# Assignment 2 – Part 2 – Project Documentation

# Joseph Villella

MET Program, Department of Education, University of British Columbia

ETEC 524: Learning Technologies: Selection, Design, and Application

Professor Tatiana Bourlova

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#### Overview

My course topic is Grade 4 Science based on the BC Curriculum, and the specific unit that I will be focusing on in part two is "Unit 1: Biomes and Adaptations". The course will be hosted using Google Classroom, and the intended audience will be Grade 4 students and their parents. The reason for including parents in this audience is that they may need to assist their child in staying on top of assignments and learning tasks. This is considered in certain aspects of the introduction, as the overall learning objectives of the course are presented in text form (for the parents) and video form (for the students). The lessons have been created with Grade 4 students in mind to help them be successful through multi-modal activities.

#### **Learning Objectives**

The learning objectives for all units are based on the BC Curriculum's big idea that all living things sense and respond to their environment (BC Ministry of Education, n.d.). By the end of the unit, students will be able to identify various biomes with similar environmental features, describe how living things sense and respond to their environment using adaptations, and identify and explain some environmental implications of their actions and the actions of others, based on current events. These learning objectives are appropriate for the Grade 4 students' abilities, as they involve observing, describing, identifying, and explaining using scientific vocabulary and concepts which follows the BC Curriculum.

I followed the Universal Design Language Guidelines of providing multiple means of engagement, representation, and action & expression (Cast, n.d.). I offered various learning options, such as text, video, or gamification, to engage learners. I created discussion opportunities and comprehension assignments to help learners represent their knowledge and perspectives. I designed a clean and easy-to-navigate course that supports learners' action and expression through sharing and

communication.

#### Content

I used a variety of content options to accommodate different learning styles in this unit. Students will learn the core concepts of the lesson or topic from online readings, videos, and slideshows that present the information in a visual way. They will reinforce their learning through classroom discussions, Google Form quizzes, and creative tools like Canva and Quizlet. I also used imagery throughout the unit to make the lessons more engaging and reduce the amount of text on each page.

### Activities, Assessments, & Communication

This unit of learning contains many activities, assessments, and communication pieces to help students learn about biomes and adaptations.

### **Learning Activities**

- Readings Students will complete readings in weeks 2, 5, and 6 to introduce the topics of biomes and adaptations. These are necessary to create a foundation for learning.
- Video Students will watch video pieces in weeks 3, 5, and 8 to help visualize biomes and adaptations. Video content is also used to help students learn Canva.
- Quizlet Students can take part in a Quizlet in Week 11 to help study and reinforce their knowledge.

#### Assessments

Google Doc Assignments – Students will be asked to complete check-in assignments on Google
 Docs during weeks 2 and 5. These are placed during the weeks to check-in on students learning
 as a formative assessment. This provides the instructor with the ability to ensure students are on
 the right track through feedback.

- Adaptations Pop-Quiz Using Google Forms, students will complete a pop quiz in week 7. This is
  to reinforce their knowledge of adaptations and is used as a formative assessment. Specifically, it
  is focused on adaptations since it is a complex aspect of the overall unit. This provides the
  instructor the ability to give feedback on the students' learning.
- Canva Poster Project Students will complete a formative assessment by making a poster using
   Canva during weeks 8-11. This provides students with the ability to showcase their knowledge of
   biomes and adaptations using creative tools. Students are expected to select a biome and then
   follow the criteria provided to create a poster with information.
- Unit Test Students will complete their summative assessment using Google Forms during Week
   12. This unit test encompasses the information they have learned about biomes and adaptations.

### Communication

Students will complete discussion posts during weeks 3 and 6. These discussions ask thoughtprovoking questions and help the students reflect on their current learning. Students must
respond to their peers to continue discussion points and help formulate new knowledge through
shared experiences (constructivism).

## **Role of the Instructor**

The role of the instructor throughout the unit is to help facilitate the learning process through the online learning management system. The instructor must help provide students with on-going support for their learning. The instructor must ensure that the modules are unlocked on a weekly basis to help students manage their time and expectations per week. The instructor must give timely feedback for students on assessments and should be available to answer questions and check-in. Responding and contributing to discussions is also required by the instructor to help create a welcoming environment of

learning. The instructor must also ensure clear guidelines and expectations are set throughout the course.

## **Authorship**

My choice of authorship for this course is the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License. My reasoning for choosing this license is so that my work can be copied, distributed, remixed, transformed, or built upon in non-commercial settings (such as education) if they give attribution to me. I want to encourage other educators to use this unit of learning in their curriculum, and I believe that this license allows that while also somewhat protecting the work in the best way possible. Due to the limiting nature of Google Classroom, this attribution and reference information is found in the course information section under the material named "Authorship Information & References".

## References

BC Ministry of Education. (n.d.) *Building student success – B.C. curriculum – Science 4*. BC Government.

https://curriculum.gov.bc.ca/curriculum/science/4/core

Cast. (n.d.). The UDL Guidelines. <a href="https://udlguidelines.cast.org/">https://udlguidelines.cast.org/</a>