

Case Study: Theory & Frameworks in Action

Applied Concepts

Backwards Design, Universal Design for Learning, Scaffolding, Bloom's Taxonomy, Formative Assessment, Motivation Theory, Self-determination Theory, Inclusive Design

Overview

This activity was developed for an "Introduction to Critical Thinking" course to facilitate learners' mastery of source evaluation in research and writing. By employing the CRAAP Test, the activity integrates theoretical analysis with practical skill development.

Within the context of Learning Experience Design, this activity exemplifies the application of learning theories and design frameworks to create structured, goal-oriented resources that promote measurable learner outcomes.

Rationale & Framework Outline

Students are provided with a list of potential sources for a research paper. They are required to select one source and evaluate it using the [CRAAP Test](#) to assess whether it meets academic standards. For each CRAAP Test category, students compose a two-sentence summary of their evaluation. Example sources include a research study, a blog, a Wikipedia page, a magazine article, and an academic journal article.

Framework: Backward Course Design with Integrated Scaffolding

The designer applied Backward Course Design to align early concept exposure with the final goal of producing a high-quality, evidence-based research paper. The worksheet requires learners to master evaluation techniques early in the term and to demonstrate their ability to assess the quality of evidence before constructing complex arguments (Scaffolding).

Alignment with Bloom's Taxonomy

The course learning outcomes are mapped to Bloom's Taxonomy to ensure alignment with the cognitive levels and knowledge types required for critical inquiry. These outcomes are directly supported by the activity and indirectly reinforced through scaffolding.

Outcome	<i>Cognitive</i>	<i>Types of Knowledge</i>
Identify credible sources and evidence to support claims and arguments	Analyze	Procedural
Create well-reasoned, coherent arguments supported by evidence and logical structure	Create	Procedural + Conceptual
Evaluate the strength, validity, and soundness of arguments	Evaluate	Conceptual

Assessment Strategy: Formative Assessment

This activity offers a formative assessment, allowing students to practice evaluation and receive feedback in a low-stakes environment. Curating a list focused on source quality supports learning and minimizes frustration. This method helps students strengthen their skills before tackling high-stakes research projects.

Motivation Theory: Self-Determination Theory (SDT)

The design applies Self-Determination Theory by emphasizing learner autonomy and relevance. Instead of assigning a single text, the activity offers five source types, allowing learners to choose a medium that matches their interests or goals. This choice increases intrinsic motivation, and real-world digital literacy scenarios keep the activity relevant to learners' experiences.

Inclusive Design and Accessibility

Following Universal Design for Learning (UDL) principles, especially "Multiple Means of Representation," the artifact draws on sources ranging from popular media to peer-reviewed journals. This range supports learners with diverse academic backgrounds and research experience. Multiple entry points lower barriers to engagement and enhance accessibility.

Instructional Design Reflection

As an Instructional Designer, I see the Evaluating Sources activity as a critical diagnostic tool rather than a simple exercise. By combining the CRAAP Test with structured two-sentence summaries, the design encourages deeper analysis and gives instructors measurable evidence of learners' critical thinking. This structure shifts the curriculum from passive learning to analytical synthesis, which is essential for effective critical thinking instruction.