

How Flipped Should a Classroom Be?

Flipped-Classroom Pedagogy Impact on Student Learning

How Flipped is Flipped Enough?



The Courses Used

Current Year

- None
 - AGRI 207; enrollment 20
 - AGRI 208; enrollment 22
- Partial
 - AGRI 341; enrollment 12
 - AGRI 345; enrollment 12
- Completely
 - AGRI 350; enrollment 15
 - AGRI 351; enrollment 11

▪ Previous Year

- AGRI 207; enrollment 33
- AGRI 208; enrollment 21
- AGRI 342; enrollment 14
- AGRI 345; enrollment 12
- AGRI 350; enrollment 14
- AGRI 351; enrollment 12

Data

Quality Instructor			
Current Year			
	None	Partial	Complete
Fall	4.71	4.6	4.2
Spring	4.2	4.4	4.6
Previous Year			
Fall	4.6	4.5	4.3
Spring	4.4	4.5	4.5
LSD: 0.2			

Quality Course			
Current Year			
	None	Partial	Complete
Fall	4.57	4.6	4.5
Spring	4.3	4.7	4.4
Previous Year			
Fall	4.4	4.2	4.67
Spring	4.4	4.4	4.5
LSD: 0.2			

Data

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Current Year			
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Student Thoughts

- Too much homework (full flip)
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Student Thoughts

- Too much homework (full flip)
- Felt like I had to teach myself everything in this course (full flip)
- Lots of outside of class work (partial flip)
- Enjoyed activities in class (partial flip)
- Too much homework (no flip)



Conclusions

- No difference in perception of instructor between approaches
- Partial flipped approach saw small improvement in course quality perception
 - Challenging to implement (balancing lecture and activity time)
 - Will experience improve impact of approach?
- Limitations:
 - 1 professor
 - 1 group of students
 - Different classes for each approach



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- The Flipped Classroom model is a current trend being discussed to increase student engagement and, as a consequence, student learning within a course. A common dilemma faced by those considering a change in their course pedagogy to encompass this model is how much should they flip? A week? A month? The whole semester? To answer this, three existing courses taught by the same professor (three each semester) were modified with one of three levels of flipped pedagogy for the whole semester: none, partial, completely. This process was then repeated a second semester. Student evaluation data was collected and analyzed for each course from the previous iteration before the modification; and at the end of each semester for "quality teacher" and "quality course" from the student course evaluations administered through the IDEA form. Courses with the "none" level of flipped pedagogy showed no statistical improvement in either the "quality teacher" or "quality course." Courses with the "completely" level of flipped pedagogy showed no statistical improvement in "quality teacher," and minimal improvement, that was not statistically significant, in "quality course." Courses with the "partial" level of flipped pedagogy showed no statistical gain in "quality teacher" and statistically significant improvement in "quality course." These results suggest that a partially flipped approach to course pedagogy, while more challenging to manage from the professor's role, creates a perception of higher course quality from the student's experience.