

EDUC 5130: Thematic Learning Environment

Overview

Technologies hold potential for supporting new types of teaching and learning, but to be effective, learning environments must be carefully designed to maximize technological potential and encourage creativity. In this project, you will choose a central theme and create various learning opportunities (“stations”) around that theme. Each learning station will apply technology to support different types of learning on the same theme.

Project Goals

This project will help you reach the goals below. It will also serve as evidence of your learning.

1. Purposefully apply a wide variety of uses of technology to foster creativity and learning
2. Evaluate, select, utilize, and create appropriate instructional materials
3. Select and develop culturally relevant learning materials
4. Use distance technologies and/or social media to expand a learning community
5. Apply project-based learning to support learners in developing their own knowing and in assessing their understanding
6. Analyze social justice and ethical dilemmas in educational technology
7. Begin developing technical proficiency in the creation of learning media.

Project Description

Your Learning Environment project will consist of at least six “learning stations.” Each station will offer learners an opportunity to explore a central theme through different types of technologies. You might compare this to a museum that offers various opportunities for engaging with the topic.

Note: If others in the class share your same career goals and interests, you may choose to work with them as a team. Please work alone or in teams of two to three.

The theme may be skill or content based (e.g. historical interpretation, rhythm in poetry, taxonomies of flora, or algebraic functions) or idea based (war, oceans, love, or roller coasters). For an English class you might create a unit on nature; for a social studies class you might create a unit on imperialism; for a science class you might create a unit on classification; for a math class you might create a unit on architecture. If you are going to apply your skills in industry, then you may choose to create a training environment, and if you plan to work in higher education, then create a college level atmosphere.

Media Resource List

To get started, collect resources on your theme.

Identify at least 10 resources on your topic that can support learning around your theme. Some or all of these materials may be used by the learners. It is not necessary to develop all of the instructional materials used in that environment because so much well produced instruction already exists.

To compile your list, do the following:

1. Identify the subject area, the grade level, and the theme of your unit.
2. Use multiple reference tools (at least three) to find information on materials that will be appropriate for your unit.
3. There are directions and indexes in the reference areas in many libraries. These publications will list materials for your information. Many of these materials will not be in the library. You may list the material and information about them in your resource list.
4. When looking up information on materials, look for materials that are in different media formats -- a book, a podcast, a video, an app, a simulation, an instructional computer program, a VR model, etc. You are to find materials of four different formats for your resource list.
5. Carefully evaluate each resource for accuracy, clarity, and developmental appropriateness. Only include quality resources.

Include on your resource list:

- State your subject area, grade level you are teaching, and the theme your group has chosen at the top of the list.
- For each of the ten resources, include:
 - The title of the resource
 - Medium: include at least 4 different media formats (i.e., Website, game/simulation, slides, audio-tape, book, video, CD)
 - Availability: include the location of the resource. Would this material be purchased, borrowed, or rented or is it free? From whom?
 - Reference source: where did you find the entry?
 - Annotation: write a brief summary of content
 - Evaluation: how does this resource support learning in this topic area? In other words, what about the media format supports the type of learning you would like to support?

Example Entry

Subject Area: Social Science

Grade Level: Seventh grade

Topic: World Exploration

Resource: "Latitude and Longitude" Video 22 minutes. 4-9th grade level. National Geographic Society.1994. Purchase from the National Geographic Society. Found in producer's catalog.

Annotation: Describes how the imaginary grid system around the Earth which was devised by the Greeks makes it possible to pinpoint any location on earth.

Evaluation: The video format demonstrates the imaginary grid system visually, allowing students to impose the grid on their mental image of the earth. It also brings in historical images and tells engaging stories that illustrate the significance of longitude and latitude.

Learning Stations

The learning environment will include at least six learning stations. In most cases, the learning station will be something that learners would complete independently. However, you may also design a station that would benefit from an instructor or facilitator.

1. Instructional Display

Use some of the resources from your media list (or others you have found) to create a visual display about your topic. The display might include manipulatives, books, videos, or programs. Select media formats that will support the type of learning you are promoting.

You may create a physical or digital display:

- If you create a physical display (such as a tri-fold or bulletin board), please include pictures of the display.
- A digital display might be a slide (or collection of slides), or use a program such as Wakelet, Mural, Miro, Padlet, etc.

Be sure to:

- Purposefully choose a set of resources that will complement each other and support learning in the content area
- Consider your audience and what you would like them to take away from their interactions with the display
- Keep visuals simple and clear to reduce distractions

2. Cultural Connections

Expand the learning community for which you are designing your learning environment by developing a distance learning activity to be shared among distant partners, (e.g., your class and another). Each end of the distance connection should benefit from the collaboration. For instance, while studying the Texas Revolution, a connection with a class in Mexico would be beneficial as students in the U.S. would gain the Mexican perspective and students in Mexico would gain the U.S. perspective.

A connection with almost any distant site would be relevant for lessons on any theme. Describe the activity that you design in terms of:

- Intended outcomes
- Participants
- Activities participants will engage in (including before, during, and after any virtual meeting)
- Any products of the lesson

3. Social Media

For this learning station, you will first develop your skills as participants in social media. Then you will design a lesson that would be appropriate for your thematic unit.

To increase your understanding of the role of social media in education, use a social media account (e.g., Facebook or Twitter) to follow 5 experts in the area related to your thematic unit. This process of following means that you will need to engage with the experts to request suggestions or follow their concepts. For example, if you are teaching a thematic unit with an emphasis on English writing, you would want to find age-appropriate authors, professors, and expertly designed social media accounts. From these resources you will develop communication relationships that can support you and your students' understandings of the thematic unit context. (Note, you will share what your personal experiences on social media in a course discussion board)

From your experience as a participant, develop an activity within your learning environment that your students can use to gather information and engage and learn about your theme through social media.

4. Authentic Assessment

Designing or creating can be a powerful learning experience as well as provide information for assessing learner progress. Design an activity or project that can serve as both a learning activity and an authentic assessment of learning in the theme area. Follow a backwards design process as you create this activity:

1. Identify "big picture" learning outcomes (what do you want learners to remember in 10 years?)
2. Describe a product learners could make that would show evidence of this learning
3. Design an activity that will help learners create this product

5. Technology Ethics Story

Write a case story about a technology-related ethical issue appropriate to the developmental level of your learner. The issue can be related to equity, privacy, property, accuracy, or accessibility. The story should focus on a single ethical dilemma and include:

- One or more characters
- A Problem with ambiguity- the problem should be challenging and in a gray area
- A Resolution- how the character resolves the problem

Be sure the story is an appropriate length for the audience and topic (only include enough detail to make it clear and interesting).

Share your story using an appropriate form of media. For example, you may choose to create an audio recording, comic strip, storyboard, video, podcast, etc.

Note, the technology ethics story does not have to connect to the content area of your learning environment, but in many cases doing so may be particularly powerful.

6. Your choice

Choose a format that is a good match for the theme of your learning environment. You may choose to do an additional station in one of the categories above (cultural connection, social media, etc.) or something completely different.

Final Product

Use digital media to create a final product that includes the media resource list and the six learning stations. You may do this through a **website, interactive slides, infographic, story boarding, or any other appropriate format**. Be sure that there is enough information about each station to allow evaluation on each item on the rubric below.

Assessment Rubric

Criteria	Project Goals	0- Cannot Evaluate	1- Limited Proficiency	2- Developing Proficiency	3- Proficient	4- Exemplary
Media Resource List	2	Product is missing or cannot be accessed	Includes at least ten resources on a central theme.	Includes at least ten resources on a central theme. At least four media formats are used.	Includes at least ten resources on a central theme. At least four media formats are used. A description including the source, an annotation, and an evaluation is included for each resource.	Includes at least ten resources on a central theme. At least four media formats are used. A description including the source, an annotation, and an evaluation is included for each resource. The descriptions illustrate an advanced understanding of the relationship between media format and learning.
Instructional Display	1, 2	Product is missing or cannot be accessed	Instructional display includes several types of media on the theme.	Instructional display includes several types of media on the theme. The display is clear and appropriate for the target audience.	Instructional display includes several types of media on the theme. The display is clear and appropriate for the target audience. The selected media are well matched to the content area.	Instructional display includes several types of media on the theme. The display is clear and appropriate for the target audience. The selected media are well matched to the content area. The media complement each other to communicate a clear message.
Cultural Connections	1, 3	Product is missing or cannot be accessed	Activity connects learners with distant partners.	Activity connects learners with distant partners. Activity includes appropriate learning outcomes.	Activity connects learners with distant partners. Activity includes appropriate learning outcomes and is well-matched to the content area.	Activity connects learners with distant partners. Activity includes appropriate learning outcomes and is well-matched to the content area. Activity illustrates

						original thinking and/or a novel approach.
Social Media	1, 4	Product is missing or cannot be accessed	Activity utilizes social media technology in a developmentally appropriate manner.	Activity utilizes social media technology in a developmentally appropriate manner. Social media activity fosters learning in the content area.	Activity utilizes social media technology in a developmentally appropriate manner. Social media activity fosters learning in the content area by taking advantage of the affordances of social media.	Activity utilizes social media technology in a developmentally appropriate manner. Social media activity fosters learning in the content area by taking advantage of the affordances of social media. Activity illustrates original thinking and/or a novel approach.
Authentic Assessment	1, 5	Product is missing or cannot be accessed	Activity allows learners to create a product while demonstrating their learning.	Activity allows learners to create a product while demonstrating their learning. The description includes learning outcomes, the core product, and how the learners will be supported in creating the product.	Activity allows learners to create a product while demonstrating their learning. The description includes learning outcomes, the core product, and how the learners will be supported in creating the product. The product and learning outcomes are well aligned.	Activity allows learners to create a product while demonstrating their learning. The description includes learning outcomes, the core product, and how the learners will be supported in creating the product. The product and learning outcomes are well aligned. Activity illustrates original thinking and/or a novel approach.
Technology Ethics Story	6	Product is missing or cannot be accessed	Story describes an ethical issue related to technology.	Story describes an ethical issue related to technology. The story includes one or more characters, an ethical problem, and a resolution.	Story describes an ethical issue related to technology. The story includes one or more characters, a problem, and resolution. The problem includes a developmentally	Story describes an ethical issue related to technology. The story includes one or more characters, a problem, and resolution. The problem illustrates a developmentally appropriate level of ambiguity. The story is clear, engaging, and fosters critical

					appropriate level of ambiguity.	thinking about an ethical issue in technology.
Designer Choice	1-6	Product is missing or cannot be accessed	An additional learning station is included.	An additional learning station is included. The technology utilized in the station is a good fit for the theme.	An additional learning station is included. The technology utilized in the station is a good fit for the theme and offers a unique perspective on the theme beyond what is presented in other stations.	An additional learning station is included. The technology utilized in the station is a good fit for the theme and offers a unique perspective on the theme beyond what is presented in other stations The station illustrates original thinking and/or a novel approach.
Final Product	1, 2, 7	Product is missing or cannot be accessed	The learning environment is presented.	The learning environment is presented clearly.	The learning environment is presented clearly. The media format of the final product is well selected for the content.	The learning environment is presented clearly. The media format of the final product is well selected for the content. The final product illustrates original thinking and/or a novel approach.