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Flipped Classroom & Case-based learning

Train the Teachers Workshop

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Flipped Classroom

What is Flipped Classroom (FC)?

- One of the most commonly used active learning methodologies, which follows a competency-based model (Basso-Aránguiz et al., 2018)
- Traditionally, activities are undertaken in the classroom, but under FC, they are done outside and prior to the class.
- This means students engaging with learning materials before the class, thereby maximising in-class active learning time and promoting an active Role for students, with the teacher guiding and facilitating the learning process (Chen et al., 2018).



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What is Flipped Classroom (FC)?

- FC has been shown to be effective in higher education settings, particularly in areas of knowledge such as sciences and biomedical sciences (Baepler et al., 2014; Chen et al., 2017)
- The FC methodology combines autonomous learning (being able to use technological resources such as Google Drive, YouTube, Vimeo or Google Classroom and face-to-face classroom activities.
- Consider “flipping” the class—moving the content coverage to outside the class in order to devote precious, in-class time to practice of important course skills



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Benefits of the FC

- The primary benefit of a flipped classroom is enabling students to take charge of their learning process.
- Students take control of the process, thereby improving their soft skills like resilience and communication.
- By participating in structured activities in class, the students rehearse aspects of critical thinking with their peers and gauge their own proficiency.
- Since students have online access to the lesson material, they are able to review it at their own pace as many times as needed to help understand it.



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Benefits of the FC

- FC model include more interaction time between students and teachers, better test scores, and less stress for students.
- Results show that **in some cases flipping the classroom helped to improve the class failure rate by as high as 30%**, and 94% of students pointed out that they liked this approach to learning. (Nwosisi et al. 2016)



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Cons of FC

- When using FC, teachers often utilize items like videos or other Internet-based research for the preparation work. This can be problematic for students who do not have regular Internet access outside of the classroom.
- Teachers spend more time preparing than those who run a traditional classroom, at least in the beginning.
- Teachers may deal with student engagement issues such as students who are unwilling to complete the preparation work for class, defeating the purpose of the flipped classroom model



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Case - Based learning



What is Case-Based learning (CBL)?

- Case-based learning (CBL) methodology, also called storytelling or case study (CS), is used in a large number of disciplines (Snyder & McWilliam, 2003).
- The CBL method is founded on theoretical principles based on experiential learning (Banning 2003).
- The aim is to create learning contexts that closely resemble professional practice, which will help students to develop the competencies required in such situations.



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What is Case-Based learning (CBL)?

- The use of this CBL is especially suitable for the construction of diagnostic and decision-making capacity in the field of social problems, where interpersonal relationships play an essential role (Escartín et al., 2015; Leonard and Cook, 2010).
- Specifically, this teaching-learning method has been defended as an effective tool for developing skills such as critical thinking (Popil, 2011), communication skills or teamwork (Pique Simón and Forés Miravalles, 2012).



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What is Case-Based learning (CBL)?

- Working with CBL makes it easier to apply theory to practice, to apply conceptual content to real-world situations, thereby bridging the gap between the academic world and the world of work and providing meaningful learning that improves academic results and student satisfaction (Escartín et al., 2015).



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Formats of Cases

- **“Finished” cases based on facts:** for analysis only, since the solution is indicated, or alternate solutions are suggested.
- **“Unfinished” open-ended cases:** the results are not yet clear (either because the case has not come to a factual conclusion in real life, or because the instructor has eliminated the final facts.) Students must predict, make choices and offer suggestions that will affect the outcomes.
- **Fictional cases:** entirely written by the instructor—can be open-ended or finished. Cautionary note: the case must be both complex enough to mimic reality, yet not have so problematic as to obscure the goal of the exercise.



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Formats of Cases

- **Original documents:** news articles, reports with data and statistics, summaries, artifacts, video and audio recordings, ethnographies, etc. With the right questions, these can become problem-solving opportunities. Comparison between two original documents related to the same topic or theme is a strong strategy for encouraging both analysis and synthesis. This gives the opportunity for presenting more than one side of an argument, making the conflicts more complex.



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Designing case studies

- Cases can be more or less “directed” by the kinds of **questions asked**. These kinds of questions can be appended to any case, or could be a handout for participants unfamiliar with case studies on how to approach one:
 - What is the situation—what do you actually know about it from reading the case?*
 - What issues are at stake? (Opportunity for linking to theoretical readings)*
 - What questions do you have—what information do you still need? Where/how could you find it?*
 - What problem(s) need to be solved? (Opportunity to discuss communication versus conflict, gaps between assumptions, sides of the argument)*



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Designing case studies

-What are all the possible options? What are the pros/cons of each option?

-What are the underlying assumptions for [person X] in the case—where do you see them?

-What criteria should you use when choosing an option? What does that mean about your assumptions?



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Managing discussion and debate effectively

- **Delay the problem-solving part** until the rest of the discussion has had time to develop. Start with expository questions to clarify the facts, then move to analysis, and finally to evaluation, judgment, and recommendations.
- **Shift points of view:** “Now that we’ve seen it from [W’s] standpoint, what’s happening here from [Y’s] standpoint?” What evidence would support Y’s position? What are the dynamics between the two positions?
- **Shift levels of abstraction:** if the answer to the question above is “It’s just a bad situation for her,” quotations help: When [Y] says “_____,” what are her assumptions? Or seek more concrete explanations: Why does she hold this point of view?”



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Managing discussion and debate effectively

- **Ask for benefits/disadvantages of a position;** for all sides.
- **Shift time frame**—not just to “What’s next?” but also to “How could this situation have been different?” What could have been done earlier to head off this conflict and turn it into a productive conversation? Is it too late to fix this? What are possible leverage points for a more productive discussion? What good can come of the existing situation?
- **Shift to another context:** We see how a person who thinks X would see the situation. How would a person who thinks Y see it? We see what happened in the Johannesburg news, how could this be handled in [your town/province]? How might [insert person, organization] address this problem?



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Managing discussion and debate effectively

- **Follow-up questions:** “What do you mean by ___?” Or, “Could you clarify what you said about ___?” (even if it was a pretty clear statement—this gives students time for thinking, developing different views, and exploration in more depth). Or “How would you square that observation with what [name of person] pointed out?”
- **Point out and acknowledge differences in discussion**—“that’s an interesting difference from what Sam just said, Sarah. Let’s look at where the differences lie.” (let sides clarify their points before moving on).



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FC + CBL combined

FC & CBL combined

- Flipped Classroom and Case-Based learning methodologies support excellent the competence-based learning when these approaches are combined.
- In an RCT students who followed an FC+CBL teaching methodology were more satisfied. Implementing these methodologies would therefore strengthen students' skills and, as a result, improve the quality of their future professional work. (Oliván-Blázquez et al. 2023)



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Further reading

- Barranquero-Herbosa, M. et al. 2022. Effectiveness of flipped classroom in nursing education: A systematic review of systematic and integrative reviews. *International Journal of Nursing Studies*. 135. 10432.
- McLean, S.F et al. 2016. Case-Based Learning and its Application in Medical and Health-Care Fields: A Review of Worldwide Literature. *Journal of Medical Education and Curricular Development* (3), 39. DOI:[10.4137/JMECD.S20377](https://doi.org/10.4137/JMECD.S20377)
- Nwosisi, C et al. 2016. A Study of the Flipped Classroom and its Effectiveness in Flipping Thirty Percent of the Course Content. *International Journal of Information and Education Technology*, Vol. 6, No. 5. DOI: 10.7763/IJiet.2016.V6.712
- Oliván-Blázquez, B. et al. 2023. Comparing the use of flipped classroom in combination with problem-based learning or with case-based learning for improving academic performance and satisfaction. *Active Learning in Higher Education*, Vol. 24(3) 373–388. DOI: 10.1177/14697874221081550
- Williams, B. 2025. Case based learning—a review of the literature: is there scope for this educational paradigm in prehospital education? *Emerg Med J* 2005;22:577–581. doi: 10.1136/emj.2004.022707



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