

**Strategies for Reducing Student
Withdrawals -
The example of some Calculus
Classes**

Capstone Project for Faculty Teaching
Certificate Program (FTCP)

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April 2009

Dropping a class

- Question:
When are the students dropping a class?
- We used Enrollement Statistics from two Calculus courses to answer this questions.

Calculus 121

Section 1: We started with 35 students enrolled in the class (after the first week).
At the end we had 25 students enrolled.

Section 2: We started with 37 students enrolled.
At the end we had 33 students enrolled.

Academic Calendar 2008- 2009

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: Instruction begins/ ends

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
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- The results were given one week after.
- During these two weeks is when the majority of the withdrawals occurred.

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
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When students withdraw- Answer

1. (The first week of classes with no fee).
2. When they are told they have to take an exam and they do not feel ready or feel lost.
3. After they have taken an exam and feel their fears for not doing well are confirmed .
4. After they have taken the results of an exam back and their performance was not what they expected.

Comments

- Some of the students will actually come and talk to the instructor before an exam that they are “lost”, or they do not understand a lot of what is going on etc.
- This is rare to happen after an exam.
- In my opinion before the exam they have some hope. After the exam their hope is gone.

Comments II

- Some of these students who end up “lost”, do not lack in ability than the other students.
- However, at some point during the course they start having questions that they can not answer. If these questions stay unanswered, they tend to multiply.
- Most of them do not ask for help until an exam, or not at all.

Identifying the problem

- ❑ There are many reasons why someone drops and I will not try to define them all.
E.g. a student wanted to take 16 credits and maintain a 4.0 GPA, while working 20 hours a week! This was not possible and she dropped one of them. She was a good student, but did not have time to study and work.
- ❑ My focus was to help students who try, but do not get sufficient results out of their work. If this continues for long (a few weeks) they come to this point of “hopelessness” and they drop the course.
- ❑ It is like a car getting trapped into the sand. It is not difficult to get it out, but you have to know how. Otherwise you will go nowhere and end up thinking that there is no hope that the car can go anywhere.
- ❑ The main goal was to provide some help for the students before they come to this point of hopelessness.

Strategies

1. Assign all students to a group and have one hour every week where groups solve problems.

Pros: If one of the students in the group knows how to answer a question, the chances are that the other students will follow along and will not get lost.

Cons: One hour a week is not enough for everything and most of the students will not meet or communicate outside class with their group members.

Strategies II

2. After every exam talk to the students who did not do well, or who did well but had the ability to do better.

Results:

- Some students do not want to put down the work, or they lack the background, so they drop.
- Other students take the decision to repeat the class next semester, but do nothing more this semester.
- Some students are actually convinced to seek for help and do some work.

Cons: Students who are convinced to seek for help show up during office hours only to see that there are another 4-5 students waiting and it is a long time before their questions are answered.

Remedy: Try to put them in groups even during office hour!

Strategies III

3. After students get the exams back work on the same problems again:

- I gave them the exam back and I told them that they had one week to look them again.
- Next week I asked them to be with their group and gave them directions so that each group to come up with some problems of their own, but similar to the original ones.
- Then, I asked them to exchange problems between groups and try to solve the other group's problems.
- If they were successful in solving the problems, they were getting some extra points on top of the exam points.
- At the end, they had to give the problems to a third group and try to correct them (most of it happened outside class).
- If they corrected the problems, they got some points towards their group work (independent of the exam points).

Strategies IV

4. Even if the students drop the class, ask them to come to the office to talk (implemented this semester).
 - The reason is not to try to convince them to change their decision.
 - Rather hear their story, give them some feedback and keep some statistics for the future.

Improvements(?)

- Up to today (March 4th 2009) withdrawals are as follows:
 - Calculus , Section 4: Three after the first week.
 - Calculus , Section 6: Two after the first week.

Feedback Form

- I have developed a form to get feedback from the students after they drop a course.

Feedback for Withdrawals

Course:

Section:

Student's Name:

Year (circle one): Freshman Sophomore Junior Senior

Is course mandatory for major? Yes No

Is student going to attempt the course again? Yes No When?

How many courses student have to take in this sequence, or that have this course as a prerequisite?

Which courses?

Reason for dropping:

How long was the student considering dropping this class for this reason:

Was help sought?

If so, what type of help:

For the instructor:

How often was the student attending class? Regularly Sometimes Almost never

Was homework/assignments submitted?

Did the student ever come for office hours or otherwise seek help?

Did the student come to talk after (s)he had dropped the course?

Comments: