

EDTC 6321 Instructional Design Instructional Design Project (IU's 1-5)

Project Description

The EDTC 6321 Instructional Design Project focused on designing, developing, implementing, and evaluating an instructional unit that teaches middle school students how to create a simple educational PowerPoint presentation. Using demonstration and guided practice, learners develop a 6–8 slide presentation that incorporates organized content, readable formatting, images or video, design themes, transitions, and animations. The instructional unit includes step-by-step visual storyboards, teacher demonstrations, hands-on student practice, an observation checklist, a performance rubric, review questions, and a learner-feedback survey. The project demonstrates the systematic application of instructional design principles to create an engaging, technology-supported learning experience for beginning PowerPoint users.

Standards Met

This project demonstrates proficiencies in the following AECT standards: Standard 1 – Content Knowledge, Standard 2 – Content Pedagogy, Standard 3 – Learning Environments, Standard 4 – Professional Knowledge and Skills, and Standard 5 – Research. The chart below illustrates the performances that fulfill the AECT standards.

AECT 2012 Standards	
Standard 1 – Content Knowledge: Candidates demonstrate the knowledge necessary to create, use, assess, and manage theoretical and practical applications of educational technologies and processes.	
Performance indicators:	Justification
1.1 Creating. Candidates demonstrate the ability to create instructional materials and learning environments using a variety of systems approaches.	<i>The project created a complete instructional unit and learning environment using a systems-oriented sequence of goal setting, objectives, materials, teacher demonstrations, guided student practice, assessment, and feedback. The storyboard-supported lesson guides learners step by step from opening PowerPoint through creating, designing, previewing, and saving a presentation.</i>
1.2 Using. Candidates demonstrate the ability to select and use technological resources and processes to support student learning and to enhance their pedagogy.	<i>Microsoft PowerPoint, an overhead projector/display, screenshots, instructional video, and student computers were deliberately selected and used to support learning. These resources allow students to observe procedures and immediately repeat the demonstrated actions on their own computers.</i>

Standard 2 – Content Pedagogy: Candidates develop as reflective practitioners able to demonstrate effective implementation of educational technologies and processes based on contemporary content and pedagogy.	
Performance indicators:	Justification
2.1 Creating. Candidates apply content pedagogy to create appropriate applications of processes and technologies to improve learning and performance outcomes.	<i>The instructional unit applies computer-skills pedagogy by combining modeling with guided hands-on practice. Rather than only explaining PowerPoint features, the lesson requires students to create slides, organize information, add multimedia, apply design features, and save a finished product.</i>
2.2 Using. Candidates implement appropriate educational technologies and processes based on appropriate content pedagogy.	<i>Appropriate educational technologies and processes are implemented throughout the lesson. Visual demonstrations and storyboard screenshots show where tools are located, while students practice the same procedures on their computers and receive immediate teacher support and feedback.</i>
2.4 Managing. Candidates manage appropriate technological processes and resources to provide supportive learning communities, create flexible and diverse learning environments, and develop and demonstrate appropriate content pedagogy.	<i>The lesson manages technological resources and instructional processes through clear teacher guidance, student guidance, pacing, visual demonstrations, troubleshooting support, and structured practice. The plan also anticipates learner needs by directing the teacher to support struggling learners and monitor participation.</i>
2.5 Ethics. Candidates design and select media, technology, and processes that emphasize the diversity of our society as a multicultural community.	<i>The design supports a diverse group of middle school learners through visual demonstrations, step-by-step directions, guided practice, immediate feedback, and opportunities to work at the task level. These approaches reduce dependence on a single mode of instruction and provide multiple ways for learners to access procedural information.</i>
Standard 3 – Learning Environments: Candidates facilitate learning by creating, using, evaluating, and managing effective learning environments.	

Performance indicators:	Justification
3.1 Creating. Candidates create instructional design products based on learning principles and research-based best practices. 3.2 Using. Candidates make professionally sound decisions in selecting appropriate processes and resources to provide optimal conditions for learning based on principles, theories, and effective practices. 3.6 Diversity of Learners. Candidates foster a learning community that empowers learners with diverse backgrounds, characteristics, and abilities.	<i>The project creates an instructional-design product organized around an explicit goal, measurable lesson objectives, demonstrations, guided practice, learner reflection, and assessment. The sequence reflects an instructional-design process in which teaching materials, activities, and evaluation are aligned with the intended performance.</i> <i>The selected processes and resources provide appropriate conditions for beginning PowerPoint learners. Screenshots, projected demonstrations, student computers, practice time, multimedia examples, and teacher feedback are combined so learners can see a procedure, perform it, and receive support when needed.</i> <i>The lesson supports learners with different levels of prior technology experience by providing visual demonstrations, explicit step-by-step directions, guided practice, troubleshooting, and immediate feedback. The teacher is specifically directed to support struggling learners and use visual demonstrations for diverse learners.</i>
Standard 4 – Professional Knowledge and Skills: Candidates design, develop, implement, and evaluate technology-rich learning environments within a supportive community of practice.	
Performance indicators:	Justification
4.4 Assessing/Evaluating. Candidates design and implement assessment and evaluation plans that align with learning goals and instructional activities.	<i>Assessment is aligned with the instructional goal and lesson activities through an observation checklist, presentation rubric, review questions, and learner-feedback survey. Students are evaluated on observable skills such as opening PowerPoint, creating slides, adding multimedia, applying design features, and saving the presentation, while the rubric evaluates organization, multimedia use, readability, and design consistency.</i>

4.5 Ethics. Candidates demonstrate ethical behavior within the applicable cultural context during all aspects of their work and with respect for the diversity of learners in each setting.	<i>The instructional plan demonstrates respect for learner differences by providing clear expectations, accessible procedural guidance, guided practice, feedback, and teacher assistance rather than assuming equal prior technology knowledge. Learner feedback is also solicited to identify difficulties and improve the instructional experience.</i>
Standard 5 – Research: Candidates explore, evaluate, synthesize, and apply methods of inquiry to enhance learning and improve performance.	
Performance indicators:	Justification
5.1 Theoretical Foundations. Candidates demonstrate foundational knowledge of the contribution of research to the past and current theory of educational communications and technology. 5.2 Method. Candidates apply research methodologies to solve problems and enhance practice. 5.3 Assessing/Evaluating. Candidates apply formal inquiry strategies in assessing and evaluating processes and resources for learning and performance.	<i>The project reflects foundational instructional-design principles by connecting goals and objectives with demonstrations, learner practice, assessment, and evaluation. The project cites Branch (2009) and Reiser and Dempsey (2018) as instructional-design references supporting the systematic planning and evaluation of learning experiences</i> <i>The project applies an instructional-design process to solve a practical learning problem: helping beginning middle school learners create an organized educational PowerPoint presentation. Learner performance is examined through observation and a rubric, while a feedback survey collects information about confidence, lesson clarity, difficulties, and suggestions for improvement.</i> <i>Formal inquiry and evaluation strategies are built into the unit through the observation checklist, performance rubric, review questions, and Google Form feedback survey. These tools provide multiple forms of evidence about both learner performance and the effectiveness of the instructional materials. The systematic use of assessment and learner feedback is consistent with the</i>

	<i>instructional-design and evaluation approaches described by Branch (2009) and Reiser and Dempsey (2018).</i>
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Modifications Made

The instructional unit developed across the EDTC 6321 project as the lesson materials, learner guidance, and evaluation components became more detailed. Short-term modifications included strengthening the step-by-step directions, organizing the PowerPoint tasks into a clearer sequence, adding storyboard screenshots and visual demonstrations, clarifying teacher and student guidance, and strengthening the assessment plan with an observation checklist, presentation rubric, and review questions. The project also added a Google Form feedback survey so learners can report their confidence after training, identify difficult parts of the lesson, evaluate the usefulness of screenshots and demonstrations, and suggest improvements.

Long-term modifications will focus on improving the unit after additional implementation with learners. Future revisions may include replacing or updating interface screenshots when PowerPoint changes, adding short video demonstrations for procedures that learners find difficult, providing additional guided practice for learners who need more support, and revising instructions or pacing based on observation, rubric results, and learner-feedback data. If the lesson is implemented with additional groups, these data can be used as summative evidence to document further improvements to the instructional solution

References

Branch, R. M. (2009). Instructional design: The ADDIE approach. Springer.
 Reiser, R. A., & Dempsey, J. V. (2018). Trends and issues in instructional design and technology (4th ed.). Pearson.