

Lesson Plan Redesign to Integrate Technology

Purpose:

The purpose of this assignment is for students to redesign and enhance a lesson plan to integrate technology and align with Universal Design for Learning (UDL) and TPACK. Students will first evaluate the lesson's critical components and then INTEGRATE TECHNOLOGY into the lesson. This assignment will be completed over the dates provided for the module, followed by presentations of the integrated technology from each collaborative team.

General Instructions:

Review one of the lesson plans listed on our Bb site or get permission to review one you have previously written or researched. Then, complete Sections 1 -8.

Remember to:

- Review the directions in each section below, carefully.
- Use thoughtful, detailed, and full sentences in your responses.
- Meet the sentence count, where instructed.
- **Leave the headings (and points)** and type directly into the template.
- Remove instructions, examples, and the lines ("i.e., the fill in the blank") when the lesson plan is submitted. The instructions and examples are there to guide students in completing the lesson plan. Deleting the instructions and examples, leaves the project looking like an official lesson plan, rather than an assignment.

Notes:

Section One: Title, Unit, and Objective – 7.5 points**List Members of Redesign Team (full names): Selena Young, Stephen Rebetsky**

1. **Lesson Title:** The Very Hungry Caterpillar: A butterfly's Lifecycle:
2. **Intended Grade Level:** 2nd
3. **Lesson Description:**

Students will participate in an interactive read aloud (IRA) on "The Very Hungry Caterpillar" by Eric Carle to learn about the butterfly life cycle. Using what they learned from the IRA, students will create their own butterfly life cycle using Scratch JR.

4. **Unit Description:**

This lesson on the butterfly life cycle falls under a unit on the life cycles of living organisms.

5. **Original Lesson Objective:**

- "Students will be able to identify the four life stages of a butterfly."
- "Students will be able to ask and answer questions to help determine or clarify the meaning of words in a text."

6. **Revised Lesson Objective:**

- Students will be able to **classify** and **sequence** the four life stages of the butterfly life cycle by answering questions and participating in an interactive read aloud of "The Hungry Very Caterpillar" by Eric Carle.
- Students will be able to **design** their own butterfly life cycle by using OctoStudio to digitally retell the stages of the life cycle (beginning, middle, and end).

Section Two: Standards – 2.5 points

Find at least one standard, which aligns to your lesson.

Copy and paste the number and complete sentence(s) associated with that standard.

- **Maryland Career and College Ready Standards (based on the CCSS) RL.2.5** Describe the overall structure of a story, including describing how the beginning introduces the story and the ending concludes the action.
- **ISTE 1.4.a** Students know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems.
- **NAEYC (if ECED) PROGRAM STANDARD 3 Curriculum:** Planning and Implementing an Engaging Curriculum to meet Meaningful Goals

Section Three: Materials List – 2.5 points

- Smart Board
- Butterfly life cycle time lapse: <https://youtu.be/ocWgSgMGxOc?si=yBV6AZdQFSxE6aKi>
- Whiteboard
- White board markers
- *The Very Hungry Caterpillar* by Eric Carle
- Completed example project (OctoStudio)
- Class set of Chromebooks
- Class set of the project instruction/tip sheet: [Document 1.docx](#)
- OctoStudio: <https://octostudio.org/>
- Class Padlet link & code: <https://padlet.com/syoung1012/butterfly-life-cycle-octostudio-project-il75x7ejkrx2lgh8>

Section Four: Anticipatory Set and Closure – 7.5 points

- **Anticipatory Set -**

Before the lesson, students will watch a YouTube time-lapse of the butterfly life cycle. Before watching the video, students will be asked to think about at least one thing they notice and one thing they wonder while the video is playing. After the video, students will be asked to turn and talk with their partner to discuss what they noticed and wondered during the video. 1-2 students will be asked to share with the whole class. 1-2 different students will be called to predict what we will learn about or what type of story they think we might read.

YouTube Link: https://youtu.be/ocWgSgMGxOc?si=zN_wVoK0VeL5xZHc

- **Closure**

Students will share the link to their completed OctoStudio projects on the class Padlet. Students will explore the work of their classmates, leaving positive feedback, comments, and support.

Padlet Link & Code: <https://padlet.com/syoung1012/butterfly-life-cycle-octostudio-project-il75x7ejkrx2lgh8>

Section Five: Integrate Technology (Proposal) – 5 points**1. Describe the Technology Activity that you integrated into the Lesson Plan:**

- Students will use OctoStudio to create an interactive animation of a butterfly's life cycle.
- Before Octostudio, students will draw four scenes on a worksheet: eggs, caterpillar, chrysalis, and butterfly.
- Students will begin by creating a scene of the caterpillar eggs
- Next students will create a scene of the caterpillar eating to grow
- Then students will create the scene of the chrysalis hanging upside down from a twig
- Finally students will create the scene of the butterfly flying in its final form

2. Justify the Technology and Activity:

The animation aspect of OctoStudio allows students to think more deeply about each stage of the life cycle and the environments in which they occur. Students can animate the butterfly flying and leaves bouncing through colorful coding blocks and the vast library of sprites and backgrounds found on OctoStudio. OctoStudio turns drawing each stage into building an animated story of the butterfly journey. When students think about the journey while creating their animation, they are thinking beyond what a single moment in each stage can capture.

Section Six: Procedures (Lesson Steps) – 10 points**Procedures: Lesson Steps****Hook:**

1. Display the lapse YouTube video of the butterfly life cycle on the Smartboard. During the video, students will think of at least one thing they notice and one thing they wonder. **Video Link:** https://youtu.be/ocWgSgMGxOc?si=zN_wVoK0VeL5xZHc
2. Instruct students to participate in a turn and talk with their partner to discuss their notices and wonders. Call 1-2 students to share aloud.

Introduction:

3. Explain to students that we will be listening to *The Very Hungry Caterpillar* by Eric Carle. Show students the book cover.
4. Call on 1-2 students to predict what they think we will be learning/reading about based on the video and the cover of the book.
5. Explain to the students that while you are reading, they should listen for the following words: **butterfly, chrysalis, eggs, and caterpillar**. Have them consider how these words relate to the story and the very hungry caterpillar.
6. Explain that a butterfly is a winged insect. The butterfly starts as an egg and then hatches to be a caterpillar, which looks like a worm that will eventually grow into a butterfly. The caterpillar turns into a chrysalis, which is like a small protective house.
7. Write the vocabulary words on the whiteboard (egg, butterfly, chrysalis, and caterpillar).
8. Explain to the students that as they are listening to the story, you want them to think about what is happening in the beginning, the middle, and the end of the story.

Explicit Instruction:

9. Read *The Very Hungry Caterpillar* aloud. When you hear the words you wrote on the board (caterpillar, chrysalis, eggs, butterfly), pause and ask your students what they think the words mean. Invite students to share their ideas with a partner.
10. Provide sentence frames to support students in asking and answering questions about the word meanings (e.g. I'm wondering what the word ____ means. I think it means ____ because ____ / I think the word ____ means _____. I know this because ____.)
11. When you get to the word **cocoon**, explain to the students that this word is similar to the word **chrysalis**.
12. Pause and discuss pictures and what the pictures are showing the students. Invite students to discuss how the pictures help them understand the word meanings.

Guided Practice:

13. Ask the students to explain, or retell, what happened in the beginning, the middle, and the end of the book.
14. Next, point to the words on the board. Ask the students to stand up if they heard you read any of the words that were on the board.

15. Explain to the students that the words on the board are the four stages of a butterfly life cycle.
16. Ask for a volunteer to come up to the board and put the life cycle stages in order from 1-4 (1 is the first stage and 4 is the last). Have the students write the numbers next to the words.
17. Explain to the students that they will get to create their own butterfly life cycle using OctoStudio.

Independent Practice:

18. Display the completed example of the OctoStudio life cycle project on the Smartboard.
19. Share tips for coding on OctoStudio (how to add/change sprites, change backgrounds, make sprites move etc.)
20. Pass out the instruction/tip sheet and explain the requirements for the OctoStudio project. (must include all four stages of the butterfly life cycle).
21. Pass out Chromebooks and demonstrate how to navigate to OctoStudio on the Smartboard.
22. Explain how to create a new project (Click "+ Create new project", "choose a sprite", "choose a backdrop").
23. Instruct students to begin working on their OctoStudio project.

Assessment:

24. Rotate during independent work time. Check to make sure the students are organizing the life cycle stages in order. Assist as needed.

Closure:

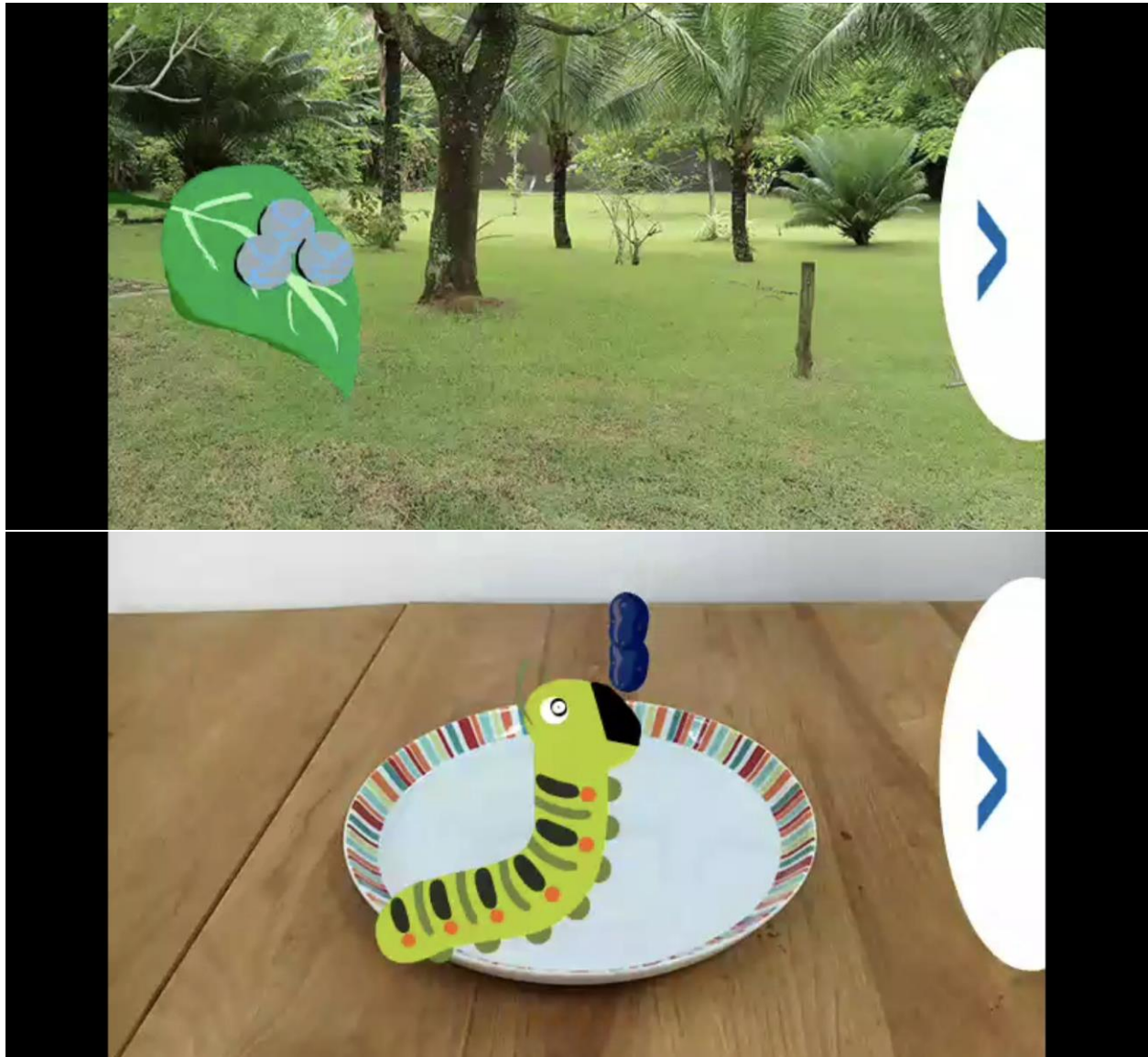
25. Create a class Padlet board.
26. Explain to students that they will be sharing their projects and leaving positive comments for their peers on a shared Padlet board.
27. Share the Padlet code and demonstrate how to join the class Padlet using the Smartboard.
28. Explain how to share their project link on the Padlet.
29. On the smartboard, demonstrate how to leave comments on other's posts.
30. Allow students to share their work and provide feedback to their peers.

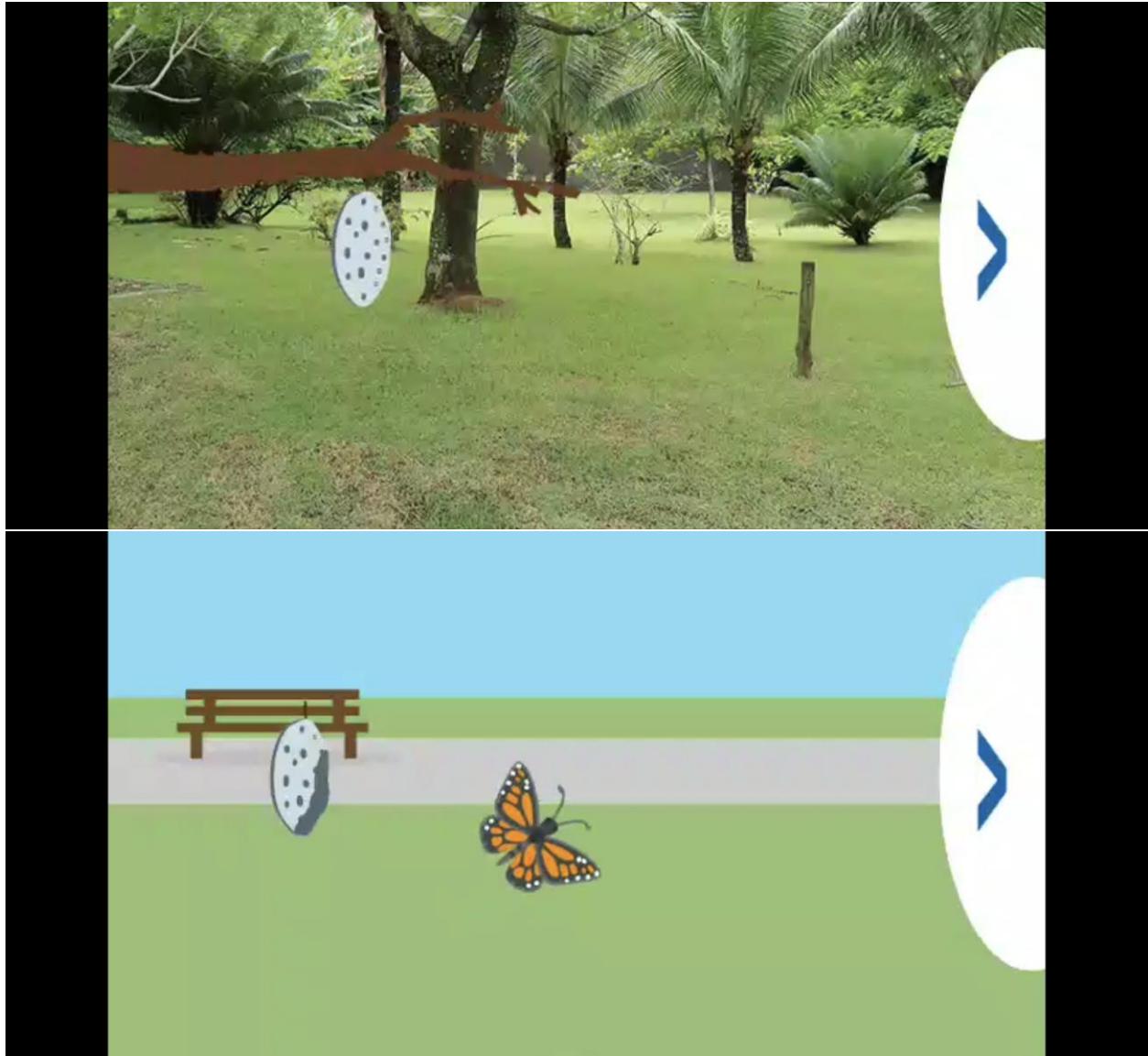
Section Seven: UDL Justification – 5 points

The first principle I chose is 1.1: Support Opportunities to Customize Display of Information. This is a core part of our lesson since students are given the freedom to connect the concepts in OctoStudio however they choose. They can use the library of sprites and backgrounds or even use their own. The second UDL principle I chose is 4.1: Vary and Honor the Methods for Response, Navigation, and Movement. This is present in our lesson since students can use OctoStudio to connect the stages of a butterfly lifecycle in any way they choose. This could be through a simple animation, a guided animation, or even a game. The means by which the user navigates the different stages of the lifecycle is entirely the choice of the students. The third UDL guideline I chose is 8.3: Foster Collaboration, Interdependence, and Collective Learning. In the final part of our lesson, students upload their own OctoStudio project to Padlet and comment on their peers' projects. This fosters collaboration as they get to share their own work and give feedback on that of their classmates.

Section Eight: The Technology Activity – 10 points

Project instruction/tip sheet: [Document 1.docx](#)





Padlet link <https://padlet.com/syoung1012/butterfly-life-cycle-octostudio-project-il75x7ejkrx2lgh8>