4 photos of students during class activities



Creating a Non-STEM Path: Intermediate Algebra for Statistics

June 12, 2013 Kathy Kubo

Before Spring 2012

Arithmetic	Pre- Algebra	Elem Algebra	Int Algebra	Statistics
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Since Spring 2012



Program Growth 2012-13

TERM	NUMBER OF SECTIONS	NUMBER OF PAIRED SHORT-TERM COURSES**
Spring 2012	11	2
Summer 2012	4	
Fall 2012	14	3
Spring 2013	16	2
Summer 2013	5	
Fall 2013	18	5

** Student cohort of Intermediate Algebra for Statistics (8 weeks) and Introductory Statistics (8 weeks) with the same instructor for both courses

California Acceleration Project

Streamlined developmental curricula should reflect three key principles:

- Backwards design from college-level courses
- Just-in-time remediation
- Intentional support for students' affective needs

Pedagogical Improvements

- OLI textbook (free/online)
- Minitab + Excel + Statcato (free software)
- Group discovery activities
- Focus on real world applications
- Emphasis on building communication skills

Video: The Difference

Photo of video screenshot of a former Math 75 student

http://www.youtube.com/watch?v=SfCYtwtJAkU&feature=youtu.be



For more information:

Using Writing and Presentations to Develop Critical Thinking and Reflection in Developmental Math Courses Thursday, June 13 10:40-11:40am Composite Room (3rd floor)

Accelerating Acceleration

Thursday, June 13 3:10-4:10pm Composite Room (3rd floor)

Poster Presentations

Photo of video screen shot of a group of Math 75 students with their poster

Kathy Kubo, College of the Canyons

Intro to Posters: 20 minutes

Form groups of 3 to 4 people and analyze the given data set (20 minutes)

Prepare a 3-minute discussion that includes the following:

- What does the data tell you?
- Describe a few of the stories behind the data

On a separate sheet of paper, draw a graphical representation of the data.

Poster Presentations (10 minutes)

Pair with a nearby group

- Presenters: Choose a group presenter to share the group findings to the other group (3 minutes)
- Listeners: At the end of the presentation (2 minutes) Yellow sticky note: Write something you liked or learned Green sticky note: Write a suggestion for improvement or a question you have about the presentation.

Then rotate roles

Poster Presentations: Round 2 (10 minutes)

Pair with a different group

- Presenters: Choose a group presenter to share the group findings to the other group (3 minutes)
- Listeners: At the end of the presentation (2 minutes) Yellow sticky note: Write something you liked or learned Green sticky note: Write a suggestion for improvement or a question you have about the presentation.

Then rotate roles

Auto Safety Posters (Week 4)

You work for an automobile insurance company, and your job is to minimize costs for the company. Your boss has assigned you the task of reviewing recent auto safety records and determining how that information may be relevant to the company.

Data: Vehicle categories, safety ratings (insurance injury loss)

Prepare a poster presentation for your boss that includes:

- appropriate comparative graph(s) and a five-number summary (using Minitab);
- descriptions of the injury ratings for each group of cars;
- a comparison of injury ratings for the three sizes of cars;
- your recommendation to your boss about your company's insurance policies.

The Process

We formed 6 groups in most classes.

3 groups simultaneously presented their posters while the other 3 listener groups rotated to each poster (3 rounds). Then switch roles for the 2nd set of posters.

Presenters Information (repeated practice with communicating ideas)

All group members remain with their poster to give a 2-3 minute presentation of their findings. Thus, the presenting group has 3 opportunities to communicate their results.

Audience information (listening/responding routine)

Each audience member writes comments on sticky notes and leaves comments on the poster

- Yellow: Something you liked or learned about the presentation
- 2nd color: One suggestion for improvement or a question that you have about the presentation

Afterwards, the groups discuss the feedback they received (referring to notes)

Video: Auto Safety Posters

Photo of 2 Math 75 students Discussing their poster presentation

(5 minutes)



Contact information

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