**What is a flipped classroom?**

The flipped learning approach involves taking direct instruction and placing the onus on the individual learner rather than group instruction. Lessons are provided to students before class and they are expected to apply these concepts in class. Classroom time is then spent exploring and using the content rather than direct instruction.

Traditional Flow: Teacher explains concepts in class, assigns work to students, then grades the work

Flipped Flow: Student reviews concepts & resources before class, teacher develops hands-on project, works with students in small groups to bridge any learning gaps and then grades the project

**Does it work?** According to Ferriman, CEO of Learn Dash:

* In 2012, 48% of teachers flipped at least one lesson, in 2014 it is up to 78%
* 96% of teachers who have flipped a lesson would recommend that method to others
* 46% of teachers researched have been teaching for more than 16 years, but are moving towards flipped classrooms
* 9 out of 10 teachers noticed a positive change in student engagement since flipping their classroom (up 80% from 2012)
* 71% of teachers indicated that grades of their students have improved since implementing a flipped classroom strategy
* Of the teachers who do not flip their classroom lessons, 89% said that they would be interested in learning more about the pedagogy

**What about case studies?**

Ferriman also reports in 2014 that a case study of Clintondale High School in Clinton Township, MI shows some pretty impressive results. When a flipped model was implemented, they found:

* + The English class failure rate decreased from 52% to 19%
  + The Math class failure rate decreased from 44% to 13%
  + The Social Studies failure rate decreased from 28% to 9%
  + The entire 9th grade failure rate went down 33% in one year

**Improved Student–Teacher Interaction**

Advocates of the flipped classroom claim that this practice promotes better student–teacher interaction. For example, Bergmann and Sams (2012) point out that when teachers aren't standing in front of the classroom talking *at* students, they can circulate and talk *with* students. If teachers use inverted classrooms this way, they are likely to better understand and respond to students' emotional and learning needs. Research makes a strong case for the benefits of such interaction. Studies have shown that having teachers who recognize and respond to students' social and emotional needs is at least as important to academic development as specific instructional practices are, and this is especially true for at-risk students (Hamre & Pianta, 2005).

**Opportunities for Real-Time Feedback**

Proponents of flipped classrooms also assert that increased student–teacher interactions give teachers more opportunities to provide feedback to students. For example, a small pilot study funded by the Gates Foundation observed that during a five-week summer school program in which students received instruction through the Khan Academy website along with support from a teacher, the teacher spent significantly more one-on-one time with students than she had in her traditional classroom; thus, she was able to provide more feedback and immediately correct student misperceptions (Greenberg, Medlock, & Stephens, 2011). Such increased opportunities for feedback could improve student learning because feedback has one of the strongest effect sizes of any instructional practice—in the 0.73–0.76 range, according to two meta-analyses (Beesley & Apthorp, 2010; Hattie, 2008).

**Student Engagement & Retention**

Another purported benefit of flipped classrooms is that "they speak the language of today's students" (Bergmann & Sams, 2012, p. 20), who are accustomed to turning to the web and social media for information and interaction. There may also be another, deeper, reason students find video lectures more engaging: Brain research tells us that the novelty of any stimulus tends to wear off after about 10 minutes, and as a result, learners tend to check out after 10 minutes of exposure to new content. After that, they either need a change of stimulus, emotional variety, or an opportunity to step back and process what they're learning (Medina, 2008). One benefit, then, of placing lectures online may be that they can break down direct instruction into more engaging, 10-minute bites of learning.

**Self-Paced Learning**

As noted earlier, putting lectures online enables students to pace their own learning according to their needs. Potentially, an inverted classroom allows the teacher to place an entire year or semester's worth of lectures online, enabling students to accelerate through the curriculum if they are ready. According to John Hattie's (2008) synthesis of 800 research meta-analyses, such acceleration has one of the strongest effect sizes (0.88) of any instructional intervention.

**More Meaningful Homework**

Another purported benefit of flipped classrooms is that they alter the nature of homework by having students practice and apply their learning in the classroom, under the watchful eye of the teacher (Bergmann & Sams, 2012; Greenberg, Medlock, & Stephens, 2011). In current practice, homework often appears ineffective in promoting learning. Beesley and Apthorp (2010) found that targeted, in-class opportunities for students to practice their skills with corrective teacher feedback had an effect size nearly four times that of homework, in which teachers had few opportunities to monitor students during their practice.

**Flipping the Paradigm**

What inverted classrooms may really be flipping is not just the classroom, but the entire paradigm of teaching—away from a traditional model of teachers as imparters of knowledge and toward a model of teachers as coaches who carefully observe students, identify their learning needs, and guide them to higher levels of learning.

**Limitations to Consider**

One important distinction to make about flipped classrooms is that not every subject needs to take on this approach. It is better to start with just one or two lessons. The traditional approach still has merit and can still be used well. Consider the flipped approach as a creative way to supplement learning and foster student engagement with the content. Keep in mind what resources you do and do not have at your institution. This will help you determine the best way to use those resources to add a flipped element to your classes.

**Online Resources for Flipping**

<http://flippedclassroom.org/>

<http://flippedlearning.org/>

<http://flippedclass.com/>

<http://www.flippedclassroomworkshop.com>

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