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TO UNDERSTAND THE STUDENTS IN DIFFERENCE METHOD USING FLIPPED CLASS ROOM

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ABSTRACT

Flipped classrooms refer to the perform of conveying lecture outside of class and dedicating class time to a variety of learning activities, Students have different levels of motivation, different attitudes about teaching and learning, and different responses to specific classroom environments and instructional practices we discuss the range of approaches to the flipped classroom and focus on activities frequently used in these settings. in the middle of these, we examine both out-of-class activities (e.g., video lectures) and in-class activities (e.g., quizzes, student discussions). Three categories of diversity that have been shown to have important implications for teaching and learning are differences in students' learning styles (characteristic ways of taking in and processing information), approaches to learning (surface, deep, and strategic), and intellectual development levels (attitudes about the nature of knowledge and how it should be acquired and evaluated), and suggests areas for further study.

KEY WORDS:

Approaches to learning, flipped classroom, active learning.

INTRODUCTION

Why English Language is important in the world? 4 reasons why learning English is so important:

1.English may not be the most spoken language in the world, but it is the official language in a large number of countries. It is estimated that the number of people in the world that use in English to communicate on a regular basis is 2 billion!

2.English is the dominant business language and it has become almost a necessity for people to speak English if they are to enter a global workforce. Research from all over the world shows that cross-border business communication is most often conducted in English. Its importance in the global market place

therefore cannot be understated, learning English really can change your life.
3.Many if the world's top films, books and music are published and produced in English. Therefore by learning English you will have access to a great wealth of entertainment and will be able to have a greater cultural understanding.
4.Most of the content produced on the internet 50% is in English. So knowing English will allow you access to an incredible amount of information which may not be otherwise available! Although learning English can be challenging and time consuming, we can see that it is also very valuable to learn and can create many opportunities! The English Language Centre is a not – for – profit organization. This means that all our profits are reinvested in the school, our purpose is to provide the highest possible quality in English language teaching at our college in Brighton and Eastbourne.

What are flipped classrooms? The flipped classroom describes a reversal of traditional teaching where students gain first exposure to new material outside of class, usually via reading or lecture videos, and then usually via reading or lecture videos, and then class time is used to do the harder work of assimilating that knowledge through strategies such as problem-solving, discussion or debates.

The term flipped classroom was popularized by teachers Aaron Sams and Jon Bergman from woodland Park High School, Colorado in 2007 in response to realization that class time would be best spent guiding knowledge and providing feedback rather than delivering direct instruction. Bergman and Sams (2012) reasoned that direct instruction could be delivered by recording video content for students to engage with before class (and any time) freeing up class time for activities that allow deeper exploration of content.

The key purpose of the flipped classroom is to engage students in active learning where there is a greater focus on student's application of conceptual knowledge rather than factual recall (see Diagram 1).

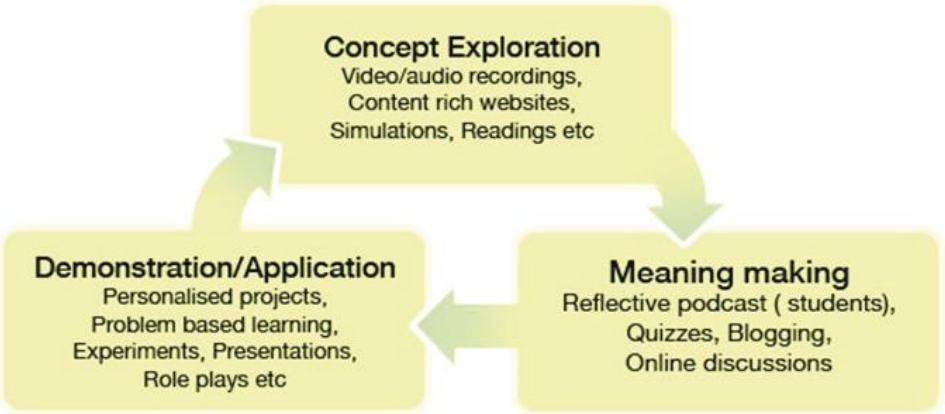


Diagram1: Learning opportunities of the flipped classroom

THE ROLE OF TECHNOLOGY

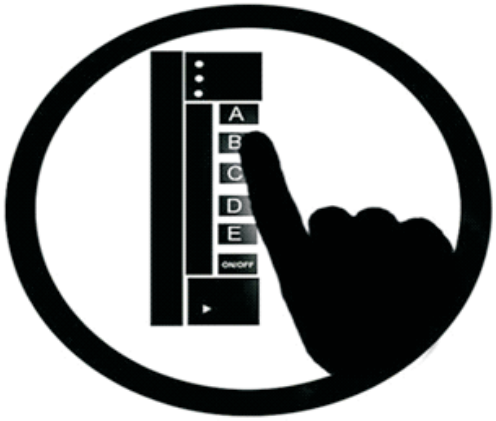
The growing accessibility and sophistication of educational technologies opens up increasing possibilities for students to explore, share and create content. Technology can support flipped classrooms thought he following affordances:

⊙ Capture content for students to access at their own convenience and to suit their pace of learning (e.g. lecture material, readings interactive multimedia),
⊙ Curate Content for students to gather their own resources.
⊙ Present learning materials' in variety of formats to suit different learner styles and multimodal learning (e.g. Text, Videos, audio, multimedia).

Provide immediate and anonymous feedback for teachers and students (e.g. quizzes, polls) to signal revision points.

Peer Instruction

⊙ Students see content before class
⊙ Quizzes are used to make sure students come to class prepared
⊙ Teacher checks understanding by using polling questions.



⊙ Capture data about students to analyses their progress and identify 'at risk' students (e.g. analytics).

OUR FLIPPED CONTEXT OUTSIDE THE CLASS

One of the most common means of moving instruction outside the classroom in a flipped classroom format has been to require students to watch prerecorded video lectures or screen casts prior to attending class (Abeysekera and Dawson 2015) 2 . Because the lecture is such a large portion of a class (even within the flipped classroom), it seems reasonable to examine whether prerecorded lectures have any impact, deleterious or positive, on learning. For ten in-class lectures in a physiology course, El Sayad and El Raouf (2013) had nursing students alternate between viewing a video-based format or a narrated PowerPoint format, with learning measured through quizzes and exams. Overall, the percentage of students who passed or failed these tests (i.e., earned 60 % or less) did not differ across lecture formats for any of the assessments. Similarly, Ellis and Mathis (1985) had introductory sociology students watch either televised or in-person lectures for an entire class semester and observed similar test performance regardless of lecture format. As well, Conway et al. (2010) reduced in-class lecture time by 14 % to provide time for completing additional out-of-class assignments which

they were responsible for, with no effect upon student grades. Thus, it does not appear that video lectures, in and of themselves, either add to or detract from student learning. Further inspection of the literature indicates that the format of imparting instructional content also fails to substantially influence learning. For example, Stephenson et al. (2008) compared learning amongst bioscience majors exposed to each of three lecture formats (traditional, virtual, e-lecture) for different topics in a human genetics course. For the traditional lecture format, students viewed an in-class lecturer giving PowerPoint presentations with printed notes as supplements. In the virtual lecture format, students navigated through an interactive multimedia online lecture (primarily text-based), which organized each of the three topics into subtopics and provided interactive audio and visual explanations in addition to self assessment questions. Finally, in the e-lecture format, students viewed narrated PowerPoint lectures with the ability to stop, pause, fast-forward, or rewind the lectures at any time. Learning was examined using a test assessing factual recall, comprehension, analysis skills, application skills, and evaluation skills. Overall, test performance was similar regardless of lecture format. Zhang et al. (2006) examined management information systems students' performance on the topic of internet search engines. Participants were exposed to either a standard lecture, an interactive video lecture (i.e., the ability to pause, fast-forward, etc.), a non interactive video lectures, or a lecture with text subtitles rather than sound. Interactive video lectures resulted in the highest test performance, with similar performance between all other conditions. Of note, this study was conducted on only one lecture, suggesting some caution in generalizing across an entire course.

INSIDE THE CLASS

The primary motive for flipping a classroom is to provide additional time for in-class activities, including active learning (Haak et al. 2011). The particular methods of active learning used vary in their utility (Prince 2004), although several methods appear to consistently enhance learning (see e.g., Freeman et al. 2014, for a review). Indeed, the success of any method of active learning will be a function of the processes engaged by that method, and we consider methods used in the flipped classroom according to that rubric. McLaughlin et al. (2014) had students engage in a series of in-class activities during each class session: audience response and open questions, pair-and-share activities, student presentations, discussion, and individual or paired quizzes. We consider the processes each of

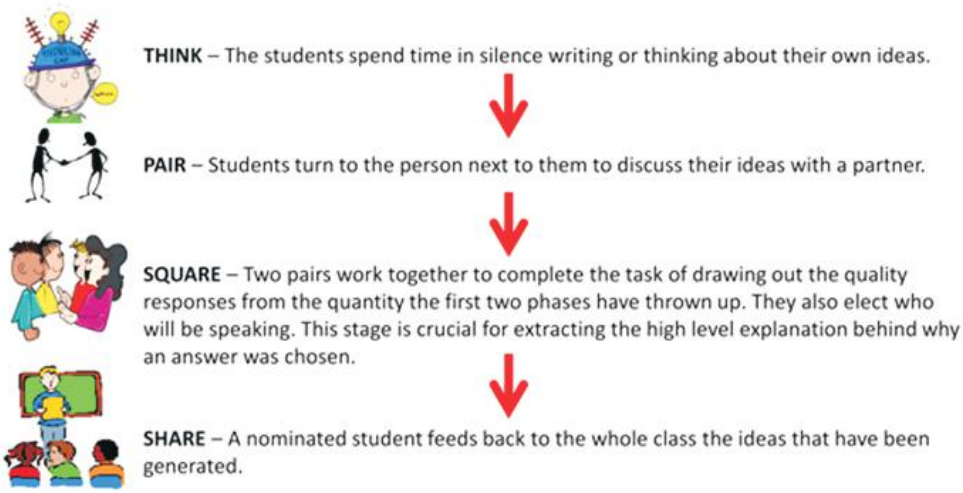
these activities engage in turn. Audience Response, Open Questions, and Quizzes McLaughlin et al. (2014) had students respond to clicker questions (i.e., questions administered via audience response systems, commonly termed Bclickers^; Caldwell 2007) regarding out-of-class content (video lectures and readings). Based on students' responses, the instructor would then provide feedback and answer questions from students regarding the lectures, readings, or related content. Additionally, at the end of each class, students completed brief quizzes on that day's material, either individually or in pairs. Other flipped classroom instructors also report utilizing clicker questions or quizzes, either as a means of ensuring that students completed the out- of-class assignments (Hung 2015; Wilson 2013) or to gather real-time feedback regarding student understanding of content (Ferreri and O'Connor 2013). Clickers appear to either improve or fail to harm exam scores, relative to equivalent time listening to class lectures or participating in class discussions (for a review, see Caldwell 2007). For example, Wenz et al. (2014) examined the effect of clicker questions on two learning modules, each taking 2 weeks to complete, in a preclinical dentistry class. The class was divided into two groups and, for the first module, one group of participants discussed questions on that module, while a second group responded to those questions via clickers. At the end of this module, participants completed a multiple-choice exam. For the second module, participants switched conditions and again completed an exam at the end of the module. Overall, test performance was highest (and fewer students failed the exams) following clicker questions. One potential explanation for an advantage of employing clicker questions is that it encourages students to engage in retrieval. Such retrieval enhances memory for the retrieved information, compared to rereading that material, a finding known as the testing effect (for reviews, see Roediger 2008; Rowland 2014). Indeed, Rowland's meta-analysis found that testing material resulted in higher average performance (i.e., in terms of proportion of items correctly recalled, recognized, etc.) than simply rereading that same information (g = .50). Do clickers enhance memory more than other means of testing information? Lasry (2008) examined this question in two different sections of a mechanics course: one using clickers' andquestions and the other presenting the same clicker questions via flashcards. Final exam performance was similar for material tested via clickers or flashcards, arguing against any additionalbenefit accruing from clickers. Thus, although clickers provide a practical means of administering tests to large groups, the act of retrieving information should benefit learning regardless of the format. Indeed, the benefits of testing are not restricted to in-class activities. For example, quizzes on out-of-class material (e.g., Flynn 2015; Wilson 2013) can also enhance learning. Further, if instructors test students on out-of-class material prior to class, they have the additional opportunity to use feedback from these tests to tailor the content addressed in-class (e.g., Hurtubise et al. 2015)

PAIR-AND-SHARE ACTIVITIES

McLaughlin et al. (2014) used three different types of Bpair-andshare^ activities in which students worked with each other (in groups of two) prior to sharing their work with the class. In rapid pair-and-share activities, students were given an in-class discussion question and were paired together to discuss and later present their ideas to the class and instructor, who provided feedback. In reflective pair-and-share activities, students had 2– 3 days to answer discussion questions in brief essays, from which the instructor selected groups to present their essays for in-class discussion. In the proactive pair-and-share activities, students paired together and took turns preparing their own discussion

questions and hosting class discussion on that topic. Similarly, other work on flipped classrooms has reported a variety of pair-and-share activities, including paired problem-solving (Love et al. 2014), and predictobserve- explain (Flynn 2015), in which learners are given a research hypothesis, subsequently predicting and observing the results, followed by explaining or discussing any discrepancies.

Group discussions appear to benefit learning. Over the course of a semester, Smith et al. (2009) had students participate in five clicker questions per class, during which they were encouraged to discuss questions with their classmates3. Benefits of this group discussion were assessed throughout the semester via 16 separate pairs of clicker questions, in which each question of a pair required the respondent to apply the same underlying concept or principle for solution. After answering the first question of a pair individually (selecting one of approximately four responses), students were permitted to discuss the question with nearby classmates before reanswering the first question, followed by the second question of a pair. Out of those students who correctly answered the first question after group discussion, 77 % answered the second, individually-answered question correctly, indicating that group discussion helped them learn the underlying concepts. Even when students did not answer the first question correctly (either initially or after group discussion), they were more likely than chance to correctly answer a second question applying the same principle after discussion (44



Thus, group discussion benefitted student performance as well as their conceptual understanding of the applied principles. Using a similar design, in which students answered the first question individually, Smith et al. (2011) allowed students to either engage in group discussion4, receive instructor explanation, or a combination of group discussion and instructor explanation. Students then individually answered a second question, which utilized the same underlying concept or principle. Performance on the second question was best for students who received the combination of group discussion and instructor explanation, regardless of performance on the first question of the pair. Do the benefits of group activities or discussion depend on factors such as the size of the group? In order to address this question, Alexopoulou and Driver (1996) had high school students discuss physics questions in groups of two or four individuals. Students answered questions individually at first (pretest) and then participated in group discussion about these questions. Two to 3 weeks later, students individually reanswered the same questions (posttest). Students in larger groups

demonstrated greater learning gains than students in smaller groups and were less likely to regress from their pretest performance. Alexopoulou and Driver suggest that groups of four students were less constrained in their interactions than groups of two students and were also more willing to discuss conflicting perspectives. Such findings argue that larger groups may enhance the value of group discussion (e.g., by furthering discussion, resolving group conflict, bringing prior experiences to bear, etc.; for similar suggestions, see Shimazoe and Aldrich 2010). However, these conclusions are based only on a single study; further work should examine the reliability of this finding and determine the point where adding individuals to a group results in diminishing returns (e.g., additional individuals offer little benefit or are detrimental). Indeed, group dynamics (e.g., influence of individuals) may also change as group size increases (Fay et al. 2000). Manipulating only group size (5 vs. 10 members), Fay et al. (2000) found that students in smaller group discussions were equally influenced by members they interacted with, whereas students in larger group discussions were primarily influenced by dominant group speakers. Although the issue of group size is not yet resolved, Michaelsen and Sweet (2008a, b, 2011) recommend groups of five to seven members when groups must address challenging intellectual tasks.

Student Presentations McLaughlin et al. (2014) had groups of four to five students prepare a summary of class readings and create presentation materials. These materials were use tolled in-class discussion, during which the students were responsible for answering other students' questions. Indeed, student presentations are commonly reported as being used in the flipped classroom format (Hung 2015; Kim et al. 2014; Mason et al. 2013; McLaughlin al. 2013; Schlairet et al. 2015). In a recent review, Carberry and Ohland (2012) discuss how teaching can benefit one's own learning (i.e., learning-by-teaching). The teaching processes (composed of: preparation, presentation, and student assessment) are frequently presumed to benefit the teacher's learning of the presented content, in addition to improving related skills, such as communication. In one example of these learning benefits, Nestojko et al. (2014) examined test performance amongst students who had studied text passages either with the expectation of teaching another student or with the expectation of a test. However, no participants engaged in teaching, and all participants engaged in the test. Overall, test performance was highest amongst learners who had expected to teach. Actual teaching may also confer an additional benefit to learning (e.g., Ross and Di Vesta 1976). For example, Fiorella and Mayer (2014) had participants study information on the Doppler Effect, either with the expectation of a subsequent test or the expectation of teaching that material. Compared to participants who expected a test, those who expected to teach performed better on both immediate and delayed comprehension tests, with this effect being strongest for those who both expected to teach and actually did teach. Overall these results indicate that presenting (or the expectation of presenting) provides benefits to the student above and beyond either listening to a class lecture or studying in anticipation of a test. These data are reminiscent of the finding that generation, or actively producing information that is being learned, results in better memory for that information than if the information is simply provided to them (for reviews, see Bjork et al. 2007; Mulligan and Lozito 2004). That is, students presenting must generate the material for the presentation, whereas students listening to the presentation might benefit from the additional review provided from the presentation itself but would not receive the benefits of generating that material. Such findings suggest that the benefit of student presentations would be enhanced to the degree that the student generates, or creates, his or her own content for the

presentation (1994). That is, if the student connects related class concepts or introduces relevant outside readings into his or her presentation, the resulting benefit to learning may be greater than if the presentation was a simple summary of the class material.

Active Learning Interacting with the Flipped Classroom Thus far, we have reviewed various components of the flipped classroom in terms of the cognitive processes (e.g., generation) they engage (e.g., Jensen et al. 2015). However, it must be noted that these processes may interact when multiple activities are paired together. For example, although both spacing and variation individually benefit learning, their combination becomes counterproductive if spaced variations fail to be connected with the original learning (Appleton-Knapp et al. 2005), or with the nature of the material (e.g., McDaniel et al. 1986). Accordingly, the benefits of any individual technique employed in flipped classroom may be altered by other methods in use. One intriguing possibility is that flipped classrooms may be an ideal venue for combining multiple methods of active learning. For example, compared to classes that integrated some active learning (e.g., clickers, online homework, and demonstrations), Flynn (2015) integrated a wide variety of active learning techniques and reported a benefit for flipped classrooms (i.e., reduced withdrawal and failure rates, increased exam scores). Future work in this area should continue to examine the degree to which individual active learning strategies aid student performance in the flipped versus traditional classroom

SUMMARY AND CONCLUSIONS

Although breakthroughs in technology have certainly made flipping the classroom a practical option, teachers are choosing to flip their classes simply because it enhances the learning experience. Students can consume lecture materials at their own pace. Under traditional lectures, students are bound to the pace that the instructor sets for the course. If a student has difficulty understanding a concept during a lecture, he or she is forced to slow down the rest of the class by interrupting and asking for additional clarification – or do his or her best to keep up and ask for guidance at the end of class. In flipped classrooms, students can review and replay any parts of the lecture that they're having trouble with as many times as they need. If students continue to have issues. The teacher is present while students apply new knowledge. In the traditional classroom, students show what they've learned in class through homework. This order of events is suboptimal because, at home, students typically do not have resources to turn to should they have questions. Consequently, a student must wait until the next class session or wait until the professor's office hours to receive help – or turn in incorrect homework. Bringing homework into class time give teachers insight into which concepts, if any that their students are struggling with and helps them adjust the class accordingly. Results from flipped classrooms show promise. There is growing evidence that the flipped classroom model can improve student achievement in nearly any subject. According to the flipped learning Network, 71% of teachers who flipped their classes noticed improved grade, and 80% reported improved student attitudes as a result. What's more, 99% of teachers who flipped their classes reported that they would flip their classes again the following year.

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