It's necessary to perform regular evaluations of AI hiring models to prevent the introduction of new inefficiencies and unintended outcomes.

## Model Analysis and Design

The image below illustrates the A2 D2 E2 model, a cyclical process framework that represents six interconnected stages: Appraise, Analyze, Design, Develop, Execute, and Evaluate. Each stage flows into the next, emphasizing continuous improvement and iteration. The circular arrows at the center highlight the model's iterative nature, supporting ongoing refinement and feedback loops in problem-solving or project management contexts.

**Figure 1**
*A2 D2 E2 Model (Open AI, 2025)*


**Model Components**

The Analyze, Appraise, Design, Develop, Execute & Evaluate (A2, D2, E2) model integrates key aspects of ADDIE with an additional up-front focus on feasibility in the Appraisal Phase. An Execution Phase replaces ADDIE's Implementation Phase as implementation is only one aspect of this phase.

In the Analyze phase, the team identifies learning needs, audience characteristics, and instructional goals. They conduct a gap analysis to determine what learners already know versus what they need to know, and gather data through surveys, interviews, or assessments.

During the Appraise phase, the team critically evaluates existing resources, learning constraints, and technological capabilities. They assess feasibility, budget, and time constraints for the instructional project, and determine the most effective learning strategies based on findings.

In the Design phase, the team creates a structured plan outlining learning objectives, content sequencing, and instructional methods. They develop blueprints for assessments, activities, and multimedia elements, and select appropriate instructional strategies (e.g., problem-based learning, gamification, or blended learning).

The Develop phase involves creating instructional materials, such as e-learning modules, lesson plans, presentations, and assessments. The team incorporates multimedia, interactive elements, and real-world applications, and conducts pilot testing or prototyping to refine materials.

During the Execute Phase, the team implements instructional materials into the intended learning environment, delivers training sessions, workshops, or online courses, and monitors learner engagement and progress in real time.

Finally, in the Evaluate phase, the team assesses the effectiveness of the instructional program using formative and summative evaluations, gathers feedback from learners and instructors, and makes necessary revisions for continuous improvement.

## Front End Analysis

Front-End Analysis will begin with conducting a comprehensive needs assessment to determine existing knowledge gaps and training necessities within the target audience. This will involve gathering data through structured surveys, direct observations, interviews, and reviewing existing documents and materials relevant to current procedures and performance outcomes. An audience analysis will then take place to deeply understand learners' prior knowledge, skills, experiences, attitudes, motivation, and demographic factors that could affect the instructional approach. Finally, a thorough gap analysis will pinpoint precisely where current organizational and individual performance differs from desired performance, thus clearly guiding subsequent instructional design decisions.

## Instructional Goals and Objectives

The instructional goals will focus on equipping hiring managers and HR professionals with the knowledge and skills necessary to effectively integrate and utilize AI-driven hiring tools in recruitment processes. Instructional objectives will detail specific, measurable outcomes, such as accurately interpreting AI-generated candidate screening results and effectively managing AI-driven interview processes. Objectives will clearly articulate expectations, using actionable verbs to describe precisely what learners must accomplish regarding AI hiring tools and methods. Together, these clearly defined goals and objectives will establish a structured foundation for developing targeted training and assessing learners' proficiency in AI-enhanced recruitment practices.

## Methods and Media for Instruction

The instructional approach will feature interactive online modules and scenario-based simulations that enable learners to interact with AI hiring systems in authentic hiring situations. Through virtual training sessions and facilitated webinars learners will receive expert demonstrations and guided practice with real-time question and answer sessions to improve AI tool comprehension. We will use media resources including video demonstrations and digital job aids alongside infographics and interactive tutorials to simplify complex ideas and help learners understand and apply AI-generated data. Online discussion forums and collaboration platforms will promote ongoing communication between peers while maintaining learner engagement during the entire instructional program.

## Formative and Summative Evaluation

Formative evaluation will include continuous stakeholder feedback loops throughout the pilot phase to ensure the learning experience is responsive and iterative. As Davies' (1975) emphasized, both relational and task-based feedback are critical; evaluation is not simply about what was delivered, but how the design team and client co-navigated its implementation. Drawing from Chevalier's (2001) diagnosis and prescription phases, evaluation tools will be adapted to reflect how each department defines performance. By customizing key performance indicators and using collaborative goal setting, the design team ensures that evaluation is meaningful and context specific.

Summative evaluation will measure outcomes such as retention, assimilation, stakeholder satisfaction, and perceived value. These qualitative measures are necessary to capture nuanced shifts in mindset and buy-in, echoing Conant's (2012) emphasis on building trust and transparency as indicators of long-term impact.

## Communication and Diffusion Plan

An effective communication and diffusion plan must address both technical and relational dimensions. Chevalier's (2001) seven-step performance consulting framework highlights preparation, rapport-building, and continuous follow-up as essential steps to influencing client readiness. These stages align with the Execute and Enhance phases in the A2, D2, E2 model and provide a template for engaging resistant stakeholders across departments.

Additionally, Davies' (1975) outlines the importance of clarifying assumptions early in the consultant-client relationship. To reduce misalignment and conflict, communication will include opportunities for stakeholders to surface competing interpretations of AI integration. These moments will be intentionally facilitated to foster candor and trust, a dynamic Contant (2012) identifies as a foundational condition for successful teams.

Messaging will incorporate learner-centered stories and visual prototypes, strategies Malamed (2019) recommends for persuading stakeholders who may be skeptical of abstract or overly technical arguments. By aligning each stakeholder group with the vision for improved performance and retention, the diffusion strategy becomes less about enforcement and more about shared investment.

### Target Audience and Messaging

The chart below depicts our target audience and key messaging.

**Table 2**
*Target Audience and Messaging*

| Audience | Key Message | Preferred Channels |
|---|---|---|
| **Executive Leadership** | AI hiring improves performance, retention, and scalability. This training aligns with strategic goals. | Executive briefings, dashboards, intranet posts |
| **HR & Talent Acquisition Teams** | Maximize candidate assessment efficiency and fairness by mastering AI hiring tools. | Interactive training sessions, newsletters |

| | | |
|---|---|---|
| **Departmental Hiring Managers** | Learn how to interpret and apply AI results to improve team fit and success. | Webinars, job aids, workshops |
| **Legal & Compliance** | Ensure AI hiring is ethical and fully compliant with employment law. | Policy updates, compliance briefings |
| **IT & Tech Teams** | Support the technical implementation and sustainability of AI hiring platforms. | Internal technical meetings, project portals |
| **Employees & New Hires** | Understand how AI shapes hiring and what it means for internal growth opportunities. | Onboarding sessions, FAQ documents |

## Conclusion

Orange Peel Lending can achieve successful AI integration in their hiring process by ensuring leaders understand and apply AI insights properly. The A2 D2 E2 framework provides a strong and adaptable structure which tackles both teaching and functional obstacles during this transition. The initiative positions Orange Peel Lending to become a leader in ethical, efficient, and innovative hiring practices through their evaluation of current capabilities alongside targeted training and structured learning strategies.

A strategic diffusion plan combined with continuous communication enables the organization to develop a culture of adaptability so that all departments can fully utilize AI's capabilities. The initiative sets a new standard for scalable and compliant talent acquisition while resolving present challenges because data demonstrates enhanced performance with AI-supported hiring which improves both retention and employee engagement.

## References

Bratton, R. (1980). The Instructional Development Specialist as Consultant. *Journal of Instructional Development*, 3(2), 2-8.

Chevalier, R. (2001). Performance Consulting: Job Aids for Interacting With Clients. *Performance Improvement*, 40(1), 28-31.

Conant, D. (2012). Building Effective Teams isn't Rocket Science, but it's Just as Hard. *Harvard Business Review*. https://hbr.org/2012/04/consistently-building-highly-e

Davies, I. (1975). Some Aspects of Theory of Advice: The Management of an Instructional Developer-Client, Evaluator-Client, Relationship. *Instructional Science,* 3(4), 351-373.

Malamed, C. (2019). Persuading Clients To Accept Your Course Design. *The eLearning Coach*. https://theelearningcoach.com/business/persuading-clients-to-accept-course-design/

OpenAI. (2025). *ChatGPT conversation* [Large language model]. Retrieved March 3, 2025.

# Appendix

## Peer Review

Our presentation was widely praised for its strong visual appeal, clear structure, and engaging delivery. Reviewers highlighted how we effectively used a scenario-based introduction to establish context and draw in the audience, as well as our consistent visual design and smooth transitions. The use of visual aids and icons was especially appreciated for enhancing clarity. Our recap of the model and the interactive Q&A format stood out as strengths, helping reinforce understanding and keeping the audience engaged. Additionally, our team's cohesiveness and professional tone were evident throughout the presentation.

That said, there are a few areas where we could improve to take our work from excellent to outstanding. Reviewers suggested that we slow down the pace between slide transitions, particularly during the model explanation, to give the audience more time to process the information. Adding more visuals to illustrate each phase of the model and smoothing out our audio transitions would also help improve clarity and flow. Using more variation in tone and energy could help keep viewers even more engaged. Finally, peers stated that including a comparison with existing models like ADDIE could add depth and context to our design. We implemented this comment into the beginning of our "Model Components" section.