



Science Sauce Online

A source for free flipped learning lessons

Professional development: Introducing Flipped Learning

Instructor notes

This pack is created as a resource for teachers and instructors to use to introduce flipped learning to their colleagues. The presentation covers the details of, and rationale behind, flipped learning, and there is an example of its use. The handout clarifies a number of details and makes a good “take-away” summary, while the exit survey acts to give the session instructor an idea of the attitudes teachers in their school may have towards using flipped learning themselves, allowing the instructor to target specific issues as follow-up if necessary.

In this pack:

- Instructor notes (the sheet you are reading now), including a suggested outline for the session.
- Presentation (in both MS PowerPoint and Keynote format).
- A PDF version of presentation for convenient instructor reference.
- An example student homework task sheet.
- A teachers’ summary handout.
- A mini exit survey.

SESSION INSTRUCTIONS

The instructing teacher is encouraged to use these resources in any way they feel is appropriate. However, here is a recommended layout for a PD session:

Time (mins)	Activity
5	Show slide 2 on the presentation (showing Bloom's taxonomy) and have teachers discuss in small groups by posing the question: "What does this mean to you and what are your strategies for encouraging higher order thinking?" Elicit suggestions and segue with the idea that flipped learning helps students reach higher levels more quickly and efficiently.
5	Show slides 3 to 6 outlining the main concepts of flipped learning, leading to the illustration showing how flipped learning leads to students achieving higher order thinking.
2	Show slide 7 and give out the handout. Instruct teacher to either write the answers as they watch the video. This is a way to model the student experience.
5	Show the video (slide 8). After the video, draw teachers' attention to the following points: <ul style="list-style-type: none"> In a real setting, students would be watching at home and would have the opportunity to pause and replay section if necessary. Teaching the content of this video would take far longer as a presentation in class, this form of input is very efficient.
5	Show slide 9, showing the classwork task (this is intended to give the teachers an idea of a task that can be set in class). Follow up by showing the worked example (slide 10). Note the following points: <ul style="list-style-type: none"> The student has been very creative in their concepts ("create" is at the top of Bloom's taxonomy) The student has added a comic twist to the diagram ("Make DNA great again") suggesting this was an enjoyable task. This was created by a high-attaining student. Lower attainers may only be able to reproduce the diagrams presented in the video (or textbook) without being as creative, but this acts to solidify their understanding ("understand" is a lower order of thinking, and allows them to "apply" it. This is effective differentiation that accounts for a range of learner levels, allowing all students to complete the task to a standard in line with their ability. This activity can be attempted alone, or in small groups/pairs. Pair work allows more discussion and idea sharing, while lone work require more participation from each individual. Each approach has its advantages.
5	Show slide 10 on methods of sharing the videos. Point out that setting up a Youtube account to share content is easy. Emphasise the importance of using an additional tool to share links with students (e.g. a class blog) as sharing a web address with the students will be problematic.
2-10	Show slide 11, which addressed some of the commonly cited limitations or reservations people may have towards flipped learning. These can be discussed individually or, alternatively, teachers can be direct to the handout which addresses each of these points one by one. Use the final point, "It takes too long," to segue to the final activity.
10	The instructor should have a presentation available, ideally something short and simple. With the laptop/PC connected to the projected, the instructor narrates the presentation and exports the video (see instructions on teacher handout). This is an effective way to show teachers how quick and easy it can be to create a study video for students.
Variable	Take questions from teachers.
1	Give out the handout (if not already done) and the mini survey. They survey is very short and can be completed within 1 minute and collected by the instructor. The information collected in the survey can be used to guide the instructor as to how teachers have responded to the idea of flipped learning, and what additional support may be required.

SURVEY GUIDANCE

The exit survey provides an opportunity to gain some insight into how teachers feel about the concept of flipped learning. This allows the school or instructor to assess what further training may be needed if flipped learning is to be implemented in the school.

NOTE: The survey does not evaluate how teachers felt about the *quality* of the professional development session. This is not the intention of this data collection.