Design Document

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# Needs Assessment

The purpose of this needs assessment is to determine what areas of the instructional design process faculty members require support in when designing an online course. This assessment is necessary to assure that all faculty members are using instructional design best practices and meeting university standards when designing their coursework. Sarah Packett, member of the instructional design team, interviewed members of the instructional design team to determine commonly requested resources from university faculty regarding course design. She also requested information regarding university standards for course design. Upon the completion of the needs assessment, it was determined that an instructional module and job aids regarding course goal and objective development need to be created for university faculty. This module will need to be housed on the university’s academic innovation website. This resource will serve as a guide for new faculty members and as an instructional resource for existing faculty who may be looking for professional development in this area.

**Summary of Results**

Below is a summary of the results revealed from the instructional design team interview. The ID Interview revealed the following:

* New faculty often request to see an overview of the ID process and how to get started.
* New faculty request guidance regarding the development of learning goals and objectives, creating formative assessment, and creating accessible/inclusive learning opportunities for online courses.
* An overview for the ID process and corresponding resources need to be posted somewhere within the Academic Innovation site.
* All university courses are required to meet Quality Matters standards, which is part of a peer review process that assesses the following course components: overview and introduction, learning objectives, assessment, resources and materials, learner engagement, course technology, learner support, and accessibility.

**Prioritized Needs**

A variety of instructional needs were identified by the instructional design team during the interview. However, it is important to note that this will be an ongoing project and for the scope of this course project only a few of the needs identified within interviews will be addressed at this time. These needs have been organized into the prioritized list below.

**Table 1**

**Prioritized List of Needs**

|  |  |  |
| --- | --- | --- |
| **Need Statement** | **Evidence of Learning Need** | **Critical Issue** |
| Faculty need knowledge of how to write student-centered, concrete, and measurable course objectives, | IDs noted that new faculty often inquired about writing course objectives when developing a new online course. | Faculty may be unfamiliar with hierarchical frameworks such as Bloom’s Taxonomy |
| Faculty need knowledge of how to write course goals. | IDs noted that new faculty often inquired about writing course goals when developing a new online course. | Faculty may be unfamiliar with the difference between course goals and course objectives. |
| Faculty need knowledge of where objective writing falls in the ADDIE design process. | IDs noted that many faculty were unfamiliar with backward design theory. | Faculty may be unfamiliar with the ADDIE process |
| Faculty need to be aware of the Quality Matters standards for course objectives | The ID team noted that all courses need to follow the Quality Matters standards . | Faculty may be unfamiliar with the Quality Matters standards |

# Goal Analysis

This instructional module should serve as a guide to help faculty develop appropriate course objectives. Upon completion of the module, new and existing faculty should be able to create student centered, concrete, and measurable course objectives and well-stated course goals that adhere to Quality Matters standards.

# Learner Analysis

The audience for this training will be all university faculty. New and existing faculty will all have access to this information and can refer to it as necessary. These learner characteristics were collected from a team of IDs who shared about their experience working with faculty at the university and their observations.

**General Characteristics**

The university prides itself on hiring diverse staff and faculty and the ID team reports that the faculty is diverse in gender and race. All faculty members have post-secondary degrees: Bachelor’s, Master’s and/or Ph.D’s in various disciplines (arts, science, education, human development, business, etc.) Some faculty are new to teaching, but most have taught before.

**Specific Entry Characteristics**

Faculty should have a university laptop with internet to access these instructional materials. Faculty should be familiar with the Academic Innovation section of the university’s website so that they can access all “course design” instructional resources. Faculty should also have previous experience participating in e-learning or asynchronous learning opportunities.

**Personal and Social Characteristics**

The ID team resports that most faculty members are receptive to professional learning regarding course design. However, there are some faculty that are hesitant to seek out a face-to-face ID consultation. When tasked with developing a course, most are highly motivated to seek out instructional resources that will help them develop coursework that will achieve higher student outcomes and a transfer of knowledge.

# Contextual Analysis

**Orienting Context**

The faculty accessing this instructional material are highly motivated to incorporate these materials. This is not a required instructional module, so those who are accessing it are doing so for their own professional development and growth. Faculty accessing this module will do so asynchronously and on their own time. They will use this information if they are designing a course for the first time or looking to improve or redevelop a course. Faculty are held to Quality Matter standards, which is a process which uses peer review to evaluate courses. Therefore, faculty are motivated to use best practices to design their courses, including objective development.

**Instructional Context**

Faculty will need computer and internet access to access the instructional module and or materials. The computer should be able to run videos, download PDFs, and play audio.

**Transfer Context**

Although the faculty have varying levels of experience in course development, this instruction will serve as a resource and guide for those who are novice course designers or those who are looking for a refresher course. These modules will explain the reason behind developing course objectives, explain how objectives guide your instruction and assessment, and demonstrate the process of developing effective objectives. This module will also demonstrate how to develop overall course goals that will create a big picture of what their course aims to accomplish over the semester. The module will model these processes and provide opportunities for practice.

# Task Analysis

This task analysis breaks down what content will be included within this instructional unit. This task analysis identified the cognitive domains and procedures that will be addressed within this module, so that appropriate objectives, instructional strategies, and assessment tools can be developed.

**Table 2**

**Performance Content Matrix**

|  |
| --- |
| **Domains** |
| **Cognitive Domains** |
| **Concepts**   * Course Goals * Course Objectives * Bloom’s Taxonomy * ABCD Objective Writing * Learning Activities * Assessments |
| * ***Principles & Rules*** * - Course objectives are created during the design portion of the ID process * - Course goals vs. course objectives * - Course goals should be a broad overview of your course outcomes * - Course objectives should be measurable, concrete, actionable, and student- centered * - Course objectives should link to course learning activities and assessments |

# Learning Objectives

Below are the learning objectives that have been developed for these modules based on the information collected from the needs assessment and based on the instructional content that needs to be covered.

**Table 3**

**Learning Objectives**

|  |
| --- |
| **Objective 1: After completing the module, faculty will be able to identify the differences between course goals and course objectives.** |
| **Domain of Objective: Cognitive** |
| **Level of Objective: Bloom’s Level of Remembering** |

|  |
| --- |
| **Objective 2: After completing the module, faculty will be able to develop a goal statement for their course.** |
| **Domain of Objective: Cognitive** |
| **Level of Objective: Bloom’s Level of Create** |

|  |
| --- |
| **Objective 3: After completing the module, faculty members will be able to use ABCD principles to develop course objectives.** |
| **Domain of Objective: Cognitive** |
| **Level of Objective: Bloom’s Level of Create** |

|  |
| --- |
| **Objective 4: After completing the module, faculty will be able to use Bloom’s Taxonomy to develop course objectives.** |
| **Domain of Objective: Cognitive** |
| **Level of Objective: Bloom’s Level of Create** |

|  |
| --- |
| **Objective 5: After completing the module, faculty will be able to align instructional objectives to course learning activities.** |
| **Domain of Objective: Cognitive** |
| **Level of Objective: Bloom’s Level of Apply** |

|  |
| --- |
| **Objective 6: After completing the module, faculty will be able to align instructional objectives to course assessments.** |
| **Domain of Objective: Cognitive** |
| **Level of Objective: Bloom’s Level of Apply** |

# Instructional Strategies

This section presents the appropriate instructional strategies that will be used to present information, as well as the generative strategies that will support cognitive recall and application.

**Table 4**

**Performance Content Matrix**

|  |  |  |
| --- | --- | --- |
| **Performance Content Matrix** | | |
| **Strategy** | | |
| **Content** | **Recall** | **Application** |
| **Concept** | **Initial Presentation:**  Provide definition of course objective  -Provide definition of course goal  - Provide history of Bloom’s Taxonomy and define its purpose  - Define the ABCD mnemonic  - Provide definition of learning activity  - Provide definition of assessment | **Initial Presentation:**  -Provide examples and non examples of various course objectives  -Provide examples and non examples of various course goals  - Provide examples of learning activities aligned with objectives  - Provide examples of verbs at each Bloom's Taxonomy level  -Provide examples and non examples of ABCD objectives  -Provide examples of assessments aligned with objectives    **Generative Strategies:**  **-**Categorize examples of course goals vs. course objectives  -Ask learners to generate examples of learning activities that match an instructional objective  - Ask learners to generate examples of assessments that match an instructional objective |
| **Principles and Rules** | **Initial Presentation:**  **Generative Strategies:** | **Initial Presentation:**  -Provide visual introduction to where goal and objective writing falls in the ADDIE Cycle  -Compare and contrast goals and objectives from the same course  **Generative Strategies:**  -Determine if example of objectives are measurable, concrete, and student centered (true/false) |

# Instructional Outline and Sequence

**•Module 1: Introduction**

* Module objectives overview
* When do I develop my goals and objectives during the ID process?

**•Module 2: Course Goals**

* Define course goals (cite research)
* Examples and non-examples of course goals

**•Module 3: Course Objectives**

* Define course objectives (cite research)
* Explain that goals should be measurable, concrete, and student-centered
* Introduce ABCD Objectives
  + Example and non-examples of ABCD Objective
* Introduce Bloom’s Taxonomy
  + Describe each level
  + Example of Bloom’s objectives at each level
* Examples and non examples of well written objectives using ABCD/Bloom’s Taxonomy
* Assessment: Categorize goals vs. objectives, identifying well-written objectives
* Resources: Objective Development Checklist

**•Module 4: Aligning Objectives to Learning Activities and Assessments**

* Define Learning Activities
  + Provide example of learning activities that align with well-written objectives
  + Assessment: Ask learners to develop their own examples from a given objective
* Define assessments
  + Provide example of learning activities that align with well-written objectives
  + Assessment: Ask learners to develop their own examples from a given objective

**•Module 5: Conclusion and Survey**

* Summarize objectives
* Evaluation survey

# Assessment Plan

**Table 5**

**Assessment Plan**

|  |  |  |
| --- | --- | --- |
| **Assessment Plan** | | |
| Objectives | Assessment Method | Results Analysis |
| **After completing the module, faculty will be able to identify the differences between course goals and course objectives.** | Sorting Activity: Learners will categorize examples of goals and objectives during the module | Answer key. Answers will be automatically checked. If the answer is incorrect a refresh of the information will be provided on the screen before advancing. |
| **After completing the module, faculty will be able to develop a goal statement for their course.** | Syllabus Review: Review goal statements within the drafted syllabi of faculty members who have completed these modules | Rubric |
| **After completing the module, faculty members will be able to use ABCD principles to develop course objectives.** | 1.Self-Assessment Checklist: A checklist that asks faculty to check for each component of the ABCD process  2.Syllabus Review: Review drafted course objectives within the syllabi of faculty members who have completed these modules | 1.Checklist completion  2. Rubric |
| **After completing the module, faculty will be able to use Bloom’s Taxonomy to develop course objectives.** | Syllabus Review: Review drafted course objectives within the syllabi of faculty members who have completed these modules | Rubric |
| **After completing the module, faculty will be able to align instructional objectives to course learning activities.** | 1.Self-Assessment: Ask learners to provide examples of learning activities that match the given objective.  2.Syllabus Review: Review drafted course objectives and look for the alignment between the objectives and the learning activities. | 1. Answer key provided with a variety of examples.  2. Rubric |
| **After completing the module, faculty will be able to align instructional objectives to course assessments.** | 1.Self-Assessment: Ask learners to provide examples of assessment opportunities that would match the given objective.  2. Syllabus Review: Review drafted course objectives and look for the alignment between the objectives and the course assessments. | 1. Answer key provided with a variety of examples.  2. Rubric |

# Evaluation Plan

**Table 6**

**Evaluation Plan**

|  |  |  |
| --- | --- | --- |
| **Evaluation Plan** | | |
| **Evaluation Purpose** | | |
| The purpose of the formative evaluations is to see if each module is user-friendly, if all materials/links are working, and if all the material is clearly presented. The summative evaluations are to gauge how the learners perceived the course and if there was a transfer of knowledge into faculty course development. | | |
| **Data to be Collected** | | |
| **Data Type** | **Specific Info/Use** | **Source** |
| **Formative Evaluation** | Have another ID or faculty member review each component of the module as it is complete. Ask about user capability and for instructional understanding. | Testing |
| **Summative Evaluation** | Survey at the end of module will ask learners about the perceived usefulness of the modules, how to module impacted their understand of goal and objective development, ask for recommendations, and | Survey Results |
| **Summative Evaluation** | Review goal statements and objectives within the drafted syllabi of three faculty members who have accessed this course at the ID team’s request. | Syllabus Review |
| **Evaluation Schedule** | | |
| **Date(s)** | **Activity(ies)** | |
| 7/5/21  7/18/21  7/25/21 | Conduct Module Testing  Introduction and Module 1  Module 2 and 3  Module 4 and Conclusion | |
| TBD | Collect survey results 3 weeks after module launches | |
| TBD | Review goal statements and course objectives on syllabus | |

# Delivery Method

Adobe Captivate will be used to create interactive, self-paced modules. Learners will have the opportunity to move about the unit in whatever order they would like, as well as go back and return to previous lessons for review. Adobe Captivate allows the designer to incorporate videos, links to resources/surveys, and narration. Adobe Captivate also affords the ability to create quizzes within the instructional module for formative and summative assessment purposes. These finalized modules will then be housed on the university’s academic innovation website under “Course Design Resources.”

# Materials

* Self-paced Captivate modules
  + Scripted Narration
  + Definitions
  + Examples
  + Practice and Assessment Opportunities
* Objective writing checklist
* Evaluation Survey
* Description of instructional module for website