STEP 1: FAMILIARIZE YOURSELF WITH OPEN BOOK EXAMS.

STEP 2: DECIDE WHICH TYPE OF OPEN BOOK EXAM ACTIVITIES WORKS FOR YOUR CONTEXT.

STEP 3: CHECK YOUR EXAM QUESTIONS

STEP 4: CHOOSE THE INITIAL SITUATION

STEP 5: CREATE CONTEXTUALIZED AND AUTHENTIC QUESTIONS
1. **STEP 1: FAMILIARIZE YOURSELF WITH OPEN BOOK EXAMS.**

**Definition**

In take home exams/Open Book Examination the students can have access to books, papers and on-line content. Different designs include:

a) Ask students to undertake a take-home exam that the instructor designs
b) Ask the students to design an open book exam.

**Benefits**

- Allows for assessment of higher order learning (e.g., application, analysis, evaluation, creation)
- Develops information literacy skills
- Mimics actual professional activities where students can have access to information
- Less anxiety provoking for some students

**Challenges and Solutions**

Students may not be familiar with this form of assessment.

- Solution: Discuss with students how to prepare, particularly for open book exams. You can find a guide prepared by University of Western Ontario [HERE](#) and a guide prepared by Trent University [HERE](#)
There are five types of open book exam activities:

1. **Essay-based exams**
   This type of open book exam asks the students to write essays. In this type of activities, instructors aim for one to three questions that allow the students to demonstrate how they integrated information learned during the course.
   **Examples:** make an argument, solve a case study, analyze a text.

2. **Performance-based exams**
   Students could also be asked to submit as videos, like a presentation, musical or athletic performance, or artistic creation.
   **Example:** record a 10-minute performance or interview, record yourself explaining the lesson.

3. **Project-based questions**
   You can ask the students to determine the questions they would like to investigate, or you can provide them with a question that they would address with a project. One strategy would be to ask the students to identify a problem, then identify the audience they would like to present the project to.

4. **Case-based questions**
   Students are asked to decide after being presented with cases. Cases are usually based on actual events. A case can take multiple forms. It could be written, digital, interactive, field trip, or many other forms. Cases can be finished, open, fictional, or original documents.

5. **Reflection-based**
   In this type of activity, students are asked to demonstrate and explain their learning.
   **Example:** You can ask the students what changed in their thinking, what questions they still have, how they would extend their learning.
A good exam question is
  
  - **Contextualized:**
  - **Authentic:**
  - **Encourages multiple positions:** Students have the options to take multiple positions and defend their position or compare it to others.
  - **Does not have one correct answer:** a good question doesn’t have one correct answer, it helps students to critically make a choice.
  - **Requires critical reading of several resources:** the answer can’t be found in one place in the course resources.
  - **Connects opinion, claim, evidence, reasoning, assumptions, and feelings:** students need to look at situations from multiple angles and to examine their claims as well as evidence and multiple other elements that impact decisions.
When deciding on the initial situation for your exam, you can either choose the initial situation for your students or you can direct them to choose one themselves. If you choose to allow the students to choose the initial situation, you can ask them to explain their choice. This will lead to situations that are significant to the students.

Initial situations can include, but is not limited to:

- An artefact
- A situation
- A proposal
- A dataset
- A client
- A Customer
- A certain need
- An example
- A principle
- A rule
- A phenomenon
- A trend
- A perspective
- A position/perspective
When you are creating questions, think about the mental activity that students will be undertaking. We grouped these mental activities into 7 keywords:
1. Change
2. Decision making
3. Identification
4. Reflection
5. Example
6. Timing
7. Creation
You will find in the seven charts below, different ways of asking questions and examples of question starters.
Change

After you choose your initial situation (a historical event, a certain legal event, a chemical reaction, a medicine, an infection, an ecosystem, an educational theory, etc…) You can create a question by making a change to any of the following:

- Initial situation: what if the initial situation was different
- Perspective: How would a woman, a visible minority, an indigenous person, or a person with special need react to this situation?
- Process: How would two elements work separately?
- Geographical location: what would happen if the situation happened in a different geographical location, for example what would have happened if Hamlet took place in North America?
- Resources: what would happen if there was access to different resources
- Components: what happens if you replace X in a medicine label?
- Law/protocol: what if the law was different?

The chart below describes the different ways you can ask the students about a change and provides you with examples of question starters.
Decision Making

This type of questions helps students make a judgement and defend it with concrete evidence. You can ask the students to show their critical thinking through:

- **Judgement:** You can ask the students to make a judgement about a situation or event and provide evidence that could be found in the course material but also in other locations.
- **Priority:** you can ask students to prioritize a group of solutions
- **Solution:** You can ask the students to find a solution or judge a solution that was suggested and implemented or how they would change a solution or evaluate it.
- **Substitution:** You can ask the student to find a substitute or judge a substitute or fix a substitute.
- **Opinion:** you can ask your students to give an opinion and find evidence or to judge a certain opinion.
- **Decision:** ask students to decide or explain a decision or trying to change a person’s decision.
- **Classification:** Ask students to classify decisions made by others or classify elements or resources.

The chart below describes the different ways you can ask the students about decision making and provides you with examples of question starters.

---

Prepared by Eliana Elhoury, PhD
Identification

This type of questions is designed to help students look at situations (data, information, analytics, elements, components, decisions, etc.) through a different lens. It helps students identify:

- Contrast: ask the students to identify contrast or explain it or find ways to remove the contrast.
- Commonalities: ask the students to identify what makes two situations similar,
- Relation: ask students to identify a relation and explain it
- Pattern: ask students to identify a pattern or find another situation that has the same pattern
- Difference: ask the students to identify the difference or find a situation they think is different. This is also important to help students identify intangible difference or biases.

The chart below describes the different ways you can ask the students about identification and provides you with examples of question starters.

---

Prepared by Eliana Elkhoury, PhD
Reflection

This type of questions is used to allow students to reflect on their own learning and their own situations. The reflection could be done through multiple lenses:

- Assumptions: This question is designed to help students explore assumptions, whether it is theirs or that of others.
- Differences: This question is designed to recognize the learning that they gained, and it is different from they already knew.
- Intention: This question is designed to help students explore their intentions behind the learning that happened.
- Reiteration: This question is designed to help students revisit their learning and reiterate it.
- Exploration: This question is designed to dig deeper into an issue and to encourage the exploration of all of its facets.
- Thought process: This question can be help students recognize their thought process.

The chart below describes the different ways you can ask the students about reflection and provides you with examples of question starters.

Prepared by Eliana Elkhoury, PhD
Example

This type of questions is used to allow students to find examples of situations, data, concepts, etc. on their own learning and their own situations. They could look for examples of:

- **Effect:** This is designed to help the students connect ideas or analyze a situation to understand the impact.
- **Situation:** This is designed to help the students think differently about common situations.
- **Different use:** This is designed to help the students expand their thinking about how an item is used.
- **Intangible effects:** This is designed to help the students think about situations where the effects may not be as obvious.
- **Exploration:** This is designed to dig deeper into an issue and to encourage the exploration of all its facets.
- **Best/worst-case scenario:** This question is designed to help the learners to look ahead.

The chart below describes the different ways you can ask the students about examples and provides you with examples of question starters.
Timing
This type of questions is used to allow students to extend their thinking through times. You can ask the students to think about:
- The beginning: Designed to help students to expand their thinking about how the situation began or it should have begun.
- The past: Designed to help students to develop historical thinking.
- The future: Designed to help students look further than the immediate benefits or risks.
- The end: Designed to help students project in the future and think about effects.

The chart below describes the different ways you can ask the students about timing and provides you with examples of question starters.

Prepared by Ellana Elkhoury, PhD
Creation
This type of questions is used to allow students to come up with something new. You can ask the students to:

- Create: ask students to create a new product
- Design: ask students design something new
- Apply: ask students to apply their knowledge like doing and experiment, creating a campaign, writing a theater scene, etc.

The chart below describes the different ways you can ask the students about creation and provides you with examples of question starters.

Prepared by Eliana Elkhoury, PhD