

## **UDL Principles of Action and Expression Analysis**

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For this analysis of the UDL Principle of Action and Expression, the author examined the relationship between the knowledge check quiz in Module 3 on Canvas Courses with the instruction page and discussion prompts in Module 11 on Evaluation: Canvas Courses. Within this paper, the author analyzed course design choices that support the UDL guidelines of action and expression and areas that limit choices for diverse learners. Finally, reflection and synthesis will consider the ACE course and the challenges of implementing UDL guidelines for providing multiple means of action and expression, along with possible instructional solutions.

Module 3 on Canvas courses contains eight sections for incorporating UDL best practices into Canvas courses. First, Module 3 supports Checkpoint 6.3: *Facilitate managing information and resources (CAST 2018)*. Designing and planning a Canvas course to include appropriate accessibility features may seem overwhelming. However, Module 3 lists the essential components of a Canvas course and addresses each component with an individual page in Module 3. Furthermore, the individual web pages within these modules instruct on best practices within a Canvas course using the instructional strategies of combining text, tutorial videos, and annotated screenshots to highlight a process, per Checkpoint 5.1: *Multiple means for communication (CAST 2018)*. Finally, the visually annotated screenshots may clarify the confusion if a learner needs help understanding the procedures in a text format.

Module 11.1 displays the process of evaluating two Canvas pages using Cidi Labs Design tools. Using Cidi Labs Design tools during this process supports providing *multiple tools for construction and composition*, per Checkpoint 5.2 (CAST 2018). Additionally, the procedures for evaluating Canvas course pages are presented in a step-by-step fashion, which helps learners understand a new process. Each step provides detail using text and annotated screenshots,

supporting Checkpoint 6.2: *Support planning and strategy development (CAST 2018)*. In addition, the author supports the combination of text and annotated screenshots as they serve as an embedded visual mentor that models a process. Likewise, Module 11.1 serves as a guide for breaking down the larger goal of evaluating Canvas pages into reachable short-term objectives, which again supports Checkpoint 6.2. Finally, evaluating two Canvas course pages using Cidi Labs Design tools provides scaffolds for learning new skills and multiple examples of solutions to authentic problems, per Checkpoint 5.3: *Build fluencies with graduated levels of support for practice and performance (CAST 2018)*.

After Module 11.1, which displays the process of evaluating two Canvas pages using Cidi Labs Design tools, there is a course page evaluation section. The learner will consider two sets of four evaluation questions when evaluating each Canvas page using the Digital Tools accessibility checker (Cidi Labs Design Tools). Three of the four questions would encourage learners to pause, think about, and consider how they implement this strategy per checkpoint 6.2 *Support planning and strategy development (CAST 2018)*. Additionally, the evaluation questions could guide scaffolding and goal-setting, per Checkpoint 6.1: *Guide appropriate goal-setting (CAST 2018)*.

Several design choices in the ACE course limit options for diverse learners. First, Module 3 on Canvas Courses contains eight sections that involve working with bulleted and numbered lists, best practices for hyperlinks, and alternative text for images, to name a few. However, while Module 3 contains eight sections, the knowledge check quiz contains only four items, which would not support Checkpoint 5.3 *Build fluencies with graduated levels of support for practice and performance (CAST 2018)*. The knowledge check quiz in Module 3 contains two assessment items on identifying best practices for alt text, one on best practices with lists, and

one on identifying appropriate text for a hyperlink. Therefore, five sections in Module 3 need more support for practice and performance, per Checkpoint 5.3 (CAST 2018).

After much reflection and synthesis, there are several possible instructional solutions for Module 3 within the ACE course that would promote UDL guidelines for providing multiple means of action and expression. First, each section in Module 3 would benefit from a set of module objectives, which would *guide appropriate goal-setting* for all learners, per Checkpoint 6.1 (CAST 2018) Additionally, module objectives could serve as embedded prompts for categorizing and systematizing module learning, per Checkpoint 6.3:*Facilitate managing information and resources* (CAST 2018). Next, each module section in Module 3 needs its own formative assessment items. Formative assessment techniques will provide feedback at regular intervals for learners to properly assess their learning (metacognition)(CAST 2020). This feedback will provide learners with "continuous feedback on their progress, readily identify their skill gaps, and zero in on what is important" (Das 2021). Finally, careful alignment of module objectives with formative assessment items will guide appropriate goal-setting (6.1); support planning and strategy development (6.2); facilitate managing information and resources (6.3), and enhance capacity for monitoring progress (6.4) (CAST 2018).

Another instructional solution for Module 3 that would promote UDL guidelines for providing multiple means of action and expression is incorporating consistent *use of multiple media for communication* (Checkpoint 5.1). For example, all individual section web pages within Module 3 must incorporate text, graphical illustrations, annotated screenshots, and tutorial videos. Furthermore, these digital artifacts must align with module objectives, content instruction, and formative assessment items, supporting Checkpoints 5.1, 5.3, 6.1, 6.2, 6.3, and 6.4 (CAST 2018). In addition, many Canvas course content digital artifacts exist on the Internet

in an OER format that ACE course designers could embed within Module 3 sections. Finally, ACE course designers could create tutorial videos and graphical illustrations, demonstrating to learners the use of multiple tools for construction and composition, which learners could replicate during their Canvas course design (Checkpoint 5.2) (CAST 2018).

## Bibliography

Bongiovanni, Emily. 2021. "Accessibility Course for Education OER." *Colorado School of Mines*. September 29, 2021.

<https://lor.instructure.com/resources/dbcb0b8d3013439386afe910e924eec7?shared>

CAST. 2018. "CAST Action and Expression Principle." CAST. 2018.

<http://udlguidelines.cast.org>.

CAST. 2020. "UDL Tips for Designing Learning Experiences." *CAST*. September 20, 2020. <http://udlguidelines.cast.org>Links to an external site..

Das, Satyabrata. 2021. "Formative Assessment: Forming the Basis of Impactful ELearning." *ELearning Industry*. March 13, 2021. <https://elearningindustry.com/formative-assessment-forming-basis-of-impactful-elearning>.