


What are the requirements for successful flipped learning?


- *Students responsible for their learning, which is incremental and sequential*
- *Small class size (~ 20 students)*
- *Students prepare in advance of class/lab attendance via detailed syllabus*
- *Instructor facilitates student learning before, during, and after class/lab*
- *Minimize lecture; maximize active, student-directed, collaborative learning*
- *In class board work:*
 - *student ownership and responsibility for their actions in the classroom*
 - *students demonstrate mastery in a formal process*
 - *students “publish” and defend*
- *Frequent assessment and feedback*

¹ a. *Academic and Military Programs of the Five Service Academies, Comptroller General of the United States, Report to Congress: 31 October 1975, pp. 48-52.*
b. *Palladino, George F. J. Chem. Educ. 1979, 56, 323.*
c. *Ertwine, Dean R.; Palladino, George F. J. Coll. Sci. Teach. 1987, 16, 524.*
d. *Gibson, Robert. J. Coll. & Character 2007 VII (3), 1-8.*
e. *Shell, Amy E. Primus: Problems, Resources, and Issues in Mathematics Undergraduate Studies 2002 12(1), 27-38.*
f. *Pursell, David P. Cell Biology Education-Life Sciences Education, 2009, 8, 15-28.*

Dr. Pursell's Tips for Student Success

Student Comments about Dr. Pursell's Course

"The instructor just thought teaching ourselves was the best idea, well IT WASN'T! Chemistry is already a difficult subject, so how does an instructor expect someone to do good in the class if he does not stand in front of the board and EXPLAIN something?! RIDICULOUS!" 

"Dr. Pursell made me teach myself. I earned my grade in his class. Along the way I hated the fact that he didn't lecture about the material, however, at the end of the semester I am now grateful because not only have I truly retained the information I learned, but I believe that I am now a much stronger student. The reality is that if you follow his syllabus exactly, attend every class, an A is not that hard to obtain. My grade in this class is due to all that hard work I put in and will be my proudest academic achievement thus far." 

Which student will you choose to be?

Dr. Pursell's Tips for Student Success

Grades Earned in Dr. Pursell's Course

Course Grade	% of Students
A	47
B	28
C	16
D	5
F	4

Dr. Pursell's Tips for Student Success

To Be Successful, Students Must Commit To:

- ✓ taking responsibility for their learning
- ✓ maintaining access to course materials
- ✓ following the guideline of ~ 2-3 hours of preparation before each 1 hour of class
- ✓ completing homework assignments before coming to every class and lab
- ✓ arriving at class and lab on-time
- ✓ never getting behind in course work
- ✓ maintaining a notebook of all work
- ✓ correcting quizzes and exams in a timely fashion
- ✓ asking questions about unclear topics, terms, and problems
- ✓ participating in class activities
- ✓ communicating with your instructor, especially if you are having difficulty
- ✓ practice working problems, then practice more, and more, . . .

Dr. Pursell Commits To:

- ✓ helping you develop into a student who achieves his/her academic and professional goals