

Case-based learning

Case-based learning (CBL) presents students with a case or dilemma situated in an authentic context, which they are required to solve. Students are provided with background, situation and supporting data. They can work individually or as a group. The course coordinator takes on a facilitator's role to guide learning rather than dictate answers.

Most effective cases:

- are developed in line with defined learning objectives
- have an educational purpose
- are authentic and relevant
- draw on common/typical scenarios
- consider dilemmas to promote decision-making
- add supporting data where necessary, and
- have relatable characters, and some include the voice of characters (e.g., patients) to add drama and realism.

In facilitating case-based learning:

1. Give students ample time to read and think about the case. You can provide the case before class.
2. Introduce the case briefly and provide some guidelines for how to approach it.
3. Create groups (ideally 3–6 students) and monitor them to ensure everyone is involved.
4. Have groups present their solutions/reasoning.
5. Ask questions for clarification and to move discussions to another level.
6. Synthesise issues raised. Be sure to bring the various strands of the discussion back together at the end. Ask groups to summarise their findings and compare group responses. Help the whole class interpret and understand the implications of their solutions.

Following is an example of a Design Thinking case-based learning plan.

Description	This lesson introduces students to Design Thinking through a real-world case study of a company that successfully applied the methodology to solve a complex problem. Students will analyse the case, engage in group activities to replicate parts of the process, and reflect on how design thinking can be applied in their own disciplines.
Learning outcomes	By the end of the lesson, students will be able to: • Explain the key stages of design thinking (empathise, define, ideate, prototype, test). • Critically analyse a case study to identify how design thinking was applied.

	• Apply design thinking principles to a new problem scenario. • Collaborate effectively in groups to generate innovative solutions. • Reflect on the strengths and limitations of design thinking in practice
How it works	1. Case Introduction (15 minutes): • Present a case study (e.g., IDEO's redesign of the shopping cart or Airbnb's use of design thinking to improve customer experience). • Provide background context and highlight the problem faced. 2. Group Analysis (20 minutes): • Students work in small groups to map the company's journey through the design thinking stages. • Each group identifies key decisions, challenges, and outcomes. 3. Application Activity (30 minutes): • Groups are given a new problem scenario (e.g., improving student engagement in online learning). • They apply design thinking steps to propose solutions, documenting their process. 4. Class Discussion (15 minutes): • Groups present their solutions. • Instructor facilitates a discussion comparing approaches and linking back to the case study. 5. Reflection (10 minutes): • Students individually write a short reflection on how design thinking could be applied in their own field of study.
Resources required	• Case study materials – provide links on Blackboard, or distribute in class. Are there multiple resources that make up the case? E.g., news articles, journal articles, reviews? • Worksheets or templates for mapping design thinking stages. • Whiteboards, sticky notes, or digital collaboration tools (e.g., Padlet, Teams).
AI considerations	• AI can help students structure their analysis by organising complex information into timelines, process

	maps, or comparative tables, which they then critically evaluate rather than accept at face value. • When applying design thinking to a new scenario, students can use AI to simulate stakeholder viewpoints (e.g., generating possible user personas or customer pain points) and then critique which are most relevant or realistic. • AI can support evidence gathering by quickly retrieving background data, but students must assess the credibility, relevance, and limitations of that information themselves. • Students should be encouraged to treat AI outputs as hypotheses or prompts for deeper inquiry, not as definitive answers, fostering habits of questioning, validating, and refining. Ethical use of AI should be emphasised: students must acknowledge when they've used AI tools and critically reflect on how those tools shaped their thinking process.
Assessment	Formative: Group participation in analysis and application activity, observed by the instructor. Summative: • Short written reflection (individual) assessing understanding of design thinking principles. • Group presentation of applied case solution, evaluated on creativity, process adherence, and feasibility. • Optional peer assessment to encourage accountability and collaboration.