

Syllabus

-: [CEULearning](#)
Course: Inquiry-Based Learning: Approaches for Active Learning
2023/24 Spring
Book
(Text): Syllabus

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1. Course description

A constant challenge that teachers/educators are facing is keeping their students' interest in a given topic and getting them actively engaged in the learning process. Inquiry based learning (IBL) empowers students to take control of their learning by allowing them to actively engage with the teaching materials. Students' ideas, opinions, questions, and observations are central to the learning experience; IBL encourages students to be critical thinkers and problem solvers; the knowledge is constructed through experience, experimentation, and exploration.

This short course will present IBL in some detail, starting with definition, the benefits of adopting this active learning approach, the activities associated with it and touch upon in which situations it is more appropriate to adopt. We will then talk about the 4 levels of Inquiry (confirmation, structured, guided, open), and discuss examples from each one of them. This will be followed by an in-depth examination of 4 approaches through which IBL is commonly applied, namely, structured debates, project based learning, simulations/role playing, and experiential learning.

2. Learning Outcomes

Upon completion of the course, the participants should have:

- The ability to discuss and critique key approaches to applying IBL (structured debates, project based learning, simulations/role playing, and experiential learning)
- The ability to apply two different IBL approaches for their assessment artifacts.
- A capacity to experiment/explore, create, and evaluate one's own teaching strategies.

3. Topics

Week 1:

Introduction to the course through an Inquiry experiment

Brief intro to Course syllabus

Definition of Inquiry based learning (IBL)

Inductive/Deductive learning

The Socio-Scientific Inquiry-based Learning [SSIBL] educational framework

Considerations for and benefits of IBL

An overview of strategies and approaches that will be covered in subsequent sessions.

Week 2:

Presentation of the four levels of Inquiry

An introduction to debates and exploration of different types of debate.

Comparison of debate to discussion and dialogue

Group work: Use a given template to create a debate.

Week 3:

Definition of Project Based Learning (PBL) and its key characteristics.

The differences between a project & PBL

The differences between Project- and Problem- based learning

Benefits & Difficulties of carrying out PBL

Group work involving the development of an outline of a PBL activity.

A brief overview and comparison of games, role plays, simulations, cases and scenario

Group work involving the development of an outline of a Scenario & a Case activity.

Week 4:

Objectives, Characteristics & Considerations for role plays

Guidelines and process for utilizing role playing in the classroom

Group work: Use a given template to create a role play

Student presentation of their first teaching artifact

Week 5:

Definition of Experiential Learning & the EL cycle

Experiential learning styles and types

The role(s) of the instructor in EL

Activity Linking this course to Learning by Design: students are asked to identify a topic in the 6-week syllabus they created that could be facilitated through an EL activity

Definition and Examples of Service Learning

Group work: Create an outline of a Service Learning project

Week 6:

Presentation of the second teaching artifact by the students

Module Evaluation

Individual work: narrating a teaching artifact for inclusion in a teaching portfolio

Recap of the module

4. Assessment

The assessment will involve the development of two activities from the four (4) IBL approaches presented during the sessions. **Two different approaches need to be adopted and showcased. The 1st activity will be due on week 4, and the second activity on week 6.**

The activities should follow the directions outlined in the next chapters, and for each one of them should include:

- Giving context by explaining where/when/with whom it is a good fit (what type of course, at what point of the course, to BA or postgraduate students).
- The inquiry level the activity is pitched at (**Note: Neither activity can be at the confirmation level**).
- Presenting clear and detailed guidelines/instructions on how to implement it.
- Providing the assessment strategy (formative/summative, graded/ungraded etc.) inclusive of either marking criteria (at least 4 of them with descriptions) or a rubric (at least 4 marking categories). Note: if you opt for ungraded, the marking criteria would be useful for giving feedback.

Both activities need to receive a pass mark according to the following rubric:

Criterion	Grade		
	Pass	Resubmit	Fail
Alignment: Appropriateness of activity in context	Pitched at right content, level & time	Not fully aligned	No clear alignment
Implementation: Provision of instructions	Clear & coherent steps	Lack of clarity or coherence	Confusing & vague steps
Originality: Uniqueness of ideas	Authentic & imaginative	Realistic but ordinary	Boring & pedantic
Relevance: Usefulness to participants	Stimulating & relatable	Interesting but unrelatable	Uninspiring & irrelevant
Assessment: Rationale for assessment strategy	Aligned to LOs & appropriate strategy	Not fully aligned to LOs but appropriate	Misaligned LOs & strategy

5. Structured Debates

Debating Structure

- i. Explain the debate motion (present clearly both sides of the argument) and give a glossary of terms you feel can be ambiguous.
- ii. List and show the additional material you will give the students to help them formulate ideas (e.g., magazine articles, Ted Talks, statistics, etc.). The material would either be part of a handout or open access online material.
- iii. Present the debating plan
 - How are the teams going to be created?
 - What roles (full description) will they have to assign and how will they be assigned?
 - Describe the different phases and the time limit for each one.
 - How is voting going to happen and how many times?
- iv. How is the debrief going to take place?
- v. How are you going to assess the activity? You will have to come up with a minimum of 4 marking criteria and explain what part of the activity each criterion is addressing

6. Simulations/role-plays

i. Writing the simulation/role-play

You need a realistic case vignette as a scenario, the details of which should facilitate the learning objectives, be able to be portrayed in simulation, and contribute to an authentic learning experience.

Participants can be briefed before the activity (with details or clarifications) or not.

The flow of the scenario stems from the vignette and begins with initial parameters that will evolve over time. The rate at which these parameters change should be as realistic as possible. (E.g., how would the gun safety debate in the US evolve depending on the make-up of the Senate; Republican majority /Democratic majority/ Democratic supermajority)

Scenario design typically incorporates planned events and transitions in these parameters, together with realistic responses to anticipated events/interventions. (E.g., mid-terms of 2022, elections of 2024; a school shooting)

Structure the activity to have a defined starting and ending point (E.g., You are a Democratic senator and you have talks with the NRA on a gun safety bill / what is your final position on the bill)

Develop a script and checklist that outlines the objectives, the scenario and props that might be necessary to set the stage.

Describe how the debrief works

How will you assess? You will have to come up with a minimum of 4 marking criteria and explain what part of the activity each criterion is addressing

ii. Things to consider

- Make the simulation/role=play as realistic as possible
- What personnel resources are available? Are there enough people to conduct a realistic activity?
- How much time is needed? Is there a time limit for the activity?
- Is it a synchronous or asynchronous activity?

7. Project Based Learning

i. Things to consider:

- Individual or group projects? What size would the groups be?
- Individual, group or a mix of both in terms of assessment?
- How do you specify what would be an acceptable product?

ii. The seven elements of PBL are:

- A challenging problem or question – you should explain how you would help the students refine their research question(s) and give an example of one such question
- Sustained Inquiry – give an example of the type of inquiry you would adopt to research that question (describe the different phases and their outcomes/deliverables, provide a potential workplan and timeframe, describe your relationship/interactions with the students etc.)
- Authenticity – the project should be adding to the existing literature
- Student Voice and Choice – the students should lead with regards to identifying the question/problem and setting up the inquiry, with the advice/mentoring of the teacher. How will you ensure this?
- Reflection – how will you build in and encourage it?
- Critique and Revision – how will you provide feedback? Will you include peer feedback? Provide template for both if applicable
- Public Product – give an example of the product (paper of publishable quality; poster; mind map; conference presentation etc.)

3. How will you assess? You will have to come up with a minimum of 4 marking criteria and explain what part of the activity each criterion is addressing

8. Experiential Learning

This assessment is based on the Personal Application Assignment (PAA) by Kolb & Kolb (2017). The participants do a journal or essay assignment, which includes the following elements:

i. Concrete Experience.

Something that is relevant to the subject content, that aligns to the participant's interests, and which has occurred recently or is a currently unfolding experience.

In this section the participants should detail about what they saw, heard, felt, thought, and heard and saw others doing.

ii. Reflective Observation.

This involves participants reviewing their thoughts and feelings about the experience from a fresh(er) perspective and from different points of view. Questions the students should consider include, but are not limited to:

- What did they observe and what possible meanings could this have to them?
- How did other participants view the situation and what did it mean to them?
- What would a neutral ("objective") observer have seen and heard?
- If some time has passed since the experience, do you now see the situation differently?

iii. Abstract Conceptualization.

Participants need to develop concepts or theories that make sense of the experience. The participants need to make links between the experience and theories and concepts they were presented with through readings, lectures, and other material. In essence they are demonstrating their ability to understand abstract material through their experience. They will need to refer to more than one theory/concept and from a number of sources. Questions to consider are:

- What issue or problem does the theory examine?
- What variables are used to analyze the problem and how does the theory explain the link between causal variables and outcomes.
- Does the theory explain what causes certain behaviors or outcomes and were these causes present in your situation?
- Does the experience support or refute parts of the theory?
- Any suggested modifications to a theory to make it fit your particular situation better?

iv. Active Experimentation.

This section of the paper should begin by summarizing what you have learned as a result of writing the paper. What new personal insights and practical lessons did you learn about how to more effectively deal with these types of experiences. Next, they should present a number of actions they would take to make them more effective in dealing with similar situations in the future. These actions can be stated in the form of guidelines as to how you would act differently or resolutions as to steps you could take to develop or practice particular skills. You should elaborate in detail how you see your action ideas being carried out. There should be a clear link between the action and the theories/concepts presented in the abstract conceptualization section.

9. Indicative Literature

Amos, R., and Levinson, R. (2019). Socio-scientific inquiry-based learning: An approach for engaging with the 2030 Sustainable Development Goals through school science. *International Journal of Development Education and Global Learning*, 11 (1), 29–49. DOI <https://doi.org/10.18546/IJDEGL.11.1.03>

Delaney, Y., Farrell, A., Hack, C.J., Lawlor, B., McLoone, S.C., Meehan, A., Phillips, D.T. and Richardson, I. (2015). An Introduction to Enquiry/ Problem-based Learning, Maynooth: Facilitate and the All Ireland Society for Higher Education (AISHE).

Kreber, C. (2001). Learning Experientially through Case Studies? A Conceptual Analysis. *Teaching in Higher Education*, 6(2), 217-228. DOI: 10.1080/13562510120045203

Shanmugavelu, G., Parasuraman, B., Ariffin, K., Kannan, B., and Vadivelu, M. (2020). Inquiry Method in the Teaching and Learning Process. *Shanlax International Journal of Education*, 8(3), 6–9.

DOI: [https://doi.org/10.34293/ education.v8i3.2396](https://doi.org/10.34293/education.v8i3.2396)

Spronken-Smith, R., and Walker, R. (2010). Can inquiry-based learning strengthen the links between teaching and disciplinary research?, *Studies in Higher Education*, 35(6), 723-740. DOI: 10.1080/03075070903315502

Swan, K., Lee, J., and Grant, S.G. (2018). Questions, Tasks, Sources: Focusing on the Essence of Inquiry. *Social Education*, 82(3), 133–137.