Backward Design TPACK Lesson Plan Model Development Worksheet

Developing a TPACK based lesson plan will require all your:
Pedagogical Content Knowledge: How to teach particular content-based material (PCK)
Technological Content Knowledge: How to select and use technologies to communicate particular content knowledge (TCK) and,
Technological Pedagogical Knowledge: How to use particular technologies when teaching (TPK)
Harris and Hofer state that instructional planning facilitated by use of digital tools and resources can be complex, with each decision determining aspects of other decisions already made or yet to be determined. Planning a particular learning event can be described as the end result of five basic instructional decisions:
1. Choosing *learning goals*
2. Selecting and developing formative and summative *assessment strategies* that will reveal what and how well students are learning
3. Making practical *pedagogical decisions* about the nature of the learning experience
4. Selecting and sequencing appropriate *activity types* to combine to form the learning experience
5. Selecting *tools and resources* that will best help students to benefit from the learning experience being planned

In alignment with our knowledge of backward design, developing assessment strategies is the second thing we do after the learning goals are decided.

The "activity types" references from Harris and Hofer can help act as a guide toward which technology support certain types of activities that are common in education. Please refer to the resources provided in your content area to help guide your lesson planning decisions.
Remember that we do not want to start our lesson planning with knowledge of what technology we will use. This is what Papert called being "technocentric-focused on the technologies used more that the students or the content.   Technocentric learning experiences rarely help students to meet curriculum-based content standards, because those standards did not serve as a primary planning focus.

As you plan your lesson, consider the technological, pedagogical, content decisions you are making and reflect in your lesson plan on how and why you are making these decisions. Of course typically this is "teacher head thinking" that goes on when you think through this process, but for this lesson plan you will write about it in the lesson to demonstrate your understanding of how this applies to your technology integration.

Name: Elizabeth Rinkes & Mark Vance
Lesson Plan Title: Art or Vandalism Unit (Lesson 1: Art, Lesson 2: Language Arts)
Describe audience, context, constraints: This is a cross-curricular project that will involve art and language arts. We plan to complete this with 5th grade students. They will complete a graffiti unit that will cover the rise of graffiti art in NYC in the 1970's and 80's. Students will consider their feeling on whether graffiti is art or vandalism. They are able to utilize their creativity by creating their own name design on a special website. Then, they will use what they learned about graffiti in language arts. They will complete a unit that challenges them to think about the uses of graffiti and their opinion on whether it should be considered vandalism or art. The final assessment is through a written opinion essay for a language arts grade.

Content	**Objectives/Indicators**
	What are the Ohio Content Standards for this lesson—indicator level.
	ISTE or other standards for your area of focus
	
	ISTE Standards:
	   ● 1b: Students build networks and customize their learning environments in ways that support the learning process.
	   ● 1c: Students use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways.
	   ● 2: Students recognize the rights, responsibilities and opportunities of living, learning and working in an interconnected digital world, and they act and model in ways that are safe, legal and ethical.
	   ● 6a: Students choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.
	   ● 6b: Students create original works or responsibly repurpose or remix digital resources into new creations.
	
	Lesson 1:
	Ohio Visual Art Standards
	Perceiving/Knowing
	   ● 5PE: Focus attention on selected artworks to identify and pose questions about aesthetic qualities (e.g., sensory, organizational, emotional) in the works.
	   ● 6PE: Select and access contemporary digital tools media arts to investigate ideas and inform artmaking
	Producing/Performing
	   ● 2PR: Use digital tools to explore ideas, create and refine works of art during the artmaking process.
	   ● 5PR: During collaborative art making experiences, demonstrate respect and support for peer ideas and creativity
	Responding/Reflecting
	   ● 5RE: Express what was learned and the challenges that remain when assessing their artworks.
	   ● 6RE: Use criteria to assess works of art individually and collaboratively.
	
	Lesson 2:
	   ● W.5.1 Write opinion pieces on topics or texts, supporting a point of view with reasons and information.
	     a. Introduce a topic or text clearly, state an opinion, and create an organizational

structure in which ideas are logically grouped to support the writer's purpose.
b. Provide logically ordered reasons that are supported by facts and details.
c. Link opinion and reasons using words, phrases, and clauses (e.g., consequently, specifically).
d. Provide a concluding statement or section related to the opinion presented.
- RL.5.1 Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.
- RI.5.9 Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.
- W.5.4 Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience.

Prior Knowledge/Prerequisites
List the prior knowledge students must have to be successful with this lesson.

Lesson 1: Students will bring to this lesson a basic understanding of the internet, Chromebook use, Padlet and how to navigate websites. The students will also have to be able to view videos and take notes on the important aspects of the video presentations. In addition to these basic skills the students will also bring their own background knowledge on graffiti that they have acquired from other classes and from life experiences. The students have all done many projects in the art room and have an understanding of the classroom rules and expectations for independent work time. All supplies will be provided so the students will not have to bring anything with them to class.

Lesson 2: The students will have prior knowledge of the various technologies used in the lesson, such as Padlet, NewsELA, EdPuzzle, Google Sites, Google Docs, and Google Classroom. In addition, the students will have knowledge regarding writing expectations and how to read rubrics. The rubric will be attached to the lesson, however, the students will have used this rubric before and will be able to interpret what is expected of their writing. They will also have reviewed our OREO strategy for opinion writing that will help them include the necessary information in their essay. In addition, since we have completed self-paced modules before like this unit, they will have prior knowledge of the expectations as they move through the information (not talking to neighbors, off task, other websites, etc).

Pedagogy	**Identify and Discuss Pedagogical Decisions**
	Assessment **Pre-Assessment-**will you pre-assess? Why? How will data be used? **Lesson 1:** The pre-assessment for the art portion of this unit will be filled out online. This assessment is a quick information gathering form. The students will answer short answer questions to help me understand their prior knowledge of graffiti and to obtain whether they think graffiti is art or vandalism. This will be compared to the post assessment to see if and how their opinion might of changed or stayed the same. The pre and post assessments will not be part of their overall grade but they must complete them. **Lesson 2:** The pre-assessment in Language Arts will be their initial post in the Padlet. They will complete this however, after reading 3 articles surrounding graffiti. The students

will be expected to write their initial post for further discussion with the class. This will lead the discussion topic as they work through the lesson. It will not be used as a grade, but rather to show how their thoughts develop throughout the topic by their summative writing piece.

Formative and Summative Assessments
How will you evaluate the students?
Why have you chosen these methods?
Is technology used for or included in the evaluation process?
How will you share data with students/others and why?

I will evaluate the students using technology based on their discussion on Padlet. This will help me gather information to see how their thoughts grow and deepen throughout the topic. However, the post-assessment will be a summative writing piece. The students are expected to type an essay through Google Docs. I chose these methods for my assessment because the summative writing is an opinion piece as that is the focus of the lesson. I want the students to form a strong opinion that they can support in detail through their writing. Technology will be used for both methods of assessment and will also allow for students to see feedback easily. They will have automatic access to feedback to their Padlet, however, they will have to wait for me to release feedback from the writing piece. This is because the Padlet is meant to be collaborative and help the students challenge their thinking. The final writing piece, on the other hand, is a summative assessment and therefore will require additional scoring from the teacher.

Models of Instruction/Instructional Strategies
Identify the instructional models or strategies you will use for this plan.

At the beginning of the lesson, we will have a teacher-led review of information, however, the rest of the lesson will be entirely student led. The students will be working through an online module platform using guided inquiry. I've provided resources to the students through the Google Site, however, it will be the student's responsibility to move throughout the lesson.

Procedures/Activities
What activities have you planned? Include detailed description of the activities and how the resources are being used to support learning.

I plan to begin the lesson in a whole group setting. I will discuss various fact vs opinion relationships with the students to review what qualifies as an opinion. We will then lead into an opinion question posed to the class that may question their morals and encourage discussion. After we discuss personal opinion and how to properly support it, we will review the OREO strategy as a class (Opinion, Reason, Evidence, Opinion). In addition, I try to get my fifth graders to write "double stuffed oreos" or even "triple stuffed" meaning they include additional reasons and evidence before restating their opinion. The rubric used is a typical rubric used in class and the students would be familiar on it as this would come after numerous "scoring camps" learning how to read rubrics and what important features are listed. Once we have completed the introduction, the students will be released to begin the online module. They will utilize Google Sites to follow a checklist of activities. These activities will include a newsELA article, EdPuzzle, and discussing through Padlet. The

	discussion board will be one form of assessment. They are expected to complete it after a few tasks and then return to it later to comment on classmates' responses. This will encourage collaboration and sharing of ideas, opinions, and examples. At this point they will be released to begin research on their own using friendly search engines such as KidRex.org. Throughout this time, to allow for differentiation while the students are working, I will be pulling small groups of students who need to work on various writing skills to practice in small groups with the teacher. For example, students who consistently have run on sentences will be pulled together to complete an activity with me to help improve that skill. In addition, the individual activities in the module will be differentiated. For example, the NewsELA.com website allows the students to all read the same article, but at varied lexiles. It will change some wording and vocabulary to increase or decrease the difficulty based on their previous scoring lexile levels. I also have various videos and quizzes that allow for the students to choose a varied difficulty level based on which activity they choose. Once they have adequate notes and information, they may begin responding to the overarching question, "Do you believe graffiti is considered an art? Or is it considered vandalism?" They will respond to this through a Google Doc. This formative assessment will be scored by the ODE rubric and the students will need to refer to it throughout their writing.
Technology / Resources	**Identify and Discuss Technological Decisions** **Resources** What resources do you need to support the activities? How do the resources help students achieve the objectives? The students will need chromebooks and their Google Logins. Through these, we will be able to utilize all necessary resources. The resources help the students in a variety of ways. The first resource will be the website used in art to create their Graffiti picture. They will use this to see that graffiti can be changed in many ways to change the image. They will also be utilizing various tools such as Padlet to encourage collaboration and discussion. In addition, in ELA, there will be a number of websites such as newsELA, Quizizz and EdPuzzle that encourage the students to dive deeper into their study of graffiti and gain a deeper understanding to form a detailed opinion. Finally, the students will be using Google Docs as their assessment. **Technology Resources** List technology resources and describe specifically why they were chosen, how the resources help students achieve the objectives and how the use will be evaluated. If technology is used for evaluation or data collection, describe how it will be used. Since our district is 1-1 with chromebooks, We will be utilizing the student chromebooks for these lessons. The students will be familiar with our Google Classroom format and will be able to easily manipulate the various tools. We will utilize various websites such as newsELA.com, Quizizz, EdPuzzle, and additional Google Apps for Education. These tools support the pedagogy because the students will be engaged in the various tools. They will not only able to follow the links we share to them, but also research on their own using digital citizenship. Their final assessment in Language Arts will be writing on Google Docs and will allow for collaboration with other students in a following unit (scoring one

	another's content based on the rubric and sharing feedback). In addition, the content is directly aligned to writing and art standards of 5th grade.
Reflection	**Lesson Reflection** Discuss your thought process in the development of this lesson. After learning about TPACK how has this knowledge influenced the way you developed this lesson? In order to plan this unit to be strong in all areas of TPACK, there were a variety of factors that were considered. For example, the content was chosen specifically based on the learning objective that the students would be able to write a final assessment stating their opinion and using evidence from their various resources used. The rubric used is from the Ohio Department of Education and is directly aligned to the learning standards for writing opinion pieces. However, when it came to pedagogy, there were a few topics that needed to be reviewed prior to beginning to online module. I will have to begin the lesson by reviewing whole class what fact vs opinion is and then the important components of writing an opinion piece. Because of this age, they have had experience with the writing skills, however, will need to have a review of the expectations and what constitutes an opinion piece. Throughout the lesson, they will be reviewing various sources for information to include in their reasons and evidence portion of their final assessment. Another standard of focus is the students will need to utilize evidence from multiple sources. This allows for the students to have direction on which resources they would like to utilize. How is the development of your planning with the use of technology changed in terms of how you integrate technology into your classroom? My use of technology in the classroom has changed drastically since learning about TPACK. This is because I've learned about how to strategically use technology rather than just using technology to use it. I've learned how to properly implement it into the classroom and make it beneficial for the students. I wouldn't say that I use technology more or less than before, however, I certainly use it in a more beneficial way. How do you measure the impact that technology has on your student learning? I believe that technology in general cannot be measured because there are just too many variables that must be considered. However, to measure the effectiveness of technology I think you need to find specific areas to be measured. The technology being utilized should be paired with a specific teaching strategy that has clear measurable goals. There must be a clear understanding of what constitutes effective? Is it improved assessment scores, execution of high level thinking, creative risk taking or even failing. If a new method of instruction is going to be measured, to determine its usefulness, there needs to be a baseline prior to the implementation. This way there is a comparison and a way to show growth. Any time technology is used there should to be a specific reason for its use and what the expected outcomes might be. This way technology is not being used just to use it. The students might enjoy it but is it actually having an impact on their learning. If you will not be able to actually implement this lesson, write a scenario of what you predict will happen when the lesson is implemented. Include a student sample product and what you predict your data collection will look like. **We will implementing this lesson.**