CI5307 Adapted
Lesson Plan Guide/ Template

Technology Integration Lesson Plan The primary objective of this assignment is for you to demonstrate to yourself, your classmates, and to me your ability to be creative and purposeful about technology integration into your teaching and learning strategies. Working with a partner, each pair will prepare a standard-aligned lesson plan that integrates technology effectively as it relates to instructional objectives and assessments. Technology updates for this assignment should be meaningful and add value to either your instruction or assessment or to students' learning.	
Author(s)	Megan Rogers
Title	Local Plant Identification
Grade	1st Grade
Subject/ Class	Science

Big Ideas	
Essential Questions	What are the 1-2 big questions that drive this lesson?
What flora exist in the world around us? How do we interact with plants in our environment?	
Key Concepts	What are the key disciplinary concepts that students will wrestle with during this lesson?
Basic evidence based research, early comprehension of local ecosystems, promotion of critical thinking.	
Standards	What MN state standards and ISTE does this lesson address?
<u>Minnesota Academic Standards in Science</u> 1.1.1 Students will be able to ask questions about aspects of the phenomena they observe, the conclusions they draw from their models or scientific investigations, each other's ideas, and the information they read. 4.1.1 Students will be able to engage in argument from evidence for the explanations the students construct, defend and revise their interpretations when presented with new evidence, critically evaluate the scientific arguments of others, and present counterarguments. <u>ISTE Standards: For Students</u> 1.3.d Explore Real-World Issues: Students build knowledge by exploring real-world issues and gain experience in applying their learning in authentic settings. 1.7.d Local and Global Issues: Students explore local and global issues, and use collaborative technologies to work with others to investigate solutions.	

CI5307 Adapted
Lesson Plan Guide/ Template

Focus on Students	
Learner Objectives	**Every Student Will Be Able To (ESWBAT):** Objectives should be measurable/observable and student centered, and should include higher-order thinking (see Bloom's Taxonomy). What should students be able to KNOW and DO by the end of the lesson?
After lesson completion, students should be able to recall identifying features of local plants and animals and apply this knowledge independently. Given a studied plant or animal, a student will be able to move through steps of Bloom's Taxonomy to verify and justify their claim on the identity of the specific flora or fauna. I.E. remember identifying details, use their understanding to classify the organism, apply their understanding independently, and support their evaluation.	
Accommodations/ Modifications	How will you meet the needs of all of your learners? In a heterogeneous classroom, teachers intentionally plan for curricular and instructional adjustments to meet the needs of individual students.
Group organization can be modified to support students with different needs. The educator can use a hands-on approach to guide students who may be struggling, for instance by personally leading a given student or group through their identification. For students with different mobility needs, the educator can prepare plant samples ahead of time. A guide for where to find specific plants may also be used for students who benefit from a more structured learning environment.	
Materials Needed	What do you need in order to do this particular lesson? Be sure to attach/link all materials here.
This lesson requires access to an Ipad with camera accessibility and the educational app Seek, a plant and animal identification tool. Seek: https://www.inaturalist.org/pages/seek_app	
Technology integration	How is technology being used to add value and/or meaning to this lesson?
The technology is the primary source for students to gather information within this lesson. Seek will be used to engage with the local outdoor environment, allowing students to grow in their understanding of the world around them.	

Developmental Sequence	
"On the Board"/ When Students Arrive	

CI5307 Adapted
Lesson Plan Guide/ Template

Upon arrival, students will be directed to collect their Ipad. The educator will also pass out a plant scavenger hunt hand out featuring common flora and fauna, as well as guides or other accessibility aids that may be required. Dependent on class size and technology availability, students will be organized into small groups ranging from 3-5 students.	
Anticipatory Set/ Warm Up	How will you hook your students and grab their attention to get the lesson started?
An engaging poster related to the lesson will be on the board at start up. The educator can ask students about flowers or animals they have seen in the local area, perhaps asking what flowers grow in family or community gardens, if they have seen any animals on the way to school, what plants they notice at recess, etc. These introductory questions set up the transition into the lesson objectives, which include seeking to gain a better understanding of local flora, fauna, and how we interact with these aspects of nature in our community.	
Body of the lesson	This is a description of the chronology of your instruction, what will happen and in what order. Please include cooperative learning structures, when specific texts or handouts will be put into play, and any planned student movement, if it serves the learning.
The educator should first explain how groups are to complete the lesson, including explaining the scavenger hunt worksheet and showing a walk through of using the Seek app. The app's functionality is simple, allowing a user to point the camera at a plant or animal and seeing the app's match within seconds. After groups are arranged with Ipads and handouts, the educator will ask students to form a line to travel safely outdoors. Once outside, students should navigate to the Seek app. Using the app, students will scan plants on the school ground and aim to match findings with plants listed on their scavenger hunt worksheet. The class is to remain on school grounds, possibly at the playground or other applicable outdoor area. Student groups will be directed to move freely about the designated area, but should not leave the teacher's sight. Students should group investigate with the goal to mark off as many plants as possible. With 15-20 minutes left of lesson time, the educator will gather groups and lead students back inside.	
Closure	How will you close the lesson? What will students do in those final moments to seal their learning?
Lesson closure will involve confirming plant identifications on Seek. The app stores identification history, which will be used for this purpose. Groups may be rewarded for scavenger hunt completion with a small reward such as a sticker or classroom points. Classroom discussion of local plants, what was interesting, surprising and so on will wrap up the in-class work for this lesson. Before leaving, or transitioning to a new subject, students will be encouraged to choose and discuss their favorite finding using the think-pair-share cooperative learning method, as they will be sent home with a worksheet based on this. Instruction on homework completion and the matching worksheet will be given prior to think-pair-share.	
Homework	
Students are expected to document their understanding of an organism they found during the scavenger hunt portion of the lesson on their own time. The given homework sheet will include a	

section where the student is asked to draw their chosen plant or animal. Below this drawing, students will be provided 3-4 dotted lines to write a sentence about what they learned related to this organism through the lesson.

Assessments	
Formative Assessments	How will you check your students' understanding and progress along the way?
Assessment of student understanding will primarily be collected via observation, group share and homework sheets. During explanation of this lesson, thumbs up or head nods can be used to ensure students understand the expectations of the lesson. To verify findings during small group investigation, the educator should examine Seek plant identification history. If the classroom needs allow, the educator can also speak with groups independently during the scavenger hunt period.	

Resources: *Has this lesson been adapted from another source? If so, link those materials here.*
This lesson was created independently and did not include adaptations from external sources.

Technology Integration: *Using SAMR. TPACK or PICRAT - Describe the type of integration that this lesson demonstrates.*
In the PICRAT framework, I believe this lesson's use of technology would fall under IT, interactive transformation. The Seek app allows for a gamified experience of plant identification and requires the user/student to navigate and explore the world, hence why I believe this is interactive. Seek creates an transformative learning experience as well, as this lesson would not function the same without utilizing the app's benefits.