



Universal Design for
Learning Online –
Module 4: Identify strategies
to provide multiple means of engagement

Flowcharts and Storyboards

Prepared For

Kathleen Bastedo and Nancy Swenson,
Instructional Designers
University of Central Florida's
Center for Distributed Learning

Prepared By

Monica Bailey
Nicole Matt
Kaitlin Garrett

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FLOWCHARTS

The figures in the flowchart sequence below outline the navigation that students will follow upon entering into Webcourses, as well as the instructional interactions that take place in Module 4: Strategies for Providing Multiple Means of Engagement.

Figure 1. Flowchart of Basic Webcourses Features

Figure 1 outlines the navigation of the basic Webcourses features that students will interact with upon entering the web-based portion of Universal Design for Learning Online. The Webcourses Orientation (1.1) is provided for students not familiar with online learning and/or Webcourses. Expansion of the Modules (1) and Assessments (5) features continue on the next pages in Figures 2 and 3, respectively. Storyboards detailing the navigation of this section are also detailed later in this document.

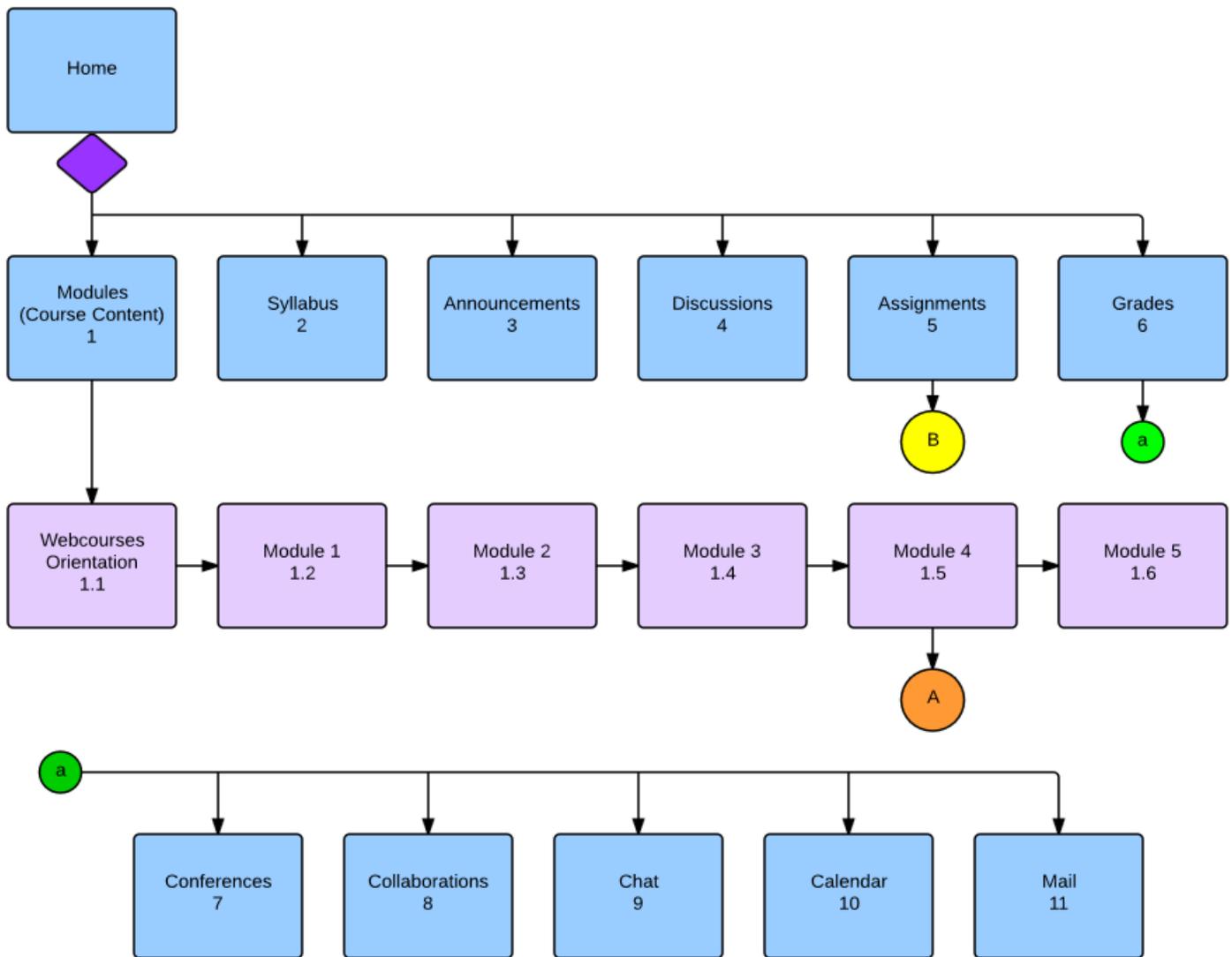


Figure 2. Flowchart of Instructional Module

The figure below outlines the basic structure and sequence of Module 4: Strategies for Providing Multiple Means of Engagement. After navigating through the course home page, students will then access their instructional content through the Modules (1) feature. The Modules will be completed in subsequent order. Figure 2 represents the instructional strategy that students will encounter in Module 4.

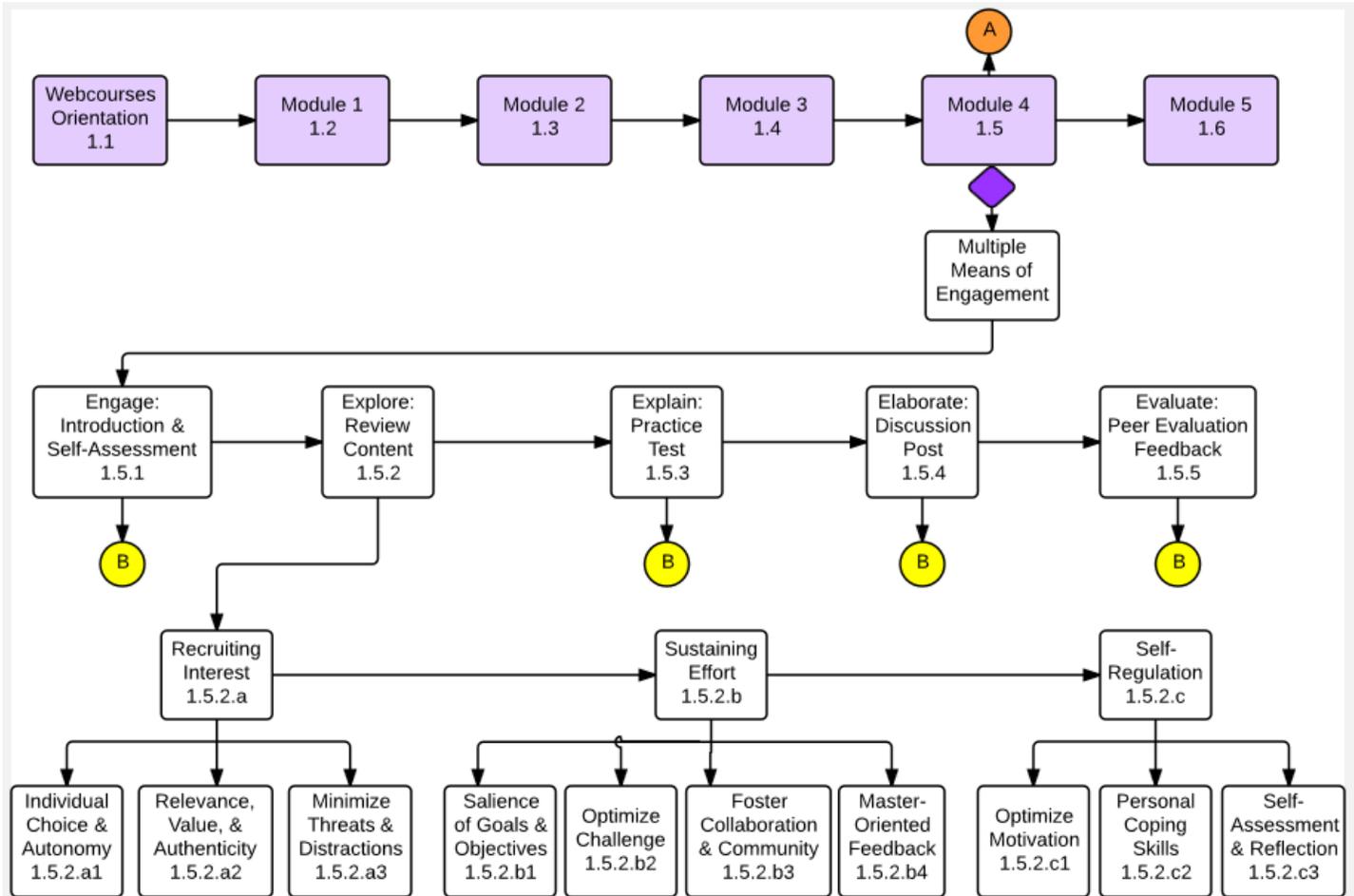
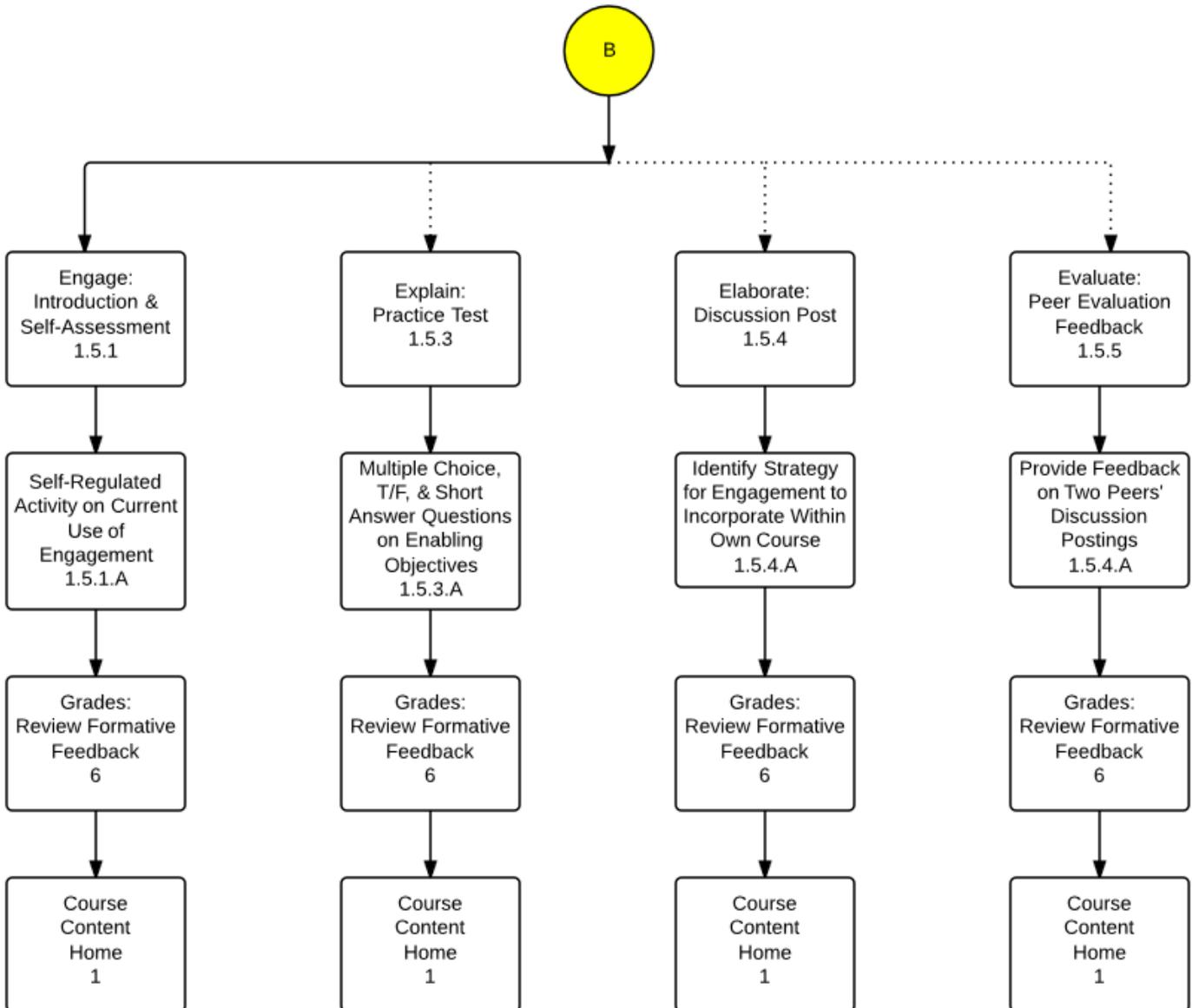


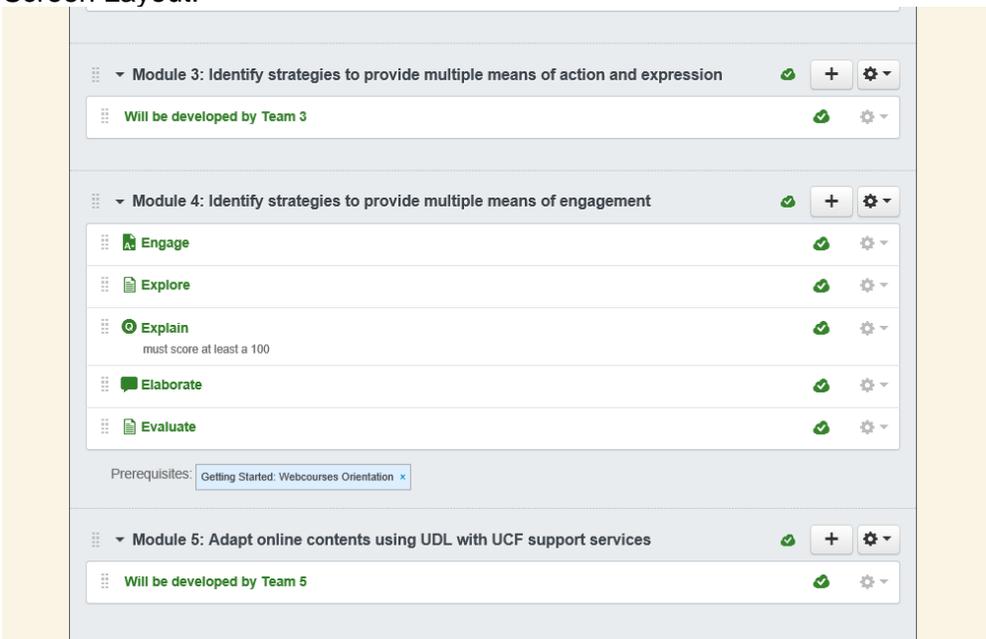
Figure 3. Flowchart of Assessments

The flowchart below outlines the assessments and their relative sequence for Module 4: Strategies for Providing Multiple Means of Engagement. The dotted arrows represent that the assessment will be available only after the satisfactory completion of the previous assessment.

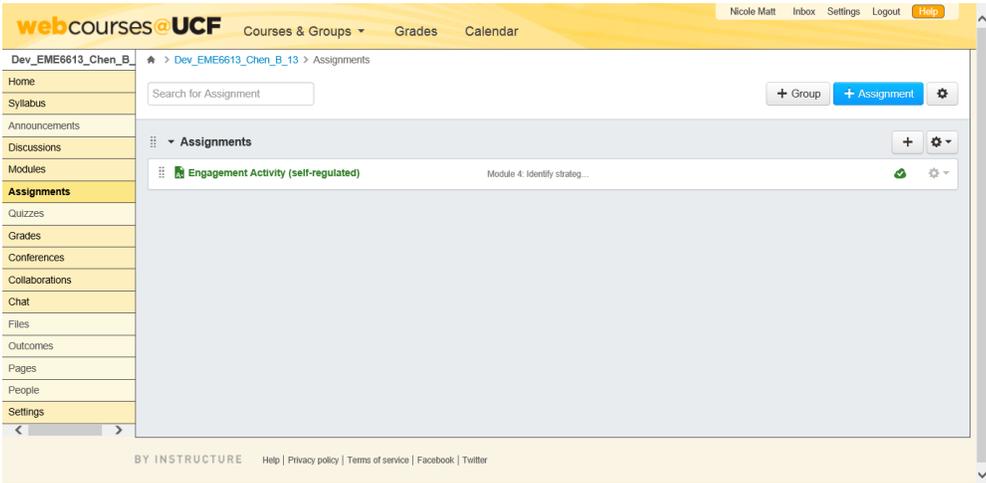


STORYBOARDS

1.5 Learning Module Menu Storyboard

Project Title: UDL Online – Module 4: Identify strategies to provide multiple means of engagement Lesson Title: Module 4: Identify strategies to provide multiple means of engagement File Name: Module 4.html Frame #: 1.5		Page: 1 of 1 Date: 11/4/14 Script: [Header]: Module 4 [Body]: Links to individual content tabs:
Links Links From Screen: Course Content Home Links To Screens: Module 4	Screen Description: Shows the content of Module 4 of the Learning Modules	<hr/> <i>Engage</i> <hr/> <hr/> <i>Explore</i> <hr/> <hr/> <i>Explain</i> <hr/> <hr/> <i>Elaborate</i> <hr/> <hr/> <i>Evaluate</i> <hr/>
Screen Layout: 		
Background: Default Color Schemes: Default Text Attributes: Arial; Heading 14; body 12	Audio: n/a Video: n/a Animated Gifs: n/a Graphic Stills: n/a	
Developer's Notes: <ul style="list-style-type: none"> • Screen Layout demonstrates content to be packaged within Webcourses (Canvas). • Green text are links that open Webcourse pages, assignments, and/or discussions. 		

1.5.1 Engage Storyboard

Project Title: UDL Online – Module 4: Identify strategies to provide multiple means of engagement Lesson Title: Engage File Name: Engagement Activity.html Frame #: 1.5.1		Page: 1 of 2 Date: 11/4/14	Script: [Header]: Assignments [Body]: Engagement Activity (self-regulated) tab links to Engagement Activity <i>Engagement Activity</i>
Links Links From Screen: Course Content Home Links To Screens: Assignment Page	Screen Description: Displays Tab for Engagement Activity under Assignment Tab		
Screen Layout:			
 <p>The screenshot shows the 'webcourses@UCF' interface. The top navigation bar includes 'Courses & Groups', 'Grades', and 'Calendar'. The user is logged in as 'Nicole Matt'. The main content area is titled 'Assignments' and displays a search bar, '+ Group', '+ Assignment', and a gear icon. Below this, a tab for 'Engagement Activity (self-regulated)' is selected, showing 'Module 4: Identify strateg...'. The left sidebar contains various navigation options like Home, Syllabus, Announcements, Discussions, Modules, Assignments, Quizzes, Grades, Conferences, Collaborations, Chat, Files, Outcomes, Pages, People, and Settings.</p>			
Background: Default Color Schemes: Default Text Attributes: Arial; Heading 14; body 12	Audio: n/a Video: n/a Animated Gifs: n/a Graphic Stills: n/a		
Developer's Notes:			
<ul style="list-style-type: none"> Engagement Activity (is an Assignment Tab) first appears on Content page. Learner clicks on Engage link and is reverted to activity. Engagement Activity can also be opened if the learner accesses Assignment Tab aside from Content Tab. 			

1.5.1 Engagement Activity (self-regulated) Storyboard

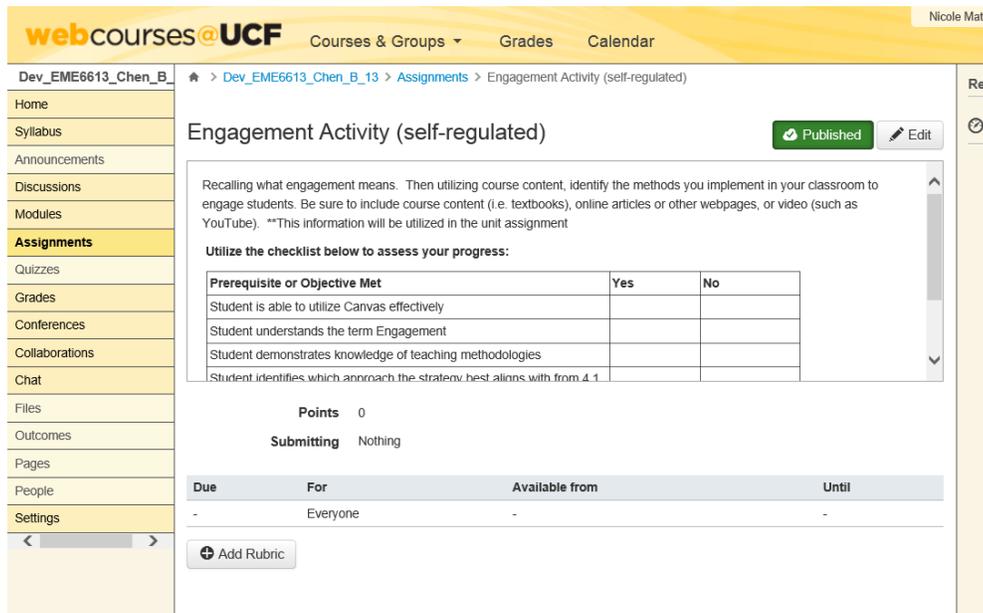
Project Title: UDL Online – Module 4: Identify strategies to provide multiple means of engagement
 Page: 2 of 2
 Lesson Title: Engagement Activity (self-regulated)
 Date: 11/4/14
 File Name: Engagement Activity.html
 Frame #: 1.5.1

Script:
 [Header]: Engagement Activity (self-regulated)
 [Body]: Engagement Activity Directions and Checklist

Links
 Links From Screen: Engagement Activity Tab (in Assignments)
 Links To Screens: Engagement Activity Page

Screen Description: Displays directions for assignment along with checklist for learner to perform

Screen Layout:



Background: Default
 Color Schemes: Default
 Text Attributes: Arial; Heading 14;
 body 12

Audio: n/a
 Video: n/a
 Animated Gifs: n/a
 Graphic Stills: n/a

Developer's Notes:

- Engagement Activity directions are for a self-regulated, non-graded activity with a checklist for the learner to perform.
- Checklist is a self-assessment for readiness of unit and ability to meet objectives prior to testing.

1.5.2 Explore Storyboard

Project Title: UDL Online – Module 4: Identify strategies to provide multiple means of engagement Lesson Title: Explore File Name: Explore Content.html Frame #: 1.5.2		Page: 1 of 1 Date: 11/4/14	Script: [Header]: Explore [Body]: Module 4.0: Identify strategies to provide multiple means of engagement
Links Links From Screen: Identifying strategies to provide multiple means of engagement Links To Screens: Content Screen	Screen Description: Shows the content of Module 4 of the Learning Modules		<hr/> <i>Module Objectives</i> <hr/> <hr/> <i>Overview</i> <hr/> <hr/> <i>Outline of Content</i> <hr/> <hr/> <i>Explore Some More</i> <hr/>
Screen Layout:			
Background: Default Color Schemes: Default Text Attributes: Arial; Heading 14; body 12		Audio: n/a Video: n/a Animated Gifs: n/a Graphic Stills: n/a	

Developer's Notes:

- Screen Layout demonstrates content for lesson. Objectives are listed first, followed by overview, then outline of the content, and finally an "Explore Some More" section with a link to an external website with information to expand upon lesson.
- The weblink connects the user to the UDL website where the information was obtained from.

1.5.3 Practice Test Storyboard

Project Title: UDL Online – Module 4: Identify strategies to provide multiple means of engagement
 Lesson Title: Explain (Practice Test)
 File Name: Module 4 Practice Test.html
 Frame #: 1.5.3

Page: 1 of 3
 Date: 11/4/14

Script:
 [Header]: Explain

[Body]: Quiz Instructions followed by Multiple Choice, True/False, and Short Answer Questions

Links
 Links From Screen: Module 4 Content (Home) Page
 Links To Screens: Explain (Practice Test)

Screen Description: Practice Test opens with Directions and Start Button. Students must click “Start Quiz” in order for practice test to begin. All of questions presented at once.

Screen Layout:

The screenshot displays the Canvas LMS interface for a quiz titled "Explain". On the left is a navigation sidebar with options like Announcements, Discussions, Modules, Assignments, Quizzes, Grades, Conferences, Collaborations, Chat, Files, Outcomes, Pages, People, and Settings. The main content area shows the quiz details:

- Quiz Type:** Practice Quiz
- Points:** 21
- Shuffle Answers:** No
- Time Limit:** No Time Limit
- Multiple Attempts:** Yes
- Score to Keep:** Highest
- Attempts:** Unlimited
- View Responses:** Always
- Show Correct Answers:** No
- One Question at a Time:** No
- Require Respondus LockDown Browser:** No
- Required to View Quiz Results:** No

Below the settings is a table for quiz availability:

Due	For	Available from	Until
-	Everyone	-	-

The quiz instructions state: "Please be sure to review objectives 4.1, 4.2, and 4.3 from the Explore section on providing multiple means of engagement (recruiting interest, sustaining effort, and providing for self-regulation) before taking the practice test. The practice test consists of 20 multiple choice and true/false questions and 1 short answer question. You will need to score 100% in order to move on to the next section - Elaborate. If you do not score a 100% on your first attempt, please review the formative feedback for the question(s) you missed and try again. The practice quiz will not be timed and you will be given multiple attempts."

The question list on the right includes:

- Question 1: Which of the following scenarios identifies an appropriate strategy an online instructor might use in order to provide individual choice and autonomy for online learning?
 - Allowing students to use notes on an exam.
 - Allowing students to work collaboratively on group projects.
 - Allowing students to choose among a list of assignments that will count for their final grade.
- Question 2
- Question 3
- Question 4
- Question 5
- Question 6
- Question 7
- Question 8
- Question 9
- Question 10

At the bottom right, it shows "Time Elapsed: 0:00" and "4 Days, 19 Hours, 56 Minutes, 55 Seconds".

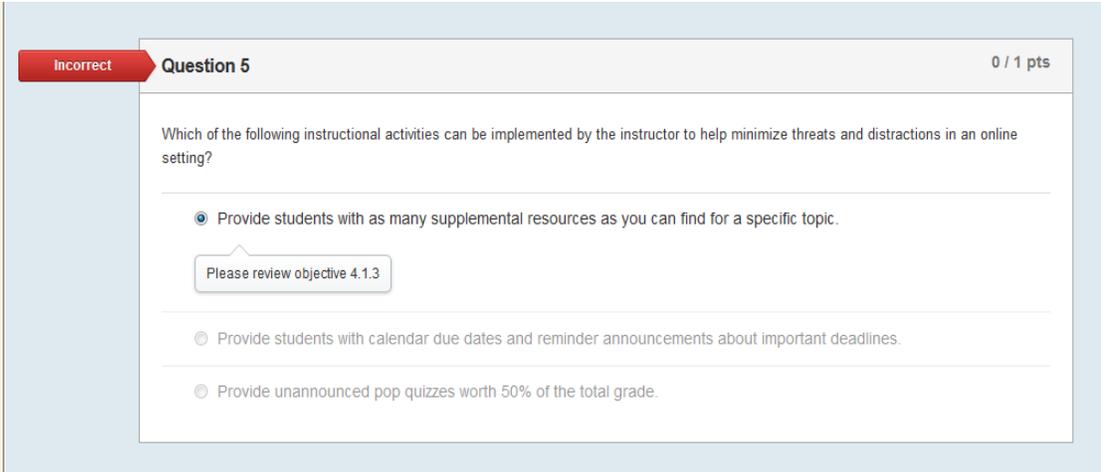
Background: Default
Color Schemes: Default
Text Attributes: Arial; Heading 14;
body 12

Audio: n/a
Video: n/a
Animated Gifs: n/a
Graphic Stills: n/a

Developer's Notes:

- Practice Test is timed and Student has multiple attempts to take the test.
- Students will have opportunity to review answers upon completion.
- 100% test grade required to complete the module.

1.5.3 Question 5 Formative Feedback Storyboard

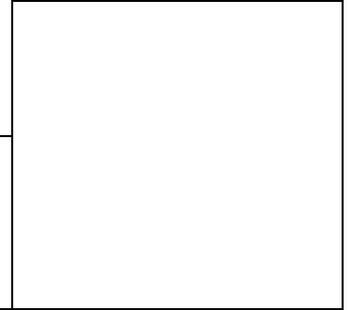
Project Title: UDL Online – Module 4: Identify strategies to provide multiple means of engagement Lesson Title: Explain (Practice Test) File Name: Module 4 Practice Test.html Frame #: 1.5.3		Page: 2 of 3 Date: 11/4/14	Script: [Header]: Question 5 - Incorrect
Links From Screen: Module 4 Content (Home) Page	Links To Screens: Explain (Practice Test)	Screen Description: This screen shows what the student will see when reviewing an incorrect answer on their quiz. The formative feedback indicates to go back and review the appropriate objective that the question was derived from.	[Body]: 0 points received since the question was marked as incorrect; question title and answer choices; formative feedback provided for incorrect answer choices
Screen Layout: 			
Background: Default Color Schemes: Default Text Attributes: Arial; Heading 14; body 12	Audio: n/a Video: n/a Animated Gifs: n/a Graphic Stills: n/a		
Developer's Notes: <ul style="list-style-type: none"> • Since a 100% quiz grade is required to complete the module, students will have opportunity to review answers upon completion. • Formative feedback provided for incorrect answer choices helps to guide the learner's review before attempting the practice test again. 			

1.5.3 Question 21 Formative Feedback Storyboard

Project Title: UDL Online – Module 4: Identify strategies to provide multiple means of engagement Lesson Title: Explain (Practice Test) File Name: Module 4 Practice Test.html Frame #: 1.5.3		Page: 3 of 3 Date: 11/4/14	Script: [Header]: Question 21 [Body]: Short answer question and directions; student response space; generic instructor feedback; not yet graded
Links From Screen: Module 4 Content (Home) Page	Links To Screens: Explain (Practice Test) Screen	Screen Description: The short answer question will be manually graded by the instructor, however, students will be presented with sample formative feedback (indicated by red arrow) to help compare whether they answered the question completely and correctly.	
Screen Layout: <div style="border: 1px solid #ccc; padding: 10px; margin-top: 10px;"> <div style="display: flex; justify-content: space-between; border-bottom: 1px solid #ccc; padding-bottom: 5px;"> Question 21 Not yet graded / 1 pts </div> <p>Directions: After reviewing the scenario below, explain how one of the bulleted strategies Professor Piaget incorporated provides for engagement when learning online. Will it recruit student interest, sustain effort, or allow students to self-regulate? Please limit your response to one paragraph.</p> <p>Professor Piaget recently took on an undergraduate course in Developmental Psychology at UCF that he will be teaching online. Professor Piaget always works hard to develop engaging activities when delivering traditional face-to-face lectures. However, he is concerned that his content won't be as engaging through an online medium and that it will be more challenging for him to identify when he has "lost" the students. In an effort to maintain the engagement of his students, Professor Piaget incorporates strategies he found on a website on Universal Design for Learning. (http://www.udlcenter.org/aboutudl/udlguidelines/principle3) He has decided to use the following strategies:</p> <ul style="list-style-type: none"> • Professor Piaget assigns group learning activities that must be completed online within the Webcourses@UCF provided group space using the iCollaborate tools. • Professor Piaget also decides to use a tic-tac-toe strategy where students are given nine assignment options for the course. By the end of the course, they must complete three assignments that create a "row" to demonstrate their mastery of course content. • Professor Piaget decides to track a participation grade by having students create three blog posts throughout the semester reflecting on the different life stages of their family members according to developmental psychology theory. <p>Your Answer: <input type="text"/></p> <p>Sample answer... <input type="text"/></p> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px; background-color: #f9f9f9;"> <p>Feedback: • Professor Piaget assigns group learning activities that must be completed online within the Webcourses@UCF provided group space using the iCollaborate tools. Fostering collaboration and community is one way that teachers can engage their students by sustaining effort. This strategy engages students by increasing the opportunity for support in activities. Students that struggle will more easily find the help and resources they need to succeed. • Professor Piaget also decides to use a tic-tac-toe strategy where students are given nine assignment options for the course. By the end of the course, they must complete three assignments that create a "row" to demonstrate their mastery of course content. This strategy is an example of optimizing individual choice and autonomy which is designed to engage students by recruiting interest. While students often cannot set their own learning objectives, they can be granted the opportunity to select how they will learn material in a way that best suits their strengths and interests. Learners differ significantly in their interests and skills, therefore allowing them to choose can significantly enhance their engagement and learning of the material. • Professor Piaget decides to track a participation grade by having students create three blog posts throughout the semester reflecting on the different life stages of their family members according to developmental psychology theory. This is a strategy of self-assessment and reflection which engages students by providing for self-regulation. The reflection required in this activity helps students to engage in their own metacognition. Students often lose engagement if they are unable to determine where they are at in their learning. A reflection or self-assessment activity helps to serve as a reminder of where they are at and what they need to still learn.</p> </div> </div>			

Background: Default
Color Schemes: Default
Text Attributes: Arial; Heading 14; body
12

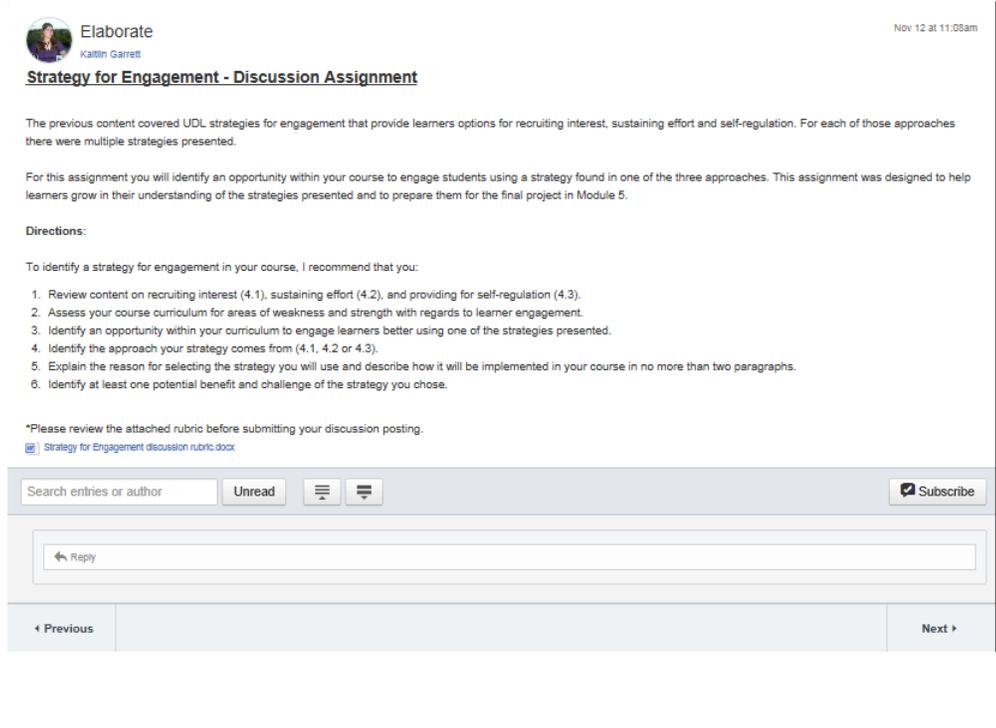
Audio: n/a
Video: n/a
Animated Gifs: n/a
Graphic Stills: n/a



Developer's Notes:

- Since a 100% quiz grade is required to complete the module, students will have opportunity to review answers upon completion.
- Formative feedback provided for incorrect answer choices helps to guide the learner's review before attempting the practice test again.

1.5.4 Elaborate Storyboard

Project Title: UDL Online – Module 4: Identify strategies to provide multiple means of engagement Lesson Title: Elaborate File Name: Elaborate Discussion Post.html Frame #: 1.5.4		Page: 1 of 1 Date: 11/4/14	Script: [Header]: Elaborate Strategy for Engagement – Discussion Assignment
Links From Screen: Previous (Explain) Next (Evaluate) Downloadable copy of the rubric for the discussion Links To Screens: Module 4 Practice Test screen Evaluate screen	Screen Description: The purpose for the discussion is described with a description of the criteria. Students must create a discussion post that will be evaluated by two of their peers during the following instructional activity. Discussion posts are not private and as such can be viewed by everyone.		[Body]: Discussion intro followed by discussion instructions and criteria with the rubric attached.
Screen Layout: 			
Background: Default Color Schemes: Default Text Attributes: Arial; Heading 14; body 12	Audio: n/a Video: n/a Animated Gifs: n/a Graphic Stills: n/a		

Developer's Notes:

- Students are not able to access this portion of the instruction until they have scored a 100% on the practice test.
- Students will be able to revise their discussion post. Discussion posts can include hypertext or other forms of multimedia.

1.5.5 Evaluate Storyboard

Project Title: UDL Online – Module 4: Identify strategies to provide multiple means of engagement Page: 1 of 1
 Lesson Title: Evaluate Date: 11/4/14
 File Name: Evaluate.html
 Frame #: 1.5.5

Script:
 [Header]:
 Evaluate

[Body]:
 Instructions for how to evaluate their peers' discussion posts and checklist for what to include in their discussion post response.

Links From Screen:
 Elaborate Discussion Board
 Elaborate Discussion Assignment (Previous button)

Screen Description:
 This screen shows what the student will see when reviewing an incorrect answer on their quiz. The formative feedback indicates to go back and review the appropriate objective that the question was derived from.

Links To Screens:
 Elaborate Page (Next button)

Screen Layout:

Evaluate

Now that you have identified a strategy for engagement that can be incorporated into your course, please read through the strategies that your peers plan to use by revisiting the [discussion board](#). Provide feedback to at least two of your peers. In no more than a paragraph for each response address the following:

- Whether the strategy is being used appropriately in the given context.
 - Ex: If the selected strategy is intended by the author to recruit interest, make sure it is a strategy from the recruiting interest content in objective 4.1
- A recommendation on how to overcome the challenge that the author shared.
 - Is there another strategy that can be used to supplement the chosen one, or is there a way that the strategy can be implemented to mitigate perceived challenges?

The following checklist will be used for your Evaluate feedback to two peers:

Evaluative Feedback Criteria	Yes	No
Student explains whether the strategy is being used appropriately in the given context		
Student provides a recommendation that addresses the authors concern		
Student provides mastery feedback to peer		

◀ Previous

Background: Default
 Color Schemes: Default
 Text Attributes: Arial; Heading 14; body 12

Audio: n/a
 Video: n/a
 Animated Gifs: n/a
 Graphic Stills: n/a

Developer's Notes:

- Students will reflect on the multiple strategies for engagement as they evaluate one another's discussion posts.
- Students will be given a participation grade based on whether or not they commented on two postings and met the checklist requirements.