

Creepy Crawlies of Tennessee: An Online Course Evaluation and Assessment Plan

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Executive Summary

Creepy Crawlies of Tennessee is an asynchronous online course comprising five units of instruction which the learner can complete in as little as five weeks or as many as twelve, allowing for maximum learner control of pacing while still having facilitators involved. Learners will be anyone interested in “creepy crawlies” in Tennessee. Primary learners will be young adults, ages 18 to 24, that may be entering a non-familial, independent phase of their life. These individuals are starting to form opinions about accommodating invasive critters in a new personal dwelling setting. Secondary learners may include home-schooled high school students, older adults, parents, retirees, and lifelong learners of all ages. Facilitators (instructors) will provide feedback on discussion-board posts and learning activities, as well as interact with learners via email to answer questions and address concerns.

The course is designed as a free massive open online course, a MOOC, to be administered through a learning management system, either EdX or Coursera. Each learning module includes multiple means of formative assessment. Summative assessment is included in the form of authentic, meaningful learning activities. The goal or course competency is for individuals to be able to effectively communicate to others the medical, ecological, and economic benefits of selected Tennessee animals considered to be creepy crawlies. In designing the Tennessee Creepy Crawlies course and assessments, we referenced the literature to ensure our design reflected best practices in the field.

Learner and Instructional Needs

Learners will be anyone interested in “creepy crawlies” in Tennessee. These individuals will primarily be young Tennessee residents, ages 18 to 24, but may also include home-schooled high school students, older adults, parents, retirees, and lifelong learners of all ages. Our primary learners are in a formative period of their lives, and may be leaving their childhood setting for the first time. As such, it is important for these learners to develop an appreciation for biodiversity and conservation through an understanding of the ecosystem. However, learners from around the globe are expected and encouraged. The course focuses on select Tennessee snakes, spiders, insects, salamanders, and mammals, and their importance in medical, ecological, and economic contexts. The course will attract learners with basic, rather than advanced, biology and ecology backgrounds.

Tennessee education programs about wildlife and conservation heavily target young learners, in particular, elementary school children. The Tennessee Environmental Education Association and Tennessee Wildlife Resources Agency maintain lists of children’s education resources at www.eeintennessee.org and www.tn.gov/twra/wildlife/wildlife-educator-tools.html. Tennessee children, and often their parents, are relatively well-served by these programs. However, there are fewer programs in the state to educate adults on these topics. There were no readily accessible free, online courses on the topic.

Education is a vital step in promoting understanding of the environment and ecosystems (United Nations Educational, Scientific, and Cultural Organization, 2017). Education instills an appreciation for Tennessee “creepy crawlies” and raises awareness of the need for conserving biodiversity in our state and in the world. The course is designed to raise awareness of the benefits of “creepy crawlies” to humans and the environment. Learners will be able to recognize

the positive impact of snakes and other “creepy crawlies” on the ecosystem. The ultimate goal is for the learners to become better stewards of the environment.

Course Competencies, Goals, Outcomes, and Objectives

Course Competency

- Individuals will be able to effectively communicate to others the medical, ecological, and economic benefits of selected Tennessee animals considered to be creepy crawlies.

Course Goals

Upon completing this course, individuals will:

- Gain an appreciation for the creepy crawlies of Tennessee.
- Become a better steward of the environment by better understanding the utility of various creepy crawlies found in Tennessee.

Learning Outcomes

Upon completing this course, individuals will be able to:

- List some of the positive effects that various creepy crawlies of Tennessee have on the environment.
- List a number of creepy crawlies of Tennessee from various animal categories.
- Describe some of the economic benefits of selected creepy crawlies of Tennessee.
- Describe some of the ecological impacts of selected creepy crawlies of Tennessee.
- Describe some of the medical benefits of selected creepy crawlies of Tennessee.

Learning Objectives (selected from various modules):

Upon completing this section of the course, individuals will be able to:

- List three ecological benefits of the salamanders of Tennessee.
- List two ways that salamanders are important to the human medical field.
- Describe three medical benefits of the snakes of Tennessee.
- Explain two reasons why snakes are important to farmers.
- Describe the ecological impact of insects on soil richness.
- List three ways in which insects directly benefit humans.
- Describe three economic benefits of honeybees.
- List three types of plants that rely on honeybees for pollination.
- Describe two ways opossums benefit humans from a pest-control standpoint.
- Describe three types of benefits that spiders afford humans.
- List two common pests that spiders feed upon.

Learning Activities

We have incorporated Universal Design for Learning (UDL) by allowing our learners to choose the media with which they will accomplish the learning objectives: text, slideshow, and/or video. Prior to beginning the course, students will be required to complete a pre-survey to assess prior knowledge. Upon finishing the final module, students will be required to complete a post-survey. Units 1-5 represent learning modules, and include multiple forms of formative assessment (discussed below). Unit 6 comprises summative learning activities. Figure 1 illustrates the content flow for each learning module (unit).

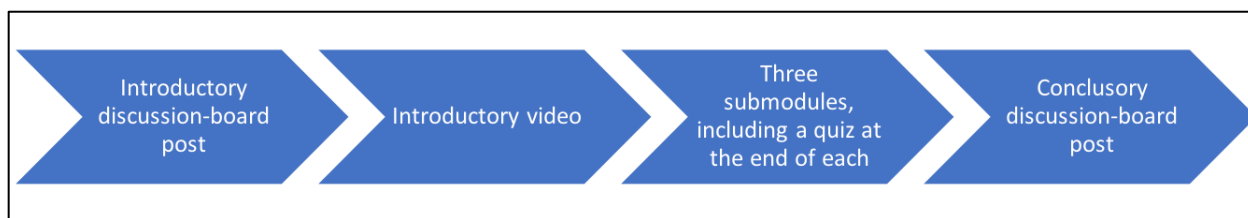


Figure 1: Content flow for units 1-5.

Each module will include introductory and conclusory discussion-board posts, with submissions being in the form of text, audio, or video. The introductory post will serve two functions: 1) as a means to assess prior knowledge; and, 2) as a means to assess attitude and interest toward the unit's animal group. After the introductory discussion-board post is completed, learners will watch a short video introducing them to the respective unit's creepy crawly. These videos will be created by the instructor, and will include a combination of curated and original content. Media attribution will be given as needed. At the end of each sub-module, learner knowledge will be assessed via a short quiz. The quizzes will be formative in nature, and automated feedback will be given shortly after submission. The quizzes will be untimed, and attempts will be unlimited. At the end of each module, instructor feedback will be given

regarding the discussion board posts. Summative assessment will be in the form of three broad learning activities, to be completed only after finishing all of the learning modules (Units 1-5).

Unit 1 - Snakes of Tennessee

- Introductory discussion board post:
 - What snakes do you know that call Tennessee home?
 - Are there any snakes in Tennessee you are afraid of and why?
 - If you could become a native Tennessee snake which one would you choose and why?
- Video - Introduction to the Snakes of Tennessee
- Activity (Multiple Options - UDL) - Medical Benefits of Snakes
 - Read a document discussing the medical benefits of snakes of Tennessee
 - Watch a slideshow discussing the medical benefits of snakes of Tennessee
 - Watch a video discussing the medical benefits of snakes of Tennessee
- Quiz - Knowledge check (True/False, Multiple Choice)
- Activity (Multiple Options - UDL) - Ecological Benefits of Snakes
 - Read a document discussing the ecological benefits of snakes of Tennessee
 - Watch a slideshow discussing the ecological benefits of snakes of Tennessee
 - Watch a video discussing the ecological benefits of snakes of Tennessee
- Quiz - Knowledge check (True/False, Multiple Choice)
- Activity (Multiple Options - UDL) - Economic Benefits of Snakes
 - Read a document discussing the economic benefits of snakes of Tennessee
 - Watch a slideshow discussing the economic benefits of snakes of Tennessee
 - Watch a video discussing the economic benefits of snakes of Tennessee

- Quiz - Knowledge check (True/False, Multiple Choice)
- Concluding discussion board post:
 - You see your neighbor walking quickly around the side of his house with a hoe, yelling something about a snake... What could you tell share with him from the course that might influence his actions?

Unit 2 - Salamanders of Tennessee

- Introductory discussion board post:
 - What salamanders do you know that call Tennessee home?
 - Are there any salamanders in Tennessee you are afraid of and why?
 - If you could become a native Tennessee salamander which one would you choose and why?
- Video - Introduction to the Salamanders of Tennessee
- Activity (Multiple Options - UDL) - Medical Benefits of Salamanders
 - Read a document discussing the medical benefits of salamanders of Tennessee
 - Watch a slideshow discussing the medical benefits of salamanders of Tennessee
 - Watch a video discussing the medical benefits of salamanders of Tennessee
- Quiz - Knowledge check (True/False, Multiple Choice)
- Activity (Multiple Options – UDL) - Ecological Benefits of Salamanders
 - Read a document discussing the ecological benefits of salamanders of Tennessee
 - Watch a slideshow discussing the ecological benefits of salamanders of Tennessee
 - Watch a video discussing the ecological benefits of salamanders of Tennessee
- Quiz - Knowledge check (True/False, Multiple Choice)
- Activity (Multiple Options - UDL) - Economic Benefits of Salamanders

- Read a document discussing the economic benefits of salamanders of Tennessee
 - Watch a slideshow discussing the economic benefits of salamanders of Tennessee
 - Watch a video discussing the economic benefits of salamanders of Tennessee
- Quiz - Knowledge check (True/False, Multiple Choice)
- Concluding discussion board post:
 - What would your reaction be if you saw a salamander on your back porch? Would your reaction be different now that you have completed this unit?

Unit 3 - Insects of Tennessee

- Introductory discussion board post:
 - What insects do you know that call Tennessee home?
 - Are there any insects in Tennessee you are afraid of and why?
 - If you could become a native Tennessee insect which one would you choose and why?
- Video - Introduction to the Insects of Tennessee
- Activity (Multiple Options - UDL) - Medical Benefits of Insects
 - Read a document discussing the medical benefits of insects of Tennessee
 - Watch a slideshow discussing the medical benefits of insects of Tennessee
 - Watch a video discussing the medical benefits of insects of Tennessee
- Quiz - Knowledge check (True/False, Multiple Choice)
- Activity (Multiple Options - UDL) - Ecological Benefits of Insects
 - Read a document discussing the ecological benefits of insects of Tennessee
 - Watch a slideshow discussing the ecological benefits of insects of Tennessee
 - Watch a video discussing the ecological benefits of insects of Tennessee

- Quiz - Knowledge check (True/False, Multiple Choice)
- Activity (Multiple Options - UDL) - Economic Benefits of Insects
 - Read a document discussing the economic benefits of insects of Tennessee
 - Watch a slideshow discussing the economic benefits of insects of Tennessee
 - Watch a video discussing the economic benefits of insects of Tennessee
- Quiz - Knowledge check (True/False, Multiple Choice)
- Concluding discussion board post:
 - On a sunny spring day, you and your friends find a bee interested in your picnic lunch. What is your reaction? How should you proceed?

Unit 4 - Spiders of Tennessee

- Introductory discussion board post:
 - What spiders do you know that call Tennessee home?
 - Are there any spiders in Tennessee you are afraid of and why?
 - If you could become a native Tennessee spider which one would you choose and why?
- Video - Introduction to the Spiders of Tennessee
- Activity (Multiple Options - UDL) - Medical Benefits of Spiders
 - Read a document discussing the medical benefits of spiders of Tennessee
 - Watch a slideshow discussing the medical benefits of spiders of Tennessee
 - Watch a video discussing the medical benefits of spiders of Tennessee
- Quiz - Knowledge check (True/False, Multiple Choice)
- Activity (Multiple Options – UDL) - Ecological Benefits of Spiders
 - Read a document discussing the ecological benefits of spiders of Tennessee

- Watch a slideshow discussing the ecological benefits of spiders of Tennessee
 - Watch a video discussing the ecological benefits of spiders of Tennessee
- Quiz - Knowledge check (True/False, Multiple Choice)
- Activity (Multiple Options - UDL) - Economic Benefits of Spiders
 - Read a document discussing the economic benefits of spiders of Tennessee
 - Watch a slideshow discussing the economic benefits of spiders of Tennessee
 - Watch a video discussing the economic benefits of spiders of Tennessee
- Quiz - Knowledge check (True/False, Multiple Choice)
- Concluding discussion board post:
 - Your aunt calls you asking what kind of bug spray to use on the spider she has found in her house. What can you tell her to influence her actions?

Unit 5 - Medium Mammals of Tennessee

- Introductory discussion board post:
 - What mammals do you know that call Tennessee home?
 - Are there any mammals in Tennessee you are afraid of and why?
 - If you could become a native Tennessee mammal which one would you choose and why?
- Video - Introduction to the Mammals of Tennessee
- Activity (Multiple Options - UDL) - Medical Benefits of Mammals
 - Read a document discussing the medical benefits of mammals of Tennessee
 - Watch a slideshow discussing the medical benefits of mammals of Tennessee
 - Watch a video discussing the medical benefits of mammals of Tennessee
- Quiz - Knowledge check (True/False, Multiple Choice)

- Activity (Multiple Options - UDL) - Ecological Benefits of Mammals
 - Read a document discussing the ecological benefits of mammals of Tennessee
 - Watch a slideshow discussing the ecological benefits of mammals of Tennessee
 - Watch a video discussing the ecological benefits of mammals of Tennessee
- Quiz - Knowledge check (True/False, Multiple Choice)
- Activity (Multiple Options - UDL) - Economic Benefits of Mammals
 - Read a document discussing the economic benefits of mammals of Tennessee
 - Watch a slideshow discussing the economic benefits of mammals of Tennessee
 - Watch a video discussing the economic benefits of mammals of Tennessee
- Quiz - Knowledge check (True/False, Multiple Choice)
- Concluding discussion board post:
 - Your dog spots an opossum in your yard at night. Your relatives tell you this is a bad thing because opossums carry disease--how do you react? What do you tell your relatives?

Unit 6 - Summative Assessment Activities

Descriptions of the following summative assessments activities are given in the proceeding section:

- Digital Presentation Assignment
- Image Scavenger Hunt (Spiders Behaving Exceptionally)
- Discussion Board Posting (The Bees Memes)

Assessment Examples

Formative Assessments

Objective Quizzes

These are given at the end of each subunit to check for understanding. Quizzes will be untimed, and will include a variety of objective assessment items. Students will be encouraged to take the quizzes from memory, and number of attempts will be unlimited. Automated feedback will be given following each quiz attempt. Figure 2 represents a typical quiz question.

Question 1	1 pts
Which of the following are snakes that can be found in the state of Tennessee? (Check all that apply)	
☐ Copperhead	
☐ Anaconda	
☐ Black Cobra	
☐ Cottonmouth	
☐ Timber Rattlesnake	
☐ Mississippi Green Watersnake	
☐ Milksnake	

Figure 2: Sample quiz question for the Snakes of Tennessee Unit.

Pre- and Post-Surveys

Learners will be required to complete surveys to gauge prior knowledge on the subject, to assess understanding of the learning outcomes and objectives, and as a means of addressing the affective domain (Krathwohl, Bloom, & Masia, 1973). Figures 3 and 4 are examples of

survey questions. Upon completing the course, students will be shown their answers to both surveys. This will allow them to see how their perspective of creepy crawlies has changed.



Creepy Crawlies Pre-survey

1. How do you feel about spiders, in general?
 - ☐ All spiders are creepy and evil.
 - ☐ Only the dangerous spiders are creepy and evil.
 - ☐ Spiders are great!
2. How many species of salamanders are native to Tennessee?
 - ☐ 0-20
 - ☐ 30-70

Figure 3: Example of a pre-course survey question.



Creepy Crawlies Post-survey

1. Did this course positively affect how you feel about creepy crawlies?
 - ☐ Yes
 - ☐ No
2. After completing this course, do you feel like you are able to educate others about the benefits of creepy crawlies?
 - ☐ Yes
 - ☐ No

Figure 4: Example of a post-course survey question.

Discussion-board Posts

Students will be required to complete two discussion-board posts for each learning module (Units 1-5). The introductory post will be completed at the beginning of each module, and will serve to assess prior knowledge, as well as to gauge the learner's attitude and interest toward the unit's animal group. The conclusory post will be completed after finishing the three sub-modules, and will be a type of formative assessment. Once submitted, learners will be able to view and comment on other learners' posts, mostly as a means of increasing engagement and creating a community of inquiry. Instructor feedback will be given regarding the discussion-board posts upon completion of the module. Figure 5 represents a sample discussion-board prompt.

Craft a response to the following questions:

1. What spiders do you know that call Tennessee home?
2. Are there any spiders in Tennessee you are afraid of and why?
3. If you could become a native Tennessee spider which one would you choose and why?

Your response may be in the form of text, audio, or video.

Figure 5: Introductory discussion-board post for Unit 1.

Summative Assessments

Digital Presentation

Choose a species of animal found in Tennessee from the categories of *Snakes*, *Salamanders*, *Insects*, *Spiders*, or *Mammals*. Using a minimum of 6 slides/pages including the title slide/page, create a presentation using media of your choice (PowerPoint, PDF, Prezi, etc....). There must be one slide/page each dedicated to detailing a minimum of 3 ecological, 3 economical and 3 medical benefits of that species. Include a minimum of 1 image per slide. Provide APA formatted citations for all required sources of information and images on the final slide/page. Your presentation should include the following sections: Title, Introduction, Ecological Information, Environmental Information, Medical Information, and References. Table 1 represents a grading rubric that will be followed.

Table 1: Rubric for grading the digital presentation.

Category	5 points	3 points	1 point	0 points
Slides/Pages	All required slides/pages	5 slides/pages	4 slides/pages	Less than 4 slides/pages
Category Details	3 categories with 3 details each	3 categories but 1 or more categories have less than 3 details	Less than 3 categories but 3 details per category	Less than 3 categories and less than 3 details per category
Spelling Grammar	Presentation has no spelling or grammatical errors	Presentation has 1-2 spelling and grammatical errors	Presentation has 3-4 spelling and grammatical errors	Presentation has 5+ spelling and grammatical errors
Use of Graphics	Each slide contains a content appropriate image with proper attribution	Each slide contains an image, but no attribution	One slide has no image	Multiple slides have no image

The Bees Memes

Using picture collage software (Canva, Adobe Spark, BeFunky, etc.) create a series of memes (3 minimum) showing at least one benefit of honeybees in each of the categories (Environmental, Ecological, Medicinal). Photograph attribution will be required as needed. Students will be provided resources (for example, [this Creative Commons wiki is a good resource](#)) that outline how to correctly attribute a photograph. Post your memes to **The Bees Memes** discussion board for factual review by the instructor. Upon receiving feedback,

students will be encouraged to post their memes to a social media platform of their choice. This will emphasize a meaningful, real-world context for the activity. Figure 6 represents a sample student submission.



Figure 6: Sample of a student submission for the Bees Memes activity.

Spiders Behaving Exceptionally

This activity requires the student to have an Instagram account and post their username to appropriate discussion board so instructors can find your posts. While exploring the natural world, be on the lookout for spiders doing spider things. Capture the behavior using an image or video and post it to Instagram with a caption describing the behavior and its benefits and tag the image #SpidersBehavingExceptionally. Three posts are required for full credit. One of the three posts may use an image that you did not take, but the image source must be cited in the first comment and licensed for sharing. Figure 7 represents part of a student submission



Figure 7: Sample student submission for the Spiders Behaving Exceptionally activity.

Best practices in developing objectives, outcomes, and competencies

In designing the Tennessee Creepy Crawlies course and assessments, we drew on recommendations from numerous course readings to ensure that our design reflected best practices. Palloff and Pratt (2009) assert that “good course design begins with the end in mind” (p. 12). Since “Objectives provide the basis for achieving consistent instructional results” (Mager, 1997b, p. 15), we first designed objectives and outcomes that were measurable with visible, overt performance as suggested by Mager (1997b, p. 51). Thus, our objectives and outcomes focus on being able to “describe” and “list” information learned in the course. Consistent with Mager (1997a), we then “select[ed] test items that ask students to: (a) do what the objective asks them to be able to do, (b) under the conditions described by the objective” (p. 17).

Designing learning activities

In our design, we used a discussion board to help establish a community of inquiry and promote knowledge construction through social exchanges in an interactive community of learners. According to Swan, et al. (2008), “An online community of inquiry emerges out of social, cognitive, and teaching presence” (p. 8). Giguere & Minotti (2003) emphasized that “internet-based teaching experts suggest that active learning and collaboration are supported through learner-centered curricula that encourages discovery learning through the use of authentic instructional activities and interactive communities of learners” (as cited in Bangert, 2004, p. 248). Pea (1993) argues that knowledge construction takes place through a process of discussion and social exchanges where participants can offer and entertain different perspectives” (as cited in Penny & Murphy, 2009, p. 812).

Palloff and Pratt (2009) argued that “[i]t behooves instructors and other assessors to become knowledgeable about best practices in assessment and how to develop standards and benchmarks based on both content and the professional context in which the content resides” (p. 5). Our course is an asynchronous MOOC which is pursued by adult learners for enjoyment and knowledge rather than college credit. We kept this in mind as we designed the learning activities, as well as in the design of the assessments. Palloff and Pratt (2009) recommended, “Assignments should (1) align with the type of desired learning, (2) be reasonable in terms of workload, (3) be strategically placed in the course, and (4) sustain ongoing learning” (p. 23). Each unit of the course can be completed in 1.5 hours or less which is reasonable for this type of course. The units on creepy crawlies align with the type of desired learning by starting with introductory discussion questions, providing new content on each type of animal, and then asking for integration of the concepts learned in a final discussion question. By finishing with a real-world scenario with an argument on behalf of the animal, we are emphasizing the fourth component, “sustaining ongoing learning.”

We designed each module to follow the same setup to aid the student in navigating the course. Rottmann and Rabidoux (2017) asserted that “each module should look like the previous modules, with updated content and learning outcomes.” Lake (2016) agreed, stating that “consistency between modules in a course will help students become familiar with the course design” and recommended repetitive design elements “increasing predictability and intuitiveness.” Lake (2016) indicated that using “a similar sequence and visual appearance with your content items from week to week to help the students develop expectations and a routine that will set them up for success.”

Palloff and Pratt (2009) cite Buzzetto-More and Alade (2006) and Lynch, Goold, and Blain, (2004) for the proposition that when competencies and outcomes are aligned and “assignments and assessments... are varied and also in alignment with course outcomes, [this] leads to a higher level of student performance and satisfaction with the learning process, regardless of the delivery mechanism of the course” (p. 29). We incorporated varied, aligned assignments and assessments. Each unit allowed learner choice in the delivery of unit content, with a choice between slideshow, video, or reading a document.

According to Morgan and O'Reilly (1999), “if an online course is designed with clear guidelines and objectives and with tasks and assignments that are relevant not only to the subject matter, but to students’ lives as well, and if students understand what is expected of them, assessment will be in alignment with the course as a whole and will not be seen as separate and cumbersome” (as cited in Palloff & Pratt, 2009, p. 39). We applied this approach in designing our final discussion question for each unit to involve an authentic task involving a problem which the learner may well encounter in real life.

Designing assessments

The assessment design was also varied. We used quizzes, which served to facilitate immediate, automated feedback and allow for additional practice with the content. Additionally, the other three summative assessments focused on a variety of authentic tasks. “Authentic assessment--that is, assessment that encourages learners to actually *do* something to demonstrate knowledge acquisition rather than taking a test or quiz--is not only a better indicator of knowledge acquisition but also more likely to align with outcomes and competencies, and it also contributes to the retention of knowledge gained” (Palloff & Pratt, 2009, p. 18). Authentic

assessments are recommended for assessment in online courses by multiple authors (Morgan & O'Reilly, 1999; Palloff & Pratt, 2009; Vonderwell & Boboc, 2013; Giguere & Minotti, 2003). Throughout the modules, likely within the introductory video, students will be encouraged to visit locations where they can learn more about the unit's animal group. This type of instructional scaffolding promotes autonomy and student-centered learning experiences (Griffin, 2012).

We also deferred to Morgan and O'Reilly (1999) by designing assessments that “are relevant not only to subject matter, but to students' lives” (as cited in Palloff & Pratt, 2009, p. 39). Our assessments were designed to relate to students' lives. The Image Scavenger Hunt and the Bees Memes activities brought in social media elements which have relevance to the ultimate course goals and course competency of being able to communicate the benefits of various Creepy Crawlies of Tennessee to others. Like the discussion-board posts and the social media assessments, the presentation assessment tests for learning while simulating the real-world task of conveying knowledge acquired in the course to others in the future.

Stein and Wanstreet (2003) note that “the element of choice in assessments appears to be a factor critical to learning success with adult learners and that the ability to choose allows students to work from a preferred learning style” (as cited in Palloff & Pratt, 2009, p. 26). The presentation assessment allowed for learner choice of an animal from any of the types of species covered in the course. The learner also has choices to make about the Bees Memes content and images as well as for the Image Scavenger Hunt content and images. By allowing learners to choose their preferred submission media, engagement is also increased (Parker, Novac, & Bartell, 2017).

Morgan and O'Reilly (1999) assert that “assessments should be both (1) formative, meaning that they occur throughout the course and inform practice, and (2) summative meaning that they occur at the end of the course and assess cumulative learning from the course” (as cited in Palloff & Pratt, 2009, p. 43). We have enlisted the aid of discussion boards and quizzes as formative assessments occurring in each unit. We designed the social media and presentation assessments as summative assessments. However, since these are authentic assessments, learning continues to occur as the learners complete the tasks. The pre-survey serves as a means to assess prior knowledge. The surveys also assess understanding of learning outcomes and address the affective domain. Upon completing the course, students will be shown the results of both surveys, as a means to see how their perspective might have shifted.

Seven Principles for Good Practice

Chickering and Gamson (1987) put forth seven principles for effective teaching: (1) student-faculty contact, (2) cooperation among students, (3) active learning, (4) prompt feedback, (5) time on task, (6) high expectations, and (7) respect for diverse talents and ways of learning (p. 2). Our course design encourages student-faculty contact through email communications, limited learner-learner interaction via discussion-boards, and instructor feedback on discussion posts and assignments. We designed for cooperation among students by using discussion boards for questions associated with each unit and for posting the Honeybee memes. We also stimulated interaction with our choice of Instagram with hashtags for the spider assessment. We incorporated active learning with multiple real-world tasks for assignments and assessments. Prompt feedback was facilitated through the use of automatically scored unit quizzes and discussion board responses from the facilitators. We designed for maximum return for time on task by emphasizing authentic tasks and including some learner-learner interaction.

As this course is self-paced, and learners may complete the modules more quickly or more slowly than other learners, opportunities for learner-learner interaction is limited to discussion-board posts.

High expectations were conveyed through the rubric for the presentation assessment and through sample posts for the social media assessments. Palloff and Pratt (2009) assert that “rubrics help to define the characteristics of a high-quality assignment and help the student understand assignment and assessment expectations” (p. 33). We respected diverse talents and ways of learning by designing a wide variety of assessment tasks and providing alternatives for the content in each unit. While we drew best practices from a number of course readings, we designed the course to comply with these Seven Principles for Good Practice.

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