

EDUC638: Learning Technologies

Final Project

Integrating Nearpod into an Online Critical Thinking Course

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Module: Evaluating Arguments

Course Subject	Critical Thinking (CT302)	Time Allocated	3 sessions (90 minutes per session)
Developed By	Sotheara Veng	Year of Study	Year 3

Module: Evaluating

Content Objectives

Knowledge:

- Recognize the need of valid information and ideas when making sound arguments, judgment, and/or decisions
- Employ critical thinking to approach and solve a problem in a consistent and systematic way
- Illustrate social harmony through respect and tolerance of different perspectives or points of view

Skills:

- Identify implications within discourses through logical inference making
- Identify assumptions in the arguments
- Recognize, build, and evaluate arguments
- Identify inconsistencies and fallacies in reasoning

Attitudes:

- Demonstrate active and independent learning ability
- Develop the ability to question, analyze, and improve ideas rather than accepting them at face value
- Demonstrate the ability to reflect on the justification of other people's, as well as their own, findings, beliefs, and values

Technology Objectives (ISTE Standards):**Empowered Learner:**

- Students articulate and set personal learning goals, develop strategies leveraging technology to achieve them, and reflect on the learning process itself to improve learning outcomes.
- Students use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways.

Knowledge Constructor:

- Students evaluate the accuracy, perspective, credibility, and relevance of information, media, data, or other resources.
- Students build knowledge by actively exploring real-world issues and problems, developing ideas and theories, and pursuing answers and solutions.

Creative Communicator:

- Students choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.

- Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models, or simulations.

Global Collaborator

- Students use digital tools to connect with learners from a variety of backgrounds and cultures, engaging with them in ways that broaden mutual understanding and learning.
- Students use collaborative technologies to work with others, including peers, experts, or community members, to examine issues and problems from multiple viewpoints.

Resource Requirements:

Internet Access

Laptop / iPad / Chromebook

Microsoft Teams

Free Subscription to Nearpod (For Instructor Only)

Technology Integration Framework

Technology Integration Matrix

	LEVELS OF TECHNOLOGY INTEGRATION →				
	ENTRY LEVEL	ADOPTION LEVEL	ADAPTATION LEVEL	INFUSION LEVEL	TRANSFORMATION LEVEL
CHARACTERISTICS OF THE LEARNING ENVIRONMENT ↓					
ACTIVE LEARNING	<p>Active Entry Information passively received</p>	<p>Active Adoption Conventional, procedural use of tools</p>	<p>Active Adaptation Conventional independent use of tools; some student choice and exploration</p>	<p>Active Infusion Choice of tools and regular, self-directed use</p>	<p>Active Transformation Extensive and unconventional use of tools</p>
COLLABORATIVE LEARNING	<p>Collaborative Entry Individual student use of technology tools</p>	<p>Collaborative Adoption Collaborative use of tools in conventional ways</p>	<p>Collaborative Adaptation Collaborative use of tools; some student choice and exploration</p>	<p>Collaborative Infusion Choice of tools and regular use for collaboration</p>	<p>Collaborative Transformation Collaboration with peers, outside experts, and others in ways that may not be possible without technology</p>
CONSTRUCTIVE LEARNING	<p>Constructive Entry Information delivered to students</p>	<p>Constructive Adoption Guided, conventional use for building knowledge</p>	<p>Constructive Adaptation Independent use for building knowledge; some student choice and exploration</p>	<p>Constructive Infusion Choice and regular use for building knowledge</p>	<p>Constructive Transformation Extensive and unconventional use of technology tools to build knowledge</p>
AUTHENTIC LEARNING	<p>Authentic Entry Technology use unrelated to the world outside of the instructional setting</p>	<p>Authentic Adoption Guided use in activities with some meaningful context</p>	<p>Authentic Adaptation Independent use in activities connected to students' lives; some student choice and exploration</p>	<p>Authentic Infusion Choice of tools and regular use in meaningful activities</p>	<p>Authentic Transformation Innovative use for higher-order learning activities connected to the world beyond the instructional setting</p>
GOAL-DIRECTED LEARNING	<p>Goal-Directed Entry Directions given; step-by-step task monitoring</p>	<p>Goal-Directed Adoption Conventional and procedural use of tools to plan or monitor</p>	<p>Goal-Directed Adaptation Purposeful use of tools to plan and monitor; some student choice and exploration</p>	<p>Goal-Directed Infusion Flexible and seamless use of tools to plan and monitor</p>	<p>Goal-Directed Transformation Extensive and higher-order use of tools to plan and monitor</p>

Technology Integration Framework

The integration of technology into the course fits into the following:

Active Adoption: The content of the lessons is developed through Nearpod by the instructor. Therefore, the most engaging activities are situated in Nearpod.

Collaborative Adaptation: The collaboration tool on Nearpod provides students the opportunity to interact with others' opinions and thoughts. However, the lessons are designed in a way that allows students to explore other tools on their own when the collaboration goes beyond simple interaction.

Constructive Infusion: Although Nearpod is used to present information, assess students' understanding, and engage them, students are allowed to choose any other technological tools to complete the given tasks, such as using search engines to find examples, embedding videos, or putting together a slide or drawing to illustrate their ideas or analyses. Tools are suggested as options in the task guidelines.

Authentic Infusion: The module's tasks and assignments are designed in a way that allows students to situate the topic or content of their work within their interests, identity, and background. They are also presented with the freedom to select the tools that best help them present their work or the issues that they are passionate about.

Goal-Directed Infusion: At the end of each session, students are asked to share their goals for the next session on a collaborative board where their identities can remain anonymous. For the second and third sessions, students are asked to assess if their learning goals are accomplished before setting new goals, and the actions to take. Students also receive information regarding their performance in each session as they complete the task on Nearpod and through the instructor's feedback. Instructors provide resources and tools that help achieve their goals at the end of each session. However, students have the freedom to choose among the resources or suggest any other resources or tools that are helpful to them.

Session 1: Understanding Patterns of Reasoning

Lesson Objectives

By the end of the session, students should be able to:

- Break down the anatomy of an argument
- Identify different patterns of reasoning in arguments
- Construct arguments with each pattern presented in the lesson

<p>Housekeeping / Introduction to Nearpod (5 minutes)</p>	<ul style="list-style-type: none"> • The instructor drops the link to the Nearpod session in the Microsoft Teams Chat for students to access the session. • The instructor provides assistance to students who have any technical difficulty <p><i>*Instructor may introduce students to the “Immersive Reader” Function on Nearpod when there are students with dyslexia and dysgraphia</i></p>	
<p>Warm Up (10 minutes)</p>	<ul style="list-style-type: none"> • A series of photos and statements are posted for students to choose which one best represents an argument. • The instructor explains the different contexts and meanings of arguments. • An example from the poll is used to illustrate the anatomy of an argument. 	<p>Tools: Nearpod Poll, Microsoft Team’s Raise Hand Feature</p> <p>Engagement Theory: Students interacting with content can foster learner engagement.</p>

	<ul style="list-style-type: none"> • Students are elicited through different examples. <p><i>*Examples should be chosen with consideration for students' backgrounds and interests.</i></p>	
<p>Activity 1: Identify reasons and conclusions (20 minutes)</p>	<ul style="list-style-type: none"> • Students have some time to think and ask questions regarding the term “argument” and its anatomy. • Students complete an exercise identifying reasons and conclusions in an argument. • The exercise starts out with arguments with a simple pattern and ends with several arguments with more complex patterns of reasoning. • While monitoring the students’ responses, the instructor takes note of items that students struggle with. • The instructor checks the answer, elicits, and provides feedback. 	<p>Tools: Nearpod Multiple Choice Questions</p> <p>Sociocultural Theory: Instructors can check students’ responses in real-time and give personalized feedback in class.</p> <p>Constructivism & Constructionism: Students developed their answers and learn through practicing in real-world scenarios.</p>
<p>Activity 2: Understanding different patterns of reasoning (20 minutes)</p>	<ul style="list-style-type: none"> • The instructor shows the items with more complex patterns of reasoning and explains their patterns by giving more examples. • Students are presented with a series of statements with more complex patterns of reasoning. 	<p>Tools: Nearpod Draw it!</p> <p>Engagement Theory: The ability to interact with the content can foster learner engagement.</p>

	<ul style="list-style-type: none"> • Students are required to draw on the statements to indicate their anatomy and identify their patterns of reasoning. • The instructor can see students' drawings in real-time and takes notes to provide feedback later. • The instructor checks the answer, elicits, and provides feedback. 	<p>Sociocultural Theory: Instructors can check students' responses in real-time and give personalized feedback in class.</p> <p>Constructivism & Constructionism: Students developed their answers and learn through practicing in real-world scenarios.</p>
<p>Activity 3: Creating your reasoning (20 minutes)</p>	<ul style="list-style-type: none"> • Students are asked to create three arguments in different patterns of reasoning and submit their answers. • Students are asked to share their answers with the class, and the instructor can display the answer to the class to help them understand them better. • The instructor elicits, provides feedback, and gives time for questions. 	<p>Tools: Nearpod Open-ended Question</p> <p>Sociocultural Theory: Instructors can check students' responses in real-time and give personalized feedback in class.</p> <p>Constructivism & Constructionism: Students developed their answers and learn through practicing in real-world scenarios.</p>

<p>Goal Setting (15 minutes)</p>	<ul style="list-style-type: none"> • The instructor provides a snapshot of what will be covered in the next session. • Students share their goals or what they would like to learn or improve on the collaborate board. • The instructor picks a few students to explain their goals. • Instructor merges similar goals, refines the goals, and provides suggestions and resources. • Based on the instructor’s suggestions, students are encouraged to record their goals and plans using any technology tools to help them keep track of their progress. 	<p>Tools: Nearpod Collaborate Board</p> <p>Sociocultural Theory: Instructors can check students’ responses in real-time and give personalized feedback in class.</p>
<p>Homework</p>	<ul style="list-style-type: none"> • Students construct three arguments based on their everyday experiences using different patterns of reasoning. • They are encouraged to use any technology tool to present their work in the next session. 	<p>Tools: Students’ picks</p>

Session 2: Identifying Assumptions

Lesson Objectives

By the end of the session, students should be able to:

- Construct arguments with each pattern presented in the lesson
- Identifying assumptions in a simple-pattern argument and a complex-pattern argument
- Evaluating assumptions of arguments

Housekeeping

(5 minutes)

- The instructor drops the link to the Nearpod session in the Microsoft Teams Chat for students to access the session.
- Instructor provides assistance to students with technical difficulty

Argument Gallery

(20 minutes)

- Students are put into different breakout rooms.
- Students take turns sharing their work.

Tools: Microsoft Team's Breakout Room, Students' picks

Constructivism & Constructionism:
Students developed their answers and

	<ul style="list-style-type: none"> The instructor goes through each breakout room to provide help and keep students on track. 	learn through practicing in real-world scenarios.
Review (15 minutes)	<ul style="list-style-type: none"> The instructor picks a few examples from students' work to review the arguments' anatomy and patterns of reasoning. Students complete a short exercise to test their understanding of arguments' anatomy and patterns of reasoning. The instructor checks the answer, elicits, and provides feedback. 	Tools: Nearpod Multiple Choice Questions Sociocultural Theory: Instructors can check students' responses in real-time and give personalized feedback in class.
Activity 1: Identifying assumptions (1) (20 minutes)	<ul style="list-style-type: none"> From the exercise, the instructor picks a few items to illustrate how to identify assumptions in a simple-pattern argument. The instructor provides a few more statements (a mixture of simple-pattern and complex-pattern arguments) to identify assumptions in a whole class discussion and makes sure students have enough time to think about each statement. Students complete an exercise choosing the correct assumption of each argument. The instructor elicits, provides feedback, and gives time for questions. 	Tools: Nearpod Multiple Choice Questions Sociocultural Theory: Instructors can check students' responses in real-time and give personalized feedback in class. Constructivism & Constructionism: Students developed their answers and learn through practicing in real-world scenarios.

<p>Activity 2: Identifying assumptions (2) (10 minutes)</p>	<ul style="list-style-type: none"> • Students complete an exercise by writing down the assumption of each argument. • The instructor elicits, provides feedback, and gives time for questions. 	<p>Tools: Nearpod Open-ended Question</p> <p>Sociocultural Theory: Instructors can check students’ responses in real-time and give personalized feedback in class.</p> <p>Constructivism & Constructionism: Students developed their answers and learn through practicing in real-world scenarios.</p>
<p>Activity 3: Evaluating assumptions (10 minutes)</p>	<ul style="list-style-type: none"> • The instructor picks a few items from the previous exercise to evaluate and critique their assumptions. • The instructor uses a series of questions to help guide students through the process of evaluating the assumptions. • The instructor brings in a few more items for the evaluation as a whole class and makes sure to allow enough time for students to think about the assumptions. 	
<p>Goal Setting (10 minutes)</p>	<ul style="list-style-type: none"> • The instructor provides a snapshot of what will be covered in the next session. • Students share their goals or what they would like to learn or improve on the collaborative board. 	<p>Tools: Nearpod Collaborate Board</p> <p>Sociocultural Theory: Instructors can check students’ responses in real-time and give personalized feedback in class.</p>

	<ul style="list-style-type: none"> • The instructor picks a few students to explain their goals. • Instructor merges similar goals, refines the goals, and provides suggestions and resources. • Based on the instructor's suggestions, students are encouraged to record their goals and plans using any technology tools to help them keep track of their progress. 	
Homework	<ul style="list-style-type: none"> • Students identify the assumptions of three arguments and provide a critique for each assumption. 	

Session 3: Fallacies and Evaluating Arguments

Lesson Objectives

By the end of the session, students should be able to:

- Distinguish different types of common fallacies
- Identifying common fallacies and assumptions in a simple-pattern argument and a complex-pattern argument
- Evaluating assumptions of arguments and providing critiques and rebuttals to arguments.

Housekeeping

(5 minutes)

- The instructor drops the link to the Nearpod session in the Microsoft Teams Chat for students to access the session.

	<ul style="list-style-type: none"> • Instructor provides assistance to students with technical difficulty 	
<p>Review (15 minutes)</p>	<ul style="list-style-type: none"> • The instructor checks the homework with the students by walking through the process: <ul style="list-style-type: none"> ○ (1) identifying the anatomy of the arguments ○ (2) identifying the patterns of reasoning ○ (3) identifying the assumptions ○ (4) evaluating the arguments by forming critiques • The instructor points out that one of the statements in the homework exercise contains the “false dichotomy” fallacy 	
<p>Activity 1: Fallacies (1) (20 minutes)</p>	<ul style="list-style-type: none"> • The instructor shows a set of photos including political campaigns, online quotes, and other materials. • Students choose which of the photos contains the “false dichotomy” fallacy • The instructor reiterates what a false dichotomy fallacy is. • The instructor introduces other common fallacies 	<p>Tools: Nearpod Poll</p> <p>Sociocultural Theory: Instructors can check students’ responses in real-time and give personalized feedback in class.</p> <p>Constructivism & Constructionism: Students developed their answers and learn through practicing in real-world scenarios.</p>

<p>Activity 2: Fallacies (2) (10 minutes)</p>	<ul style="list-style-type: none"> • Students find examples of the common fallacies presented by the instructor online or from their experience. • Students are encouraged to use any tool or resources. • Students share their examples on the collaborate board • Students can react to each other’s content and guess the fallacy of each statement. 	<p>Tools: Nearpod Collaborate Board</p> <p>Sociocultural Theory: Instructors can check students’ responses in real-time and give personalized feedback in class.</p> <p>Constructivism & Constructionism: Students developed their answers and learn through practicing in real-world scenarios.</p>
<p>Activity 3: Evaluating arguments (10 minutes)</p>	<ul style="list-style-type: none"> • The instructor presents a few statements with assumptions or fallacies, shows the process of evaluation again, and gives students time to evaluate the statements. • Once submitted, students’ responses can be viewed by the instructor to form some feedback for answer checking, • Students are encouraged to volunteer to share their evaluations. • The instructor refines the answer through guiding questions or suggestions. 	<p>Tools: Nearpod Open-ended question</p>
<p>Activity 4: Time to Climb (10 minutes)</p>	<ul style="list-style-type: none"> • Students compete in a game called “Time to Climb” consisting of various questions covering content from all three sessions in the multiple-choice question format. 	<p>Tools: Nearpod Time to Climb</p>

	<ul style="list-style-type: none"> • The instructor is encouraged to pause the game in between questions or difficult questions to explain the answer. • Based on students' performance in the game, the instructor may decide if it is necessary to plan another session to help students understand the content of the module. 	<p>Sociocultural Theory: Instructors can check students' responses in real-time and give personalized feedback in class.</p>
<p>Goal Check</p>	<ul style="list-style-type: none"> • Students may share complete and incomplete goals on the collaborate board. • Students are encouraged to volunteer to verbally explain the details of their progress in the module. • <i>Based on students' performance in the game and students' sharing of their goals, the instructor may decide if it is necessary to plan another session to help students understand the content of the module.</i> 	<p>Tools: Nearpod Collaborate Board</p>