

Results from the Fall 2005
Pre-Collegiate Mathematics Pilot

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With Thanks to Ms. Susan Dean Instructor of Mathematics





- De Anza College
  - 2-year community college located in Cupertino, CA
- Enablearning
   Educational Technology Company
- Noel-Levitz
   Enrollment Management Consulting
   Company





### Why?

- Low success rate (55%): Need to improve Student Success in Developmental Math
- A large group of 5,000 to 6,500 development math students each year









- Pilot Interventions
  - Noel Levitz College Student Inventory (CSI) administered each quarter
    - Counselors provide in class feedback
    - Offer assistance for those most at risk
  - EnableMath Software/Textbook
    - Provides mastery based homework questions done in lab during class time
    - Software gives student and teacher weekly updates on progress







- Purpose
  - Help students and instructors to attack one of the most difficult "gateway" areas (Math) EARLY with technology, services and consultation







#### De Anza

- Commits to participate fully in the partnership for 2 years
- Provides at least 6 sections of
   Developmental Math to participate in
   Fall 2005 (Math 210 (2), Math 112 (2),
   Math 114 (4)); Includes teacher training





- De Anza (Continued)
  - Provides a Leadership Team to work with Noel-Levitz consultants & with Enablearning. (Leadership Team: 2 Math Instructors, PSME Dean; Acting Dean of Counseling; De Anza College Researcher; Dean of EOPS and Student Development)
  - Agrees to implement retention strategies and best practices offered by our partners





- Enablearning provides
  - An unlimited use of EnableMath's mastery-based homework system
  - A customized syllabus for each course
  - 24-hour support for students and faculty
  - Progress reports within the program, weekly e-mail summaries





- Noel-Levitz provides
  - Help in the collection and review of initial student performance data
  - Consultants
  - For participating faculty and administrators, goal-setting and strategy workshops
  - Summary report and analysis

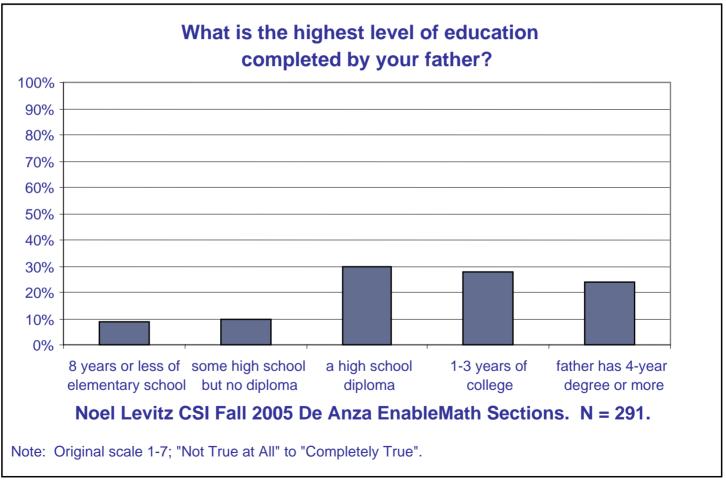




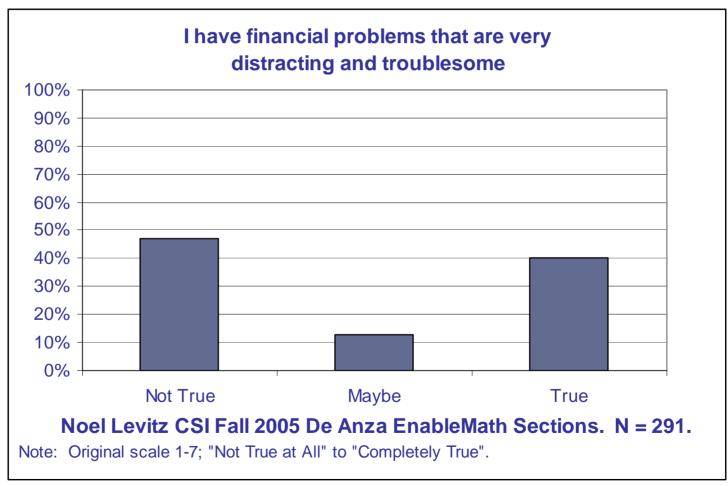
- Outcomes Self Selection Bias
  - In Fall 2005 the EnableMath sections were not identified to the students so selection was considered random
  - Instructors Self Selected





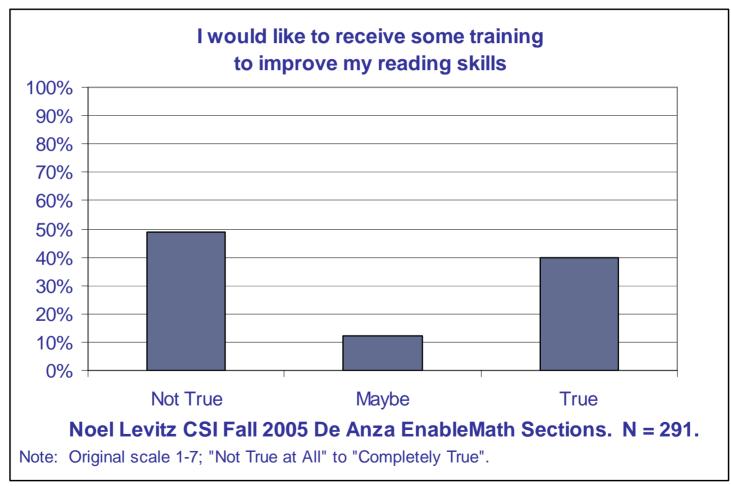




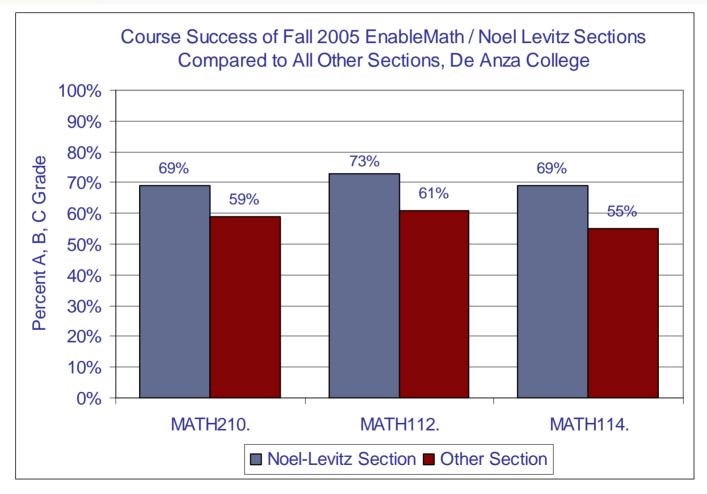






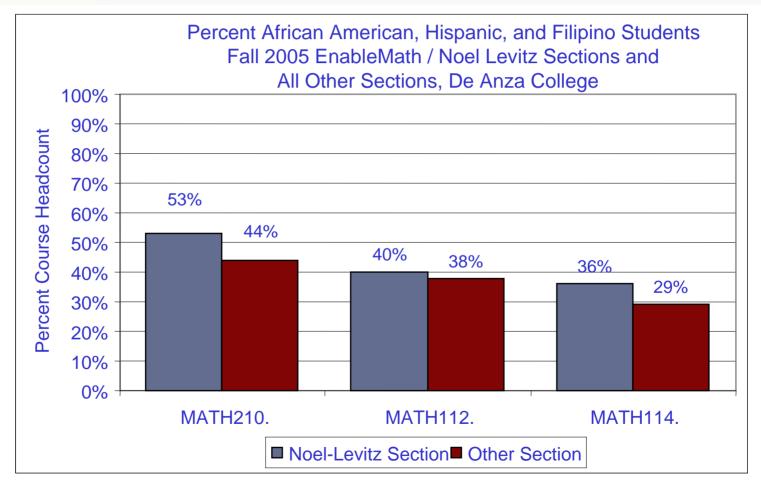
















## Fall 2005 EnableMath / Noel Levitz Sections / Students, De Anza College

Course	Group	# Sec	HC
MATH210.	Noel-Levitz Section Other Section	2	81 375
MATH112.	Noel-Levitz Section Other Section	2 16	77 590
MATH114.	Noel-Levitz Section Other Section	4 19	150 635
Total	Noel-Levitz Section Other Section	8 46	308 1,600







# Student Performance in Developmental Mathematics: Math 200, 101, and 105 Baseline Statistics

De Anza College, Fall 2003 - Spring 2004

Class	Total Students	Passed (P/A/B/C)	Did Not Pass (NP/D/F/I)	Dropped (W)	Total Did Not Pass
Pre-Algebra	1,062	58%	25%	17%	42%
Elem. Algebra	1,866	49%	23%	28%	51%
Inter. Algebra	2,828	58%	21%	21%	42%
Total DM	5,756	55%	22%	23%	45%

Source: Noel Levitz Proposal Letter May 17, 2005





## Course Success of Fall 2005 EnableMath / Noel Levitz Sections Compared to All Other Sections, De Anza College

	Pass Grades Percent		Did Not Pass Grades Percent		Withdrew Grades Percent		Total Grades Percent	
Course Group								
MATH210. Noel-Levitz Section	56	69%	24	30%	1	1%	81	100%
Other Section	220	59%	90	24%	65	17%	375	100%
MATH112. Noel-Levitz Section	56	73%	18	23%	3	4%	77	100%
Other Section	357	61%	126	21%	107	18%	590	100%
MATH114. Noel-Levitz Section Other Section	104 348	69% 55%	25 123	17% 19%	21 164	14% 26%	150 635	100% 100%

Includes end of term grades of students enrolled at census (3rd week).

Note: Not all Noel Levitz Section Students completed the College Student Inventory (CSI).





#### Course Success of Fall 2005 EnableMath / Noel Levitz Sections Students Not Completing the College Student Inventory (CSI), De Anza College

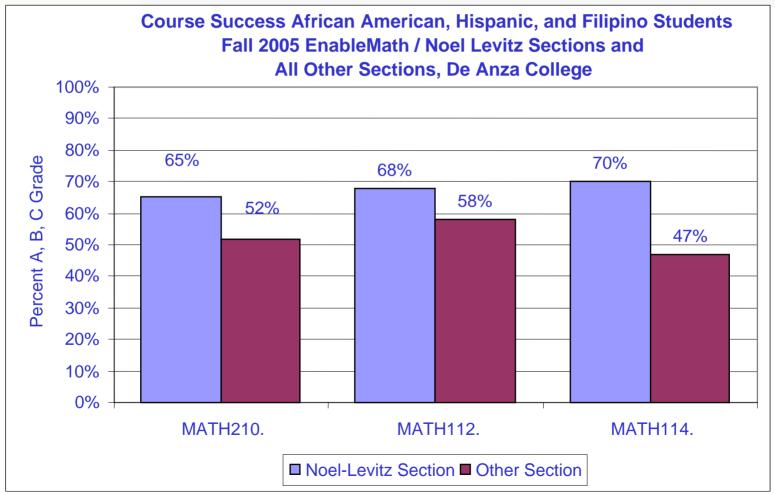
Course Group	Pass Grades Percent		Did Not Pass Grades Percent		Withdrew Grades Percent		Total Grades Percent	
MATH210. Noel-Levitz Section	5	63%	2	25%	1	13%	8	100%
MATH112. Noel-Levitz Section	5	56%	3	33%	1	11%	9	100%
MATH114. Noel-Levitz Section	10	50%	4	20%	6	30%	20	100%

Includes end of term grades of students enrolled at census (3rd week).

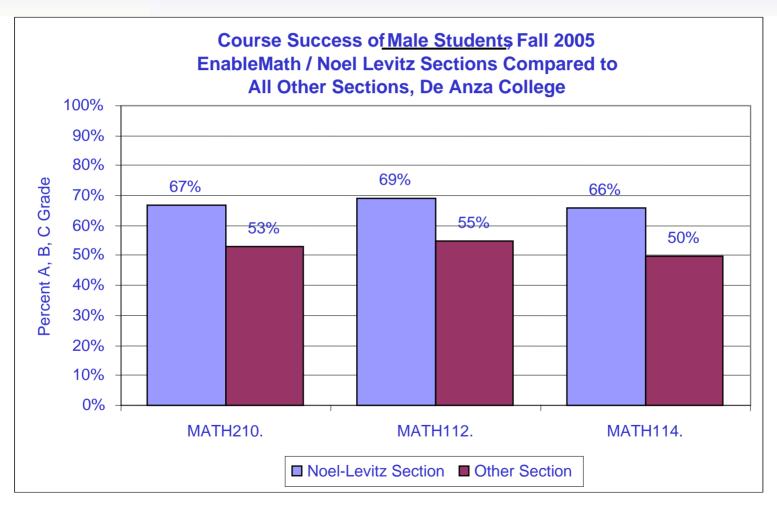
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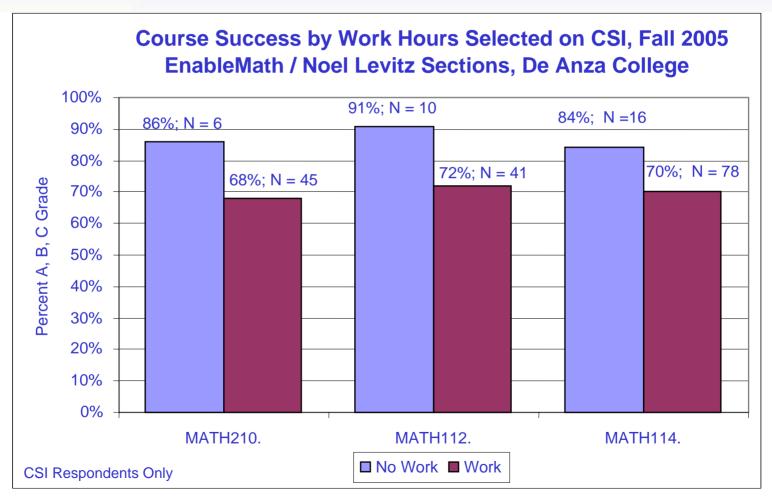






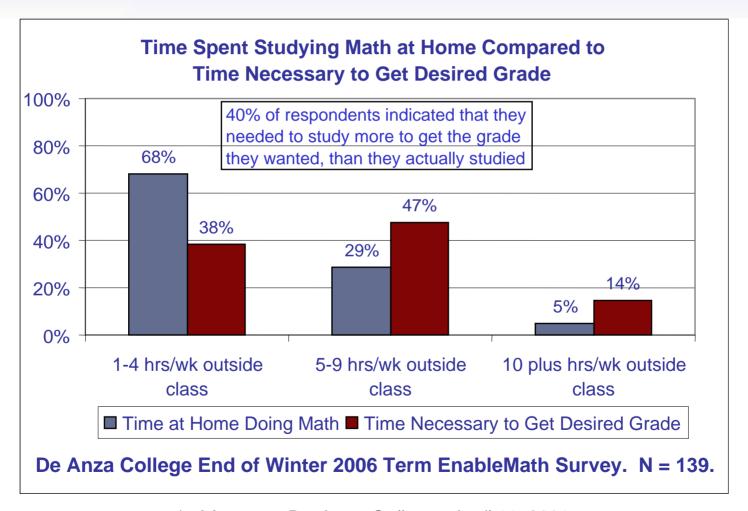






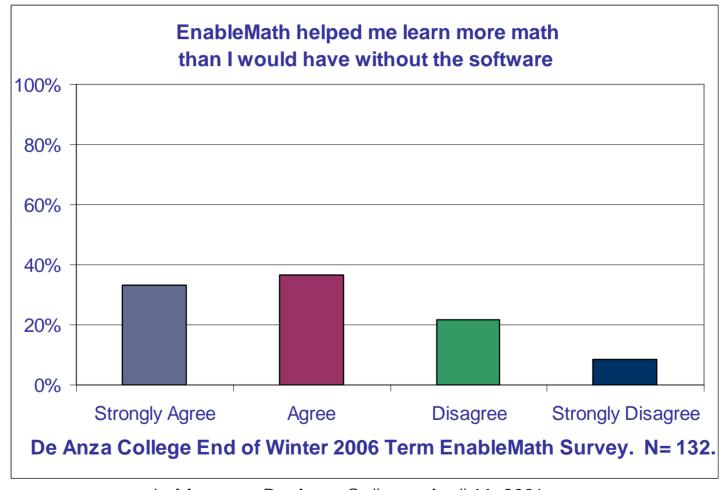






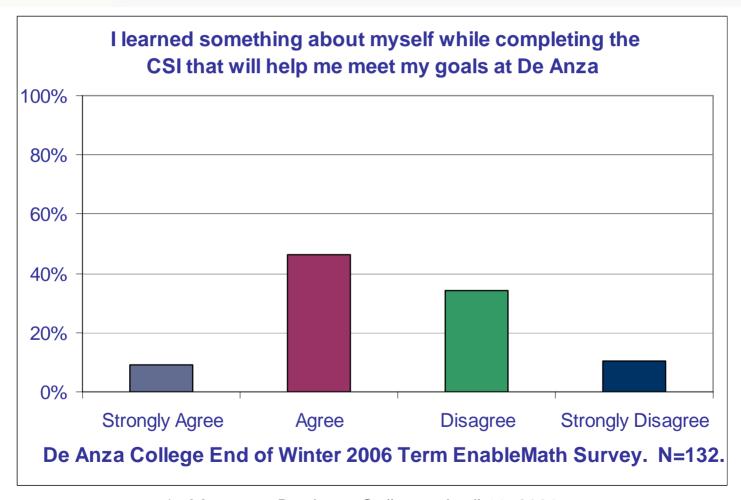
















#### Observations

- Appears to be having an affect on student learning outcomes
- So far hard to say the relative effect of each intervention
- The fact that students are in a "special" cohort may give them more motivation
- For Spring 2006, will administer the CSI to Non-EnableMath sections



