

Innovations in Teaching, Learning and Support Services



MathJam at Cañada College

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representing Math faculty, staff and students

MathJam at Cañada College



MathJam was modeled after programs elsewhere in the state, particularly at Pasadena City College

MathJam had 4 major goals

- Help students progress faster through Cañada's math sequence to enable them to transfer to a 4 year university earlier or to complete an associate's degree earlier.
- Recruit as many students as possible into STEM majors.
- Increase students' awareness of the tools and skills they need to be successful college students.
- Develop a community of learners among program participants.

MathJam at Cañada College



Funded by HSI-CCRAA and MSEIP grants from the DOE



Initially, we targeted students who tested into a level of math lower than expected or just below the cut-off score for the next higher class.

MathJam at Cañada College



- Use MyMathTest
 - Online system developed by Pearson Education for developing math placement tests and short math refresher programs
 - Customizes individual study plan based on results of practice test
 - \$7.00 per license – good for 12 weeks
- 4 Instructors (Prealgebra, Elementary Algebra, College Algebra, Trigonometry and higher)
- About 1 tutor for every 5 students.

MathJam at Cañada College



	June 8	June 9	June 10	June 11	June 12
Time	Monday	Tuesday	Wednesday	Thursday	Friday
9-10 am	Welcome & Ice Breaker	Math Study Skills	Math!	Math!	
10 -12 pm	Practice Test Review Result	Math!			
12-12:30	Lunch	Lunch	Lunch	Lunch & Mesa Panel	Lunch
12:30-1	Meet the staff & MJ Overview	Math Anxiety Assessment	Financial Aid		
1-1:30	Time Management	Ed Plan Counseling OR Math Anxiety	Ed Plan Counseling OR Time Mgt	Learning Styles	Field Trip
1:30-2					
2-2:20	Why an Educ. Plan?				
2:20-2:30	Signups for Work Sessions				
2:30-3:30 [Optional]		Individual Ed Plan OR Skills Counsel	Individual Ed Plan OR Skills Counsel	Individual Ed Plan OR Skills Counsel	

MathJam at Cañada College



	June 15	June 16	June 17	June 18	June 19
Time	Monday	Tuesday	Wednesday	Thursday	Friday
9-10 am	Math!	Math!	Math!	Post-Program Survey	
10 -12 pm				Placement Test	
12-12:30	Lunch	Lunch	Lunch	Lunch & Guest Spkr	
12:30- 2:30 pm	Math!	Math!	Math!		
2:30-3:30 [Optional]	Individual Ed Plan / Skills Counseling	Individual Ed Plan / Skills Counseling	Individual Ed Plan / Skills Counseling	Individual Ed Plan / Skills Counseling	

MathJam at Cañada College



First Math Jam Summer 2009

Completion Rate: 42 out of 50 (84%)

Results of Post MathJam

Placement Test

Improved 94%

Placed to a Higher Level 64%



MathJam at Cañada College



Summer MathJam students who took a math class that fall (2009) semester

	MJ Students who Advanced (N=26)	MJ Students who did not Advance (N=11)	All Math Students (N=1515)
Retention Rate	84.6%	63.6%	74.5%
Success Rate	78.4%	54.5%	50.5%

MathJam at Cañada College



Second MathJam Jan. 2010



- 1 Week (Jan. 11-15th)
- 87 students attended
- 22 students took the Math Placement test again: 36.3% placed into a higher math course.
- 100% of students said that the instruction in Math Jam was Effective; 75.8% rated it Very Effective.

MathJam at Cañada College



Third MathJam June 2010

- 2 Weeks
- 129 students attended, with 107 (82.9%) completed program
- 42 students had both pre and post MathJam placement tests: 38 out of the 42 improved their score (90.5%) and 30 moved to a higher level math class (71.4%)
- Next summer all participants will be required to take the placement test before starting the program.
- Recruiting no longer necessary
- Students are a mix of new and continuing





Growth of MathJam

June 2009 8 days	42
Aug. 2010 5 days	8
Jan. 2010 5 days	87
June 2010 8 days	129
Aug. 2010 5 days	~110

- Continued growth will be limited by the number of computers available for students.
- During the June 2010 MathJam the entire learning center (2nd floor of building 9) was full of students with overflow in the reading/writing lab.
- Two carts of laptops were in full use as well as all of the available desktops computers.
- Our current estimate is an upper limit of 225 students.

MathJam at Cañada College



For the 64 students who have advanced to the next level of math:

Savings

Advancing 1 level of math (generally 5 units)

Tuition (\$26/unit)	\$8,320
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Book (\$100/course)	<u>\$6,400</u>
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Total	\$14,720
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**Time saved..
PRICELESS**

MathJam at Cañada College



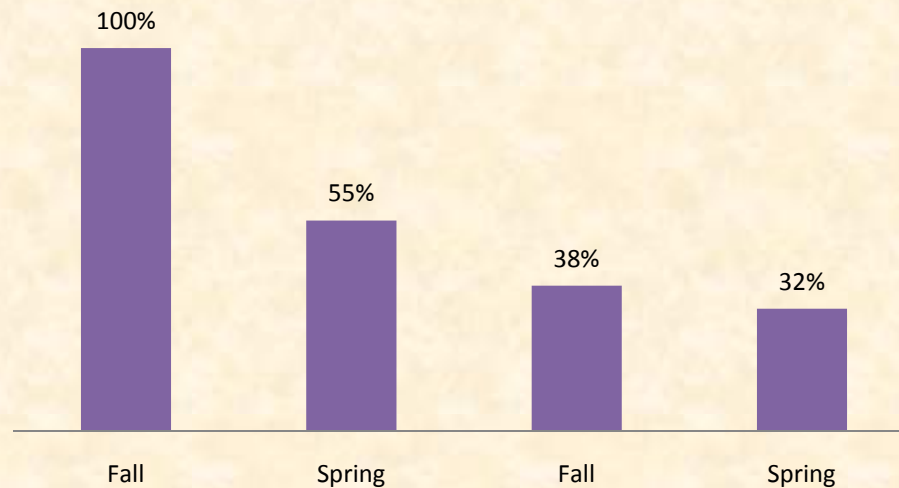
- Students emphasize that MathJam had a significant impact on their comfort at Cañada and the feeling that they are supported by other students, tutors and faculty.
- This social support makes them much more likely to continue on at Cañada.



MathJam at Cañada College



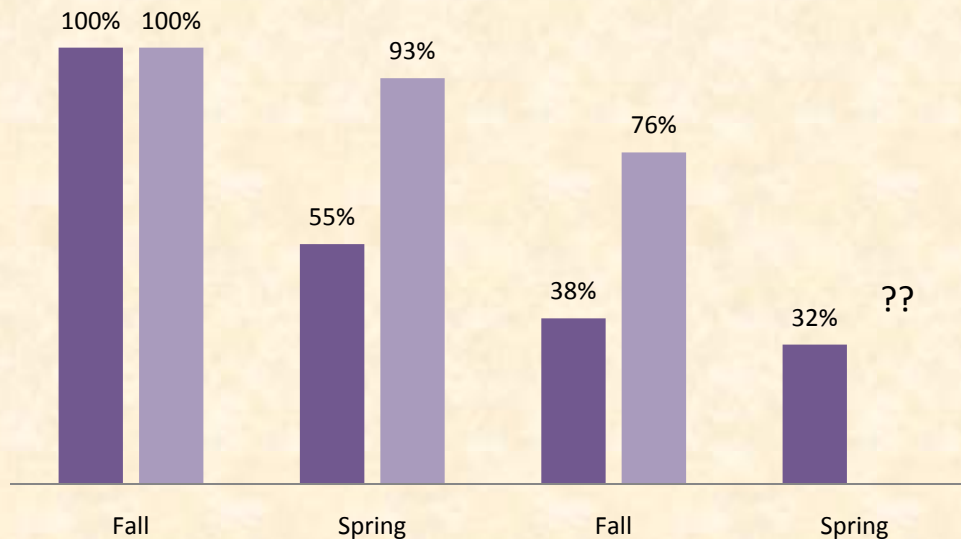
Average Persistence Rates of First Time Students at Cañada College



MathJam at Cañada College



Average Persistence Rates of First Time Students at Cañada College
(darker bars)



Students who attended MathJam in the summer of 2009 (lighter bars)



MathJam Summary

- MathJam is working to get students to progress faster through Cañada's math sequence
- MathJam increases students' awareness of college success resources, tools and skills
- MathJam has created a community of learners who feel comfortable at Cañada
- MathJam graduates performed better than non-Math Jam students in subsequent math courses
- Early evidence suggests that MathJam can improve retention and success
- MathJam has been unable to recruit more students into STEM majors
- Cost ~\$38,000 per week of instruction. We continue to pursue external funding sources for this program