

CADQ Guide

The flipped classroom

Many educators across different educational institutions are experimenting with the idea of a flipped classroom approach. This resource discusses the notion of the flipped classroom and provides an overview of the principles that underpin this way of teaching.

What is a flipped classroom?

A flipped classroom is a learning and teaching approach that turns the traditional classroom on its head, in other words, activities that have traditionally taken place inside the classroom now take place outside the classroom and vice versa. For instance, instead of having lectures during sessions at university, students gather the information largely outside of sessions, by reading, watching videos and listening to podcasts or other audio format. These resources can be created by their lecturers and posted online or they can be selected from an online repository. When students attend sessions, they do what is typically thought to be homework, working with lecturers or peers to solve problems and apply their learning to new contexts.

The flipped classroom is arguably, 'much more an ideology than it is a specific methodology ... there is no prescribed set of rules to follow or approach to fit' (Schell, 2012, np). Colleagues can do things differently and they can improve the approach based on direct experience of how effective it is for their students. Flipped classroom is synonymous with the 'reverse classroom' or 'the inverted classroom'.

What happens in a typical flipped classroom?

In contrast to the lecture format, in flipped classrooms the role of the lecturer changes from being a presenter of content to a learning coach. Bergmann et al. (2012, np) state that, 'the [Lecturer] is no longer the "sage on the stage" but the "guide on the side". Students become active learners instead of relying on the lecturer as the disseminator of knowledge.

Lecturers might lead in-class discussions. Alternatively, activities can be student-led and students might create their own content, engage in independent problem solving or work on some enquiry-based activities in small groups putting into practice what they have learned from their preparation. Lecturers move around the room answering questions, asking probing questions of students to uncover misconceptions, working with small groups and guiding the overall learning experience. They might organise tutorial groups of students who are struggling with assignments and often provide mini-lectures. Bergmann and Sams¹ (2012) state that, '[t]he beauty of these mini-lectures is we are delivering "just in time" instruction when the students are ready for learning'.

¹ The two are high school teachers who are believed to be among the first advocates for flipped classrooms in the USA.

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Although there will be variation in how a flipped approach works, Bennett et al. (2012, np) describe the characteristics of effective flipped classrooms as:


- Discussions are led by the students where outside content is brought in and expanded.
- These discussions typically reach higher orders of critical thinking.
- Collaborative work is fluid with students shifting between various simultaneous discussions depending on their needs and interests.
- Content is given context as it relates to real-world scenarios.
- Students challenge one another during sessions on content.
- Student-led tutoring and collaborative learning forms spontaneously.
- Students take ownership of the material and use their knowledge to lead one another without prompting from the [lecturer]
- Students ask exploratory questions and have the freedom to delve beyond core curriculum.
- Students are actively engaged in problem solving and critical thinking that reaches beyond the traditional scope of the course.
- Students are transforming from passive listeners to active learners.

What is the role of technology in a flipped classroom?

Technology is one of the key components of the flipped approach. The general principle is to provide a menu of options for the students to use in learning. The lecturers in flipped classrooms focus on the desired outcome (for instance, having the student prepare for discussion) and allow the student to choose the best method to reach that outcome. Flipped classrooms typically make use of learning technologies, particularly multimedia, which provide opportunities for students to learn. Lecturers can take advantage of techniques such as podcasting and screencasting to provide lecture content outside the formal learning environment. The material will often be chunked differently when freed from the traditional face-to-face lecture format. This may allow for more individualised instruction in the sessions and will enable students have access to content in the future, for review or other references when needed. This is likely to continue as the on-going development of powerful mobile devices will put a wider range of rich, educational resources into the hands of students, at times and places that are most convenient for them.

When might the flipped classroom approach be used?

Spencer et al. (2011) advise that a flipped classroom can be a good option if colleagues are interested in promoting, among other things, interactive questioning, content and idea exploration, student content creation and student voice and choice. In other words, the approach can be useful to colleagues who are interested in ensuring that students take more control of their own learning. Preparing the instructional resources requires effort and time on the part of the colleagues; although, it is possible that some materials can be publicly available or shared as Open Educational Resources (OER). In general though introducing a flip can mean additional work initially and may require new skills. Colleagues may choose to implement only a few elements of the flipped classroom approach initially or

to flip only a few selected sessions in a course until they develop enough confidence and time to flip the whole course 

References

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