January 11, 2006

TO: Anne Leskinen, Dean PSME

Barbara Fink, Math Department Chair

FROM: Andrew LaManque, De Anza Research

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SUBJECT: EnableMath Survey, Fall 2006

A survey of EnableMath students was conducted during the last week of classes in Fall 2006. 295 students completed the survey online during lab time (out of 508 – 58%). The following include comparisons with 114 respondents from the Spring 2006 results. Results include:

- 88% of students responded that this is their first math class using EnableMath.
- 129 out of 295 (44%) of students indicated that they needed to study more hours to get the grade they wanted, than they actually studied.
- 83% of students agreed or strongly agreed that they "felt more engaged using EnableMath software."
- 74% of students agreed or strongly agreed that EnableMath "helped them learn more math than without the software."
- 58% of the students responded strongly agree or agree to the statement, "I learned some facts from EnableMath that were not presented in the lecture."
- 74% of students agreed or strongly agreed that EnableMath helped to improve their grade. This result varied by the amount of time a student indicated they spent on homework: of the students that spent less than 5 hours on homework 71% (160 of 224) indicated EnableMath helped to improve their grade, compared with 80% (56 of 70) of the students that spent 5 hours or more on homework.
- 83% of students responded agree or strongly agree that they would take another math class with EnableMath. The rate was about 87% (118 of 136) for students expecting an A; about 80% (76 of 95) for students expecting a B; and 77% (47 of 61) for student expecting a C or less.
- 63% of students responded agree or strongly agree to the statement, "As a result of the CSI and the counselor presentation I am more likely to take advantage of college services."
- 40% of students agreed or strongly agreed to the statement "The feedback from the CSI helped me to do better in the class."

					5-9 hrs/week outside class		10 plus hrs/week outside clas		Tot Respo	
	Num	Per	Num	Per	Num	Per	Num	Per	Num	Per
How many hours per week (on average) do you spend doing math outside of the of the regular class/lab time?	10	3%	215	73%	64	22%	6	2%	295	100%
How many hours per week (on average) doing math outside of class/lab do you think are necessary to get the grade you want?	4	1%	122	41%	132	45%	37	13%	295	100%

	Ye	s	N	0	Total R	esponses
	Num	Per	Num	Per	Num	Per
This is my first math class at De Anza College	187	63%	108	37%	295	100%
This is my first math class using EnableMath	260	88%	34	12%	294	100%

	Α		А В		С		D		F		Total Responses	
	Num	Per	Num	Per								
											·	
What grade do you expect to receive in this class?	137	46%	96	33%	55	19%	6	2%	1	0%	295	100%

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	Strongly	Agree	Agr	ee	Disag	gree	Stron Disag		Tot Respo	
	Num	Per	Num	Per	Num	Per	Num	Per	Num	Per
I felt more engaged using EnableMath software	93	32%	149	51%	37	13%	14	5%	293	100%
EnableMath helped me learn more math than I would have without the software	78	27%	138	47%	64	22%	11	4%	291	100%
EnableMath helped to improve my grade	76	26%	140	48%	65	22%	13	4%	294	100%
I learned some facts from EnableMath that were not presented in the lecture	38	13%	132	45%	106	36%	18	6%	294	100%
I would take another math class with EnableMath	110	38%	131	45%	30	10%	21	7%	292	100%
I would recommend the EnableMath program to other students	114	39%	132	45%	35	12%	13	4%	294	100%
Completing the CSI was worth the time	32	11%	152	52%	81	28%	28	10%	293	100%
I learned something about myself while completing the CSI that will help me meet my goals at De Anza	35	12%	132	45%	102	35%	22	8%	291	100%
As I result of the CSI and the counselor presentation I am more likely to take advantage of college services	38	13%	146	50%	86	30%	21	7%	291	100%
I went to see a counselor with questions as a result of the CSI	13	4%	67	23%	153	53%	58	20%	291	100%
The feedback from the CSI helped me to do better in the class	22	8%	94	32%	137	47%	39	13%	292	100%

The following section sorts the results by the students' response to the number of hours spent outside the class on homework

Less than 5 hrs homework

				ou	hrs/we			hrs/we side cl			ide cla	ass o	10 plus nrs/wee utside o um	ek		Fotal sponse	es Per
How many	hours per week (on	average	e) do														
you spend or regular clas	doing math outside s/lab time?	of the of	the		10	4%	21	5 9	96%						225	5 10	0%
math outsid	hours per week (on le of class/lab do yo o get the grade you	ou think a	e) doing are		4	2%	12	1 5	54%	8!	9 4	0%	11	5%	225	5 10	0%
								Yes			No		Total	Respo	onse	- S	
_							Num			Nu	m	Per			Pei	_	
-	This is my first ma	ath class	at De	Anza (College		151		67%	7	74	33%			100%	-	
-	This is my first ma	ath class	using l	Enable	eMath		201		90%	2	23	10%	224		100%		
		А		ı	В		С			D		F	=	_	Total spons		
		Num	Per	Num	Per	r Nu	ım	Per	Nu	m	Per	Num	Per	Nur	n	Per	
What grade receive in the	do you expect to nis class?	108	48%	73	32%	, ;	38	17%		5	2%	1	0%	22	5 1	00%	
				Stı	rongly A	Agree	9	Agre	e		Disagr	ree		ngly igree		To Resp	
					Num	Pe	r N	um	Pe	r N	lum	Per	Num	P	er	Num	
I felt more of software	engaged using Ena	bleMath			71	32%	, o	111	50%	6	31	14%	10	4	1%	223	10
EnableMat would have	h helped me learn i without the softwa	more ma ire	th than	I	56	25%	, , 0	111	50%	6	44	20%	10	5	5%	221	10
EnableMat	h helped to improve	e my grad	de		56	25%	, ,	104	46%	6	52	23%	12	5	5%	224	10
	ome facts from Ena		that		25	11%	, , 0	103	46%	6	79	35%	17	8	3%	224	10
•	e another math clas				85	38%		98	449	/_	23	10%	16		7%	222	10
	ommend the Enabl	eMath pr	rogram		86	38%		99	44%		28	13%	11		5%	224	10
Completing	g the CSI was worth	n the time)		23	10%	, o	114	51%	6	63	28%	24	11	%	224	10
I learned so completing goals at De	omething about my the CSI that will he Anza	self while elp me m	eet my		26	12%	, 0	99	45%	6	77	35%	20	g	9%	222	10
presentation	of the CSI and the on I am more likely to of college services	to take	r		25	11%	, o,	111	50%	6	68	31%	18	8	3%	222	10
I went to se result of the	ee a counselor with e CSI	question	ns as a		10	5%	, 0	50	23%	6 ·	112	50%	50	23	3%	222	10
The feedba	ack from the CSI he e class	lped me	to do		18	8%	, 0	72	32%	6	99	44%	34	15	5%	223	10

5 + hrs homework

	1-4 hrs/v		5-9 hrs.		10 p hrs/w outside	eek	Tot Respo	
	Num	Per	Num	Per	Num	Per	Num	Per
How many hours per week (on average) do you spend doing math outside of the of the regular class/lab time?			64	91%	6	9%	70	100%
How many hours per week (on average) doing math outside of class/lab do you think are necessary to get the grade you want?	1	1%	43	61%	26	37%	70	100%

	Ye	s	No		Total Re	esponses
	Num	Per	Num	Per	Num	Per
This is my first math class at De Anza College	36	51%	34	49%	70	100%
This is my first math class using EnableMath	59	84%	11	16%	70	100%

	Α		В		С		D		To: Respo	tal onses
	Num	Per	Num	Per	Num	Per	Num	Per	Num	Per
What grade do you expect to receive in this class?	29	41%	23	33%	17	24%	1	1%	70	100%

	Strongly Num	Agree	Agr Num	ee Per	Disag	gree Per	Stron Disag		Tot Respo	
I felt more engaged using EnableMath software	22	31%	38	54%	6	9%	4	6%	70	100%
EnableMath helped me learn more math than I would have without the software	22	31%	27	39%	20	29%	1	1%	70	100%
EnableMath helped to improve my grade	20	29%	36	51%	13	19%	1	1%	70	100%
I learned some facts from EnableMath that were not presented in the lecture	13	19%	29	41%	27	39%	1	1%	70	100%
I would take another math class with EnableMath	25	36%	33	47%	7	10%	5	7%	70	100%
I would recommend the EnableMath program to other students	28	40%	33	47%	7	10%	2	3%	70	100%
Completing the CSI was worth the time	9	13%	38	55%	18	26%	4	6%	69	100%
I learned something about myself while completing the CSI that will help me meet my goals at De Anza	9	13%	33	48%	25	36%	2	3%	69	100%
As I result of the CSI and the counselor presentation I am more likely to take advantage of college services	13	19%	35	51%	18	26%	3	4%	69	100%
I went to see a counselor with questions as a result of the CSI	3	4%	17	25%	41	59%	8	12%	69	100%
The feedback from the CSI helped me to do better in the class	4	6%	22	32%	38	55%	5	7%	69	100%

The following section sorts the results by the students' response to the grade they expect to receive in the class

Expect a A in the class

	0 hrs/w		1-4 hrs		5-9 hrs/ outside		10 pl hrs/wo	eek	To: Respo	
	Num	Per	Num	Per	Num	Per	Num	Per	Num	Per
How many hours per week (on average) do you spend doing math outside of the of the regular class/lab time?	7	5%	101	74%	25	18%	4	3%	137	100%
How many hours per week (on average) doing math outside of class/lab do you think are necessary to get the grade you want?	3	2%	78	57%	47	34%	9	7%	137	100%

	Yes	3	No)	Total R	esponses
	Num	Per	Num	Per	Num	Per
This is my first math class at De Anza College	102	74%	35	26%	137	100%
This is my first math class using EnableMath	123	90%	14	10%	137	100%

A Total
Responses
Num Per Num Per

What grade do you expect to receive in this class?

137 100% 137 100%

	Strongly Num	Agree Per	Agr Num	ee Per	Disag Num	gree Per	Stron Disag Num	gly jree Per	Tot Respo	
I felt more engaged using EnableMath software	53	39%	65	48%	15	11%	3	2%	136	100%
EnableMath helped me learn more math than I would have without the software	43	32%	59	44%	27	20%	5	4%	134	100%
EnableMath helped to improve my grade	46	34%	62	45%	23	17%	6	4%	137	100%
I learned some facts from EnableMath that were not presented in the lecture	17	12%	62	45%	48	35%	10	7%	137	100%
I would take another math class with EnableMath	54	40%	64	47%	12	9%	6	4%	136	100%
I would recommend the EnableMath program to other students	61	45%	62	45%	12	9%	2	1%	137	100%
Completing the CSI was worth the time	14	10%	69	51%	38	28%	15	11%	136	100%
I learned something about myself while completing the CSI that will help me meet my goals at De Anza	17	13%	62	46%	42	31%	14	10%	135	100%
As I result of the CSI and the counselor presentation I am more likely to take advantage of college services	17	13%	68	51%	38	28%	11	8%	134	100%
I went to see a counselor with questions as a result of the CSI	5	4%	35	26%	66	49%	28	21%	134	100%
The feedback from the CSI helped me to do better in the class	12	9%	44	33%	57	42%	22	16%	135	100%

Expect a B in the class

	0 hrs/week outside class		1-4 hrs				10 plus hrs/week outside clas		Tot Respo	
	Num	Per	Num	Per	Num	Per	Num	Per	Num	Per
How many hours per week (on average) do you spend doing math outside of the of the regular class/lab time?	2	2%	71	74%	21	22%	2	2%	96	100%
How many hours per week (on average) doing math outside of class/lab do you think are necessary to get the grade you want?	1	1%	35	36%	48	50%	12	13%	96	100%

	Yes	3	N	0	Total R	esponses
	Num	Per	Num	Per	Num	Per
This is my first math class at De Anza College	60	63%	36	38%	96	100%
This is my first math class using EnableMath	87	91%	9	9%	96	100%

Total
B Responses

Num Per Num Per

What grade do you expect to receive in this class?

96 100% 96 100%

	Strongly	Agree	Agr	ee	Disag	ree	Stron Disag		Tot Respo	
	Num	Per	Num	Per	Num	Per	Num	Per	Num	Per
I felt more engaged using EnableMath software	23	24%	57	59%	11	11%	5	5%	96	100%
EnableMath helped me learn more math than I would have without the software	20	21%	50	52%	22	23%	4	4%	96	100%
EnableMath helped to improve my grade	21	22%	51	53%	20	21%	4	4%	96	100%
I learned some facts from EnableMath that were not presented in the lecture	13	14%	38	40%	40	42%	5	5%	96	100%
I would take another math class with EnableMath	33	35%	43	45%	11	12%	8	8%	95	100%
I would recommend the EnableMath program to other students	33	34%	45	47%	11	11%	7	7%	96	100%
Completing the CSI was worth the time	13	14%	46	48%	29	30%	8	8%	96	100%
I learned something about myself while completing the CSI that will help me meet my goals at De Anza	10	10%	45	47%	36	38%	5	5%	96	100%
As I result of the CSI and the counselor presentation I am more likely to take advantage of college services	14	15%	48	50%	27	28%	7	7%	96	100%
I went to see a counselor with questions as a result of the CSI	3	3%	20	21%	57	59%	16	17%	96	100%
The feedback from the CSI helped me to do better in the class	7	7%	29	30%	47	49%	13	14%	96	100%

Expect a C or less in the class

	0 hrs/week outside class				5-9 hrs/week outside class		10 plus hrs/week outside clas		To: Respo	
	Num	Per	Num	Per	Num	Per	Num	Per	Num	Per
How many hours per week (on average) do you spend doing math outside of the of the regular class/lab time?	1	2%	43	69%	18	29%			62	100%
How many hours per week (on average) doing math outside of class/lab do you think are necessary to get the grade you want?			9	15%	37	60%	16	26%	62	100%

	Ye	s	No		Total R	esponses
	Num	Per	Num	Per	Num	Per
This is my first math class at De Anza College	25	40%	37	60%	62	100%
This is my first math class using EnableMath	50	82%	11	18%	61	100%

	С		D		F		To: Respo	
	Num	Per	Num	Per	Num	Per	Num	Per
What grade do you expect to receive in this class?	55	89%	6	10%	1	2%	62	100%

	Strongly	Agree	Agr	ee	Disag	gree	Stron Disag			
	Num	Per	Num	Per	Num	Per	Num	Per	Tot Responsive Num 61 61 61 61 61 61 61 61 61 6	Pe
I felt more engaged using EnableMath software	17	28%	27	44%	11	18%	6	10%	61	100%
EnableMath helped me learn more math than I would have without the software	15	25%	29	48%	15	25%	2	3%	61	100%
EnableMath helped to improve my grade	9	15%	27	44%	22	36%	3	5%	61	100%
I learned some facts from EnableMath that were not presented in the lecture	8	13%	32	52%	18	30%	3	5%	61	100%
I would take another math class with EnableMath	23	38%	24	39%	7	11%	7	11%	61	100%
I would recommend the EnableMath program to other students	20	33%	25	41%	12	20%	4	7%	61	100%
Completing the CSI was worth the time	5	8%	37	61%	14	23%	5	8%	61	100%
I learned something about myself while completing the CSI that will help me meet my goals at De Anza	8	13%	25	42%	24	40%	3	5%	60	100%
As I result of the CSI and the counselor presentation I am more likely to take advantage of college services	7	11%	30	49%	21	34%	3	5%	61	100%
I went to see a counselor with questions as a result of the CSI	5	8%	12	20%	30	49%	14	23%	61	100%
The feedback from the CSI helped me to do better in the class	3	5%	21	34%	33	54%	4	7%	61	100%