

SAGINAW VALLEY STATE COLLEGE

BOARD OF CONTROL

SEPTEMBER 9, 1985

SPECIAL MEETING

INDEX OF ACTIONS

BM-680	MOTION TO MOVE TO EXECUTIVE SESSION (APPROVED)	2
RES-685	APPROVAL OF COLLECTIVE BARGAINING AGREEMENT BETWEEN SAGINAW VALLEY STATE COLLEGE AND THE SVSC CLERICAL ASSOCIATION MEA (APPROVED)	2

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MINUTES
BOARD OF CONTROL
SAGINAW VALLEY STATE COLLEGE

Special Meeting
Pioneer Board Room -- Pioneer Hall
September 9, 1985

Present: Arbury
Braun
Curtiss
Gilmore
Kendall
Ryder
Saltzman
Woods

Excused: Klykylo

**Others
Present:** Davis
Dickey
Dresser
Fitzpatrick
Frahm
Strasz
Thompson
Woodcock
Yien

I. CALL TO ORDER

Chairman John Kendall called the meeting to order at 9:47 a.m.

II. EXECUTIVE SESSION

BM-680 It was moved and supported that the Board move to Executive Session for the purpose of approving the collective bargaining agreement between Saginaw Valley State College and the SVSC Secretarial and Clerical Association, MEA covering the period from July 1, 1985 through June 30, 1988.

The Board moved to Executive Session and Chairman Kendall adjourned the session at 10:28 a.m.

Chairman Kendall reconvened the meeting at 10:30 a.m.

III. PROCEDURAL ITEMS

1. Approval of Collective Bargaining Agreement between Saginaw Valley State College and the SVSC Secretarial and Clerical Association, MEA

RES-685 It was moved and supported that the following resolution be adopted.

WHEREAS, Representatives of the Administration of Saginaw Valley State College and the SVSC Secretarial and Clerical Association, MEA reached a tentative agreement on a new contract to replace the 1983-85 agreement between the College and the SVSC Secretarial and Clerical Association, MEA on September 4, 1985, and

WHEREAS, The SVSC Secretarial and Clerical Association, MEA ratified the proposed agreement on September 6, 1985;

NOW, THEREFORE, BE IT RESOLVED, That the Board of Control does hereby approve the collective bargaining agreement between Saginaw Valley State College and the SVSC Secretarial and Clerical Association, MEA covering the period from July 1, 1985 through June 30, 1988.

The resolution was APPROVED unanimously.

IV. ADJOURNMENT

Chairman Kendall adjourned the meeting at 10:32 a.m.

Respectfully submitted:

John W. Kendall
Chairman

Florence F. Saltzman
Secretary

Marilyn Gordon Dresser
Marilyn Gordon Dresser
Recording Secretary



Saginaw Valley State College

DATE: September 3, 1985
TO: Members of the Board of Control
FROM: President Jack M. Ryder

A handwritten signature in cursive script, reading "Jack M. Ryder".

I hope you will be able to join me on Monday, September 9, at 9:30 a.m. in the Pioneer Hall Board Room and Library for important committee meetings. Agenda are enclosed. I am sorry that we could not mail the agenda sooner.

I also invite you to a noon luncheon in the Large Private Dining Room. Because I am scheduled to ask a potential contributor for significant assistance in our Special Funds Drive, I will not be able to join you for lunch but have asked Lila and members of the Executive Committee to be with you. If necessary, committees will reconvene at 1:30 p.m.

9:00-9:30 a.m.	Coffee, Pioneer Library
9:30-noon	Committee Meetings, Pioneer Library and Board Room
Noon-1:30 p.m.	Luncheon, Large Private Dining Room
1:30 p.m.	Committees reconvene if necessary

JMR:mgd

Encl.

Appendix A

Evidence of Increase in Remedial Mathematics Instruction

University A¹: Percent of enrollments in
freshmen, entry-level courses that are
at the remedial level, 1973-74 to 1983-84

<u>Year</u>	<u>No. Remedial Enrollments</u>	<u>Total No. Entry-Level Math Enrollments</u> ²	<u>Percent Remedial</u>
73-74	423	1,592	27%
75-76	589	1,780	33%
77-78 ³	955	2,596	37%
79-80	1,061	2,773	38%
81-82	1,201	2,792	43%
83-84	956	2,272	42%

University B: Number of students
enrolled in pre-college algebra courses,
1972-73 to 1984-85

<u>Year</u>	<u>Fall</u>	<u>Winter</u>
72-73	132	119
73-74	213	169
74-75	478	442
75-76	539	502
76-77	764	718
77-78	962	838
78-79	1,582	1,279
79-80	1,168	1,085
80-81	1,750	1,948
81-82	2,018	1,713
82-83	2,016	1,596
83-84	1,988	1,398
84-85	1,728	1,680

1. Individual universities will not be identified in this report. All have had similar experience.
2. Entering freshmen may take one of eight different courses based upon their high school record and placement test score. This is the total enrollment for the entry-level courses.
3. A lower level (pre-algebra) remedial course added.

University C: Percent of enrollments in
freshman, entry-level courses that are
at the remedial level
Fall semester only, 1973 to 1983

<u>Year</u>	<u>No. Remedial Enrollments</u>	<u>Total No. Entry-level Math Enrollments</u>	<u>Percent Remedial</u>
1973	575	2,152	27%
1975	646	2,421	27%
1977	813	2,623	31%
1979	1,109	3,236	34%
1981	1,548	3,409	35%
1983	1,383	2,937	47%

University D: A Breakdown of entry-level
enrollments, 1979-80 to 1984-85⁴

<u>Year</u>	<u>Intermediate Algebra</u>	<u>College Algebra</u>	<u>Pre-Calculus</u>	<u>Calculus</u>	<u>Total</u>
79-80	256 (16%)	413 (26%)	628 (40%)	291 (18%)	1,588
80-81	290 (16%)	515 (28%)	707 (38%)	350 (19%)	1,862
81-82	241 (12%)	555 (27%)	861 (42%)	417 (20%)	2,074
82-83	276 (12%)	612 (26%)	903 (39%)	531 (23%)	2,322
83-84	278 (13%)	607 (27%)	853 (38%)	489 (22%)	2,227
84-85	269 (11%)	556 (24%)	1,001 (43%)	530 (23%)	2,356

University E: Scores at selected percentile levels
for the university's 30-point math placement test,
1969 to 1985⁵

<u>Year</u>	<u>90 Percentile</u>	<u>75 Percentile</u>	<u>50 Percentile</u>	<u>25 Percentile</u>	<u>10 Percentile</u>
1969	26.6	23.2	18.2	12.3	7.8
1970	26.6	23.1	18.1	12.1	7.5
1971	25.7	21.8	16.5	10.7	6.7
1972	24.5	20.5	15.4	10.3	6.6
1973	24.6	20.6	15.3	10.1	6.6
1974	24.4	20.5	15.2	10.0	6.6
1975	24.2	20.1	14.9	9.8	6.5
1976	24.0	19.8	15.0	10.0	6.6
1977	23.6	19.6	14.6	9.7	6.5
1978	23.9	20.0	15.3	10.3	6.9
1979	23.9	20.2	15.3	10.7	7.1
1980	24.1	20.3	15.3	10.7	7.1
1981	24.6	21.0	16.4	11.7	8.2
1982	24.4	20.6	16.0	11.4	7.9
1983	24.5	21.0	16.4	11.9	8.3
1984	24.7	21.0	16.5	12.1	8.7

4. Remedial instruction provided by a nearby community college not reflected here.
5. A score of 13 or less corresponds to placement into a remedial course (below college algebra). Thus, the data indicates between 25% and 50% placing at the remedial level.

THE OHIO EARLY COLLEGE MATHEMATICS PLACEMENT TESTING PROGRAM
FOR HIGH SCHOOL JUNIORS

A Program of the Ohio Board of Regents

Administered by The Department of Mathematics of The Ohio State University

In February, 1978, the Mathematics Department at The Ohio State University initiated an experimental Early Mathematics Placement Testing (EMPT) program at Westland High School near Columbus. The basic objective was to address the issue of remediation at the college level. It was hoped that if high school juniors were informed about their mathematics skills (in terms of OSU math placement levels) and if they understood the negative consequences of needing remedial math courses in college, then they would schedule appropriate college preparatory mathematics courses in their senior year. Indeed, Westland High School realized a 73% increase in senior math enrollments the following year as a direct result of the early testing. We also hoped that Westland students attending OSU in Autumn of 1979 would have higher mathematics placement scores and would need to take fewer remedial courses at OSU. Our hopes were realized and the program grew from 7 high schools in the '78-'79 school year to 232 high schools in '82-'83, and then expanded to over 600 Ohio high schools for the past two academic years (1983-4 & 1984-5). Over 60,000 Ohio high school juniors will be tested this year in the Ohio EMPT program!

Each student tested receives a personalized report of his or her performance together with a list of mathematics courses required in the intended major and an indication of what remedial courses, if any, would be required if the mathematics skills remain at the junior year level. This year students are able to request course information in terms of the curriculum at ANY one of twelve State supported Universities (Bowling Green State University, Central State University, Cleveland State University, Kent State University, Miami University, Ohio University, The Ohio State University, University of Akron, University of Cincinnati, University of Toledo, Wright State University, and Youngstown State University) and seven two-year State supported colleges (Clark Technical College, Cuyahoga Community College, Edison State Community College, Lorain Community College, Muskingum Area Technical College, Sinclair Community College, and the University of Cincinnati Two-Year College).

Last year, out of the 61,680 juniors tested, 8,782 of them indicated they were taking no math in their junior year, and 93% of the students taking no math had remedial math placement. Also our data indicated that overall 23,744 juniors tested last year were college bound AND had projected remedial math placement!

As a result of participating in EMPT, many high schools report that their senior math enrollments increase dramatically. We also have strong evidence that students from high schools participating in EMPT for several years need fewer remedial courses than would otherwise be expected. In addition, OSU math placement scores have significantly improved over the past two years as a likely result of widespread use of the EMPT program in high schools sending large numbers of students to Ohio State.

The Ohio Legislature has funded the Ohio EMPT program for the 1983-5 biennium at a level that allowed any Ohio high school to participate in early mathematics testing as well as incorporating all Ohio state-supported four year Universities and selected two-year colleges. The potential of the Ohio EMPT Program is great. We can save taxpayers and parents of college bound students thousands of dollars in eliminating unnecessary remedial instruction. In addition, we are insuring that high school students get the best possible academic preparation for college mathematics courses. We also have established a valuable dialogue among high school math teachers and counselors and college mathematics faculty throughout Ohio.

Further information regarding the Ohio EMPT program can be obtained from Professor Bert Waits, Director, Ohio EMPT Program, c/o Department of Mathematics, The Ohio State University, 231 W. 18th Ave., Columbus, Ohio, 43210. Phone (614) 422-0746.

THE OHIO EARLY COLLEGE MATHEMATICS PLACEMENT TESTING-PROGRAM

<u>Year</u>	<u>Number of Participating Ohio High Schools</u>	<u>Cooperating Universities</u>
1977-78	1	OSU
1978-79	7	OSU
1979-80	37	OSU
1980-81	107	OSU
1981-82	214	OSU and University of Akron
1982-83	232	OSU and five State Universities
1983-84	605	All Twelve State Universities
1984-85	604	All State Universities and selected two year State Colleges (19 total)

Number of Ohio High School Juniors Tested

1982-83	28,238
1983-84	61,680

The Ohio EMPT program is funded by the
Ohio Board of Regents and operated for the Ohio
Board of Regents by the Mathematics Department
of The Ohio State University

EMPT Background Data

MATH PLACEMENT LEVELS

Ohio High School Juniors

	<u>1979-80</u>	<u>1980-81</u>	<u>1981-82</u>	<u>1982-83</u>	<u>1983-84</u>
MPL 2	8.8%	10%	9.1%	12.2%	11.52%
MPL 3	30.3%	30%	31.5%	34.6%	32.13%
MPL 4	13.0%	13%	13.2%	12.5%	11.78%
MPL 5	<u>47.8%</u>	<u>47%</u>	<u>46.3%</u>	<u>40.7%</u>	<u>44.56%</u>
No of Students	5,234	16,227	24,213	28,238	61,680
No. of High Schools	37	107	114	232	605

EMPT Math Placement Level (MPL)
By High School Course of Enrollment
Ohio High School Juniors

	<u>Algebra I</u>		<u>Geometry</u>		<u>Algebra II</u>	
	<u>'83</u> <u>(4.15%)</u>	<u>'84</u> <u>(4.56%)</u>	<u>'83</u> <u>(16.50%)</u>	<u>'84</u> <u>(15.97%)</u>	<u>'83</u> <u>(39.20%)</u>	<u>'84</u> <u>(39.64%)</u>
MPL 2	0.18%	0.40%	1.81%	2.54%	12.08%	10.69%
MPL 3	7.11%	6.12%	25.13%	20.23%	55.12%	51.50%
MPL 4	8.78%	8.45%	20.00%	15.93%	15.42%	16.47%
MPL 5	83.93%	85.03%	53.06%	61.29%	17.38%	21.35%

	<u>Advanced Math</u>		<u>Other Math</u>		<u>No Math</u>	
	<u>'83</u> <u>(15.04%)</u>	<u>'84</u> <u>(15.37%)</u>	<u>'83</u> <u>(8.84%)</u>	<u>'84</u> <u>(9.89%)</u>	<u>'83</u> <u>(16.27%)</u>	<u>'84</u> <u>(14.57%)</u>
MPL 2	47.04%	44.59%	0.78%	0.72%	0.76%	0.59%
MPL 3	43.72%	44.84%	8.27%	6.68%	9.20%	6.55%
MPL 4	4.69%	4.95%	7.78%	7.02%	9.17%	6.72%
MPL 5	4.55%	5.61%	83.17%	85.57%	80.87%	86.14%

1982-83 N = 27,474

1983-84 N = 60,272

EMPT Background Data

COURSE ENROLLMENT TRENDS

Distribution of Ohio High School Students into Junior Year Math Courses

(EMPT participating high schools)

	<u>1979-80</u>	<u>1980-81</u>	<u>1981-82</u>	<u>1982-83</u>	<u>1983-84</u>
Algebra I	4.4%	4.0%	3.7%	4.2%	4.56%
Geometry	12.3%	13.4%	13.1%	16.5%	15.97%
Algebra II	38.3%	38.0%	36.2%	39.2%	39.64%
Advanced Math	12.9%	12.8%	15.6%	15.0%	15.37%
Other Math	11.0%	11.8%	12.0%	8.8%	9.89%
No Math	21.1%	20.0%	19.4%	16.3%	14.57%
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
N :	5,234	16,227	24,213	27,474	60,272
No. of High Schools	37	107	214	232	605

1983-84 Ohio EMPT Program

61,680 Students

605 High Schools

PLANS AFTER HIGH SCHOOL:

4-year college	66.84%	} 80.62%
2-year college	13.78%	
Other	19.38%	

EMPT Background Data

Summary of Last Mathematics Grade

(6 or 9 week grading period)

in high school junior mathematics courses from EMPT participating high schools

	<u>1983-84</u>	<u>1982-3</u>	<u>1981-2</u>
A	22.06%	23.77%	24.56%
B	33.96%	34.31%	34.47%
C	28.91%	27.83%	27.60%
D	11.71%	11.29%	10.55%
E or F	3.36%	2.80%	2.82%
	<hr/>	<hr/>	<hr/>
	605 High Schools	232 High Schools	214 High Schools
	52,092 Students	23,425 Students	19,322 Students

EMPT Background Data

(First Choice) Intended College Major

1983-4 N = 53,841

<u>Major</u>	<u>1983-4 Percentage</u>	<u>1982-3 Percentage</u>	<u>1981-2 Percentage</u>
1. Education	6.46%	5.23%	5.83%
2. Social and Behavioral Sciences	9.54%	8.40%	8.92%
3. Humanities and Liberal Arts	7.43%	7.12%	7.98%
4. Engineering	21.15%	22.19%	20.97%
5. Math and Physical Sciences	4.61%	4.16%	4.36%
6. Biological and Life Sciences	7.60%	8.11%	7.97%
7. Allied Health Professions	13.53%	12.53%	11.30%
8. Administrative Science or Business	16.65%	16.01%	16.40%
9. Agriculture and Home Economic	3.44%	2.80%	3.19%
10. Other or "no idea whatsoever"	9.59%	13.46%	13.08%

N = 53,841

N = 23,510

N = 19,778

The Ohio State University

EMPT Placement Data

Percentage Change in Actual OSU Math Placement Levels

Autumn '84 vs. 5 yr. Average Autumn '79 - '83

<u>MPL</u>	<u>Non-EMPT Schools</u>	<u>EMPT Schools</u>	<u>Old EMPT Schools</u>	<u>EMPT Students</u>
1	+ 3.8	+ 4.4	+ 4.3	+ 5.2
2	+ 3.8	+ 5.3	+ 4.9	+ 6.1
3	+ 3.2	+ 5	+ 5.7	+ 5.5
College Level	<u>+10.8%</u>	<u>+14.7</u>	<u>+14.9</u>	<u>+16.8</u>
<hr/>				
4	- 3.8	- 5	- 5.6	- 5.6
5	- 7	- 9.7	- 9.3	- 11.2
Remedial	<u>-10.8%</u>	<u>-14.7</u>	<u>-14.9</u>	<u>-16.8</u>
N =	2968	3037	2629	2281
August '84 H. S. Rank	72.3	68.8	68.6	69.7
August ACT Math	21.1	21.2	21.1	21.0

Math Department Works with Ohio Schools

During the 1970s the mathematics preparation of freshman entering Ohio State experienced a sharp decline. In 1965, eight percent of the freshmen students demonstrated no skills in elementary algebra on the mathematics placement tests. This number increased to 26% in 1975. During the same period the average rank in high school of the freshmen improved.

In 1977 the University sent a report to each Ohio high school on the mathematics and English preparation of the Ohio State students from that school in the period 1974 to 1977. In response to those data, Westland High School near Columbus asked the Department of Mathematics to test its college-intending juniors. The high school felt these students should be appraised of their mathematics levels with respect to University expectations before registering for senior year courses.

The invitation was the beginning of the Ohio Early Mathematics Placement Testing Program. This program has grown each year since 1977. In 1983-84, more than 60,000 juniors in 614 Ohio high schools wrote the early placement test. The program is now funded within the state budget of Ohio. All of the state universities participate, and a

student's test performance is interpreted in terms of the curriculum at the university he or she designates. Professor Bert Waits is the program director. Among the positive results of the Early Testing Program has been an average 40% increase in senior year mathematics enrollments in the high schools participating.

A curricular problem became evident through the Early Testing Program; the traditional college preparatory program has not provided an appropriate senior year course for low-achieving students in mathematics. In 1981-82 Professor Frank Demana and Professor Joan Leitzel (together with Professors F. Joe Crosswhite and Alan Osborne of the faculty of Mathematics Education at OSU and two high school mathematics teachers) piloted a new course for college-intending high school seniors who, as juniors, showed essentially no skills in algebra. This project was funded by the Battelle Memorial Foundation. The results have been very promising. More than 80% of the students improved their mathematics placement levels and almost 70% reached an accepted level for university entrance. The same group of faculty, with a grant from SOHIO, is now working with seventh and eighth grade students on a project to improve the transition from arithmetic to algebra.

In Autumn Quarter, 1984, freshmen for the first time will be conditionally enrolled if they have not taken a full college preparatory program in high school. The data on applicants indicate that all but 7.4% have taken at least three years of college preparatory mathematics. This is a marked improvement over previous years and hopefully will mean that Ohio State freshmen are now even better prepared to begin the mathematics required in their University programs.

Another part of the department's efforts in working with the schools has been the development of a full program of mathematics courses for in-service elementary and secondary teachers. These courses draw enrollments of more than 250 students each year. In addition, the Department of Mathematics has defined a Master's degree option especially for teachers. The program began during the summer of 1981. Presently there are 40 students pursuing this degree option. Of these, 25 are full-time students, serving as teaching associates in the department.

Through all of these cooperative efforts with schools and special programs for teachers, the department is recognizing that mathematics teaching is a task of primary importance in today's scientific and technological society.

MATH MATRIX

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Appendix C

Sample Student Report

(Individual information based on student score and interests indicated by a bracket in the left margin)

The Michigan Mathematics Early Placement Test Student Report Form for

John T. Smith
Central High School
Ourtown, Michigan

January 26, 1986

This is a report of how you did on the Early Placement Test in Mathematics which you took a few weeks ago. The purpose of the test is to give you an idea of how well prepared you are at this point in your studies to handle the mathematics you will need for college. Many students are not sufficiently aware of how important a solid knowledge of mathematics is for so many fields of study. As a result, they do not take enough mathematics in high school, or only give a minimal effort to the courses they take. We hope that information in this report will help you and your counselor in choosing the right mathematics course for your senior year in order to best move you along toward a successful experience in college and toward meeting your career goals.

Your score on the test was 13 out of a possible 32 points. This puts you at a placement level of 4 on a scale of 1 to 5, with 1 being the highest and 5 the lowest. The levels have the following meanings:

- | | |
|---|--|
| 1 | Ready for a calculus course.
(This test does not go that high.) |
| 2 | Ready for a pre-calculus course (topics like logarithmic, exponential and trig functions, analytic geometry, etc). |
| 3 | Ready for college algebra. |
| 4 | Below college level. Need intermediate algebra. |
| 5 | Farther below college level. Need refresher in arithmetic and beginning algebra. |

Your placement at level 4 means that if you were entering college right now, you would likely have to take a course in intermediate algebra before being admitted into the mathematics courses which your program may require. This course may not carry credit toward graduation, will possibly add to the time it takes to complete a degree, and will certainly add to the expense.

But, of course, you are not beginning college now. You still have your senior year to improve your level. Why not ask your counselor or math teacher about the best course to help you do that?

On your test form you also indicated your interest in the following fields of study:

First choice:	Business
Second choice:	Social or behavioral science

Most majors in the area of business will require several mathematics courses. The first may have a title such as "finite mathematics" or "business mathematics." It will present a wide variety of topics that have applications in business decision-making. The second will be a course in statistics. Finally, at many colleges or universities, a brief look at calculus might be part of your program. You can also expect considerable exposure to computers for which mathematical skills will be very helpful.

The social and behavioral sciences are greater users of mathematics than you might expect. They make heavy use of statistics to identify social trends and patterns in behavior. Computers make it possible to use such mathematical approaches to a greater degree. You can expect to take one or more courses in statistics, together with the preliminary mathematics needed for them. You will also make use of computers to analyze data.

Alternate placement level paragraphs:

For level 2:

Your score on the test was 31 out of a possible 32 points. This puts you at a placement level of 2 on a scale ...
...Your placement level of 2 means that if you were entering college right now, you would likely be placed into a course that is just one step below a calculus course. Being at level 2 is a very good place for a high school junior to be. It means that you have stayed with mathematics all along. You will surely want to take your high school's advanced senior mathematics course as well. If you do well in it, you could very well place in level 1 next year when you get to college. This means you will be able to progress without delay into programs which require calculus or other more advanced mathematics.

For level 3:

Your score on the test was 21 out of a possible 32 points. This puts you at a placement level of 3 on a scale ...
...Your placement level of 3 means that if you were entering college right now, you would likely be placed in a course in college algebra or a course at the same level designed to meet the needs of students in particular programs. This course would overlap to a great extent with a high school algebra II course, and many students who enter college with a solid high school mathematics background can bypass it and get right on to higher level courses required in their programs. For students going into most nontechnical majors, entering college at placement level 3 will likely not prolong their time to getting a degree. However, for fields such as engineering, computer science or pre-medicine which require much mathematics, students entering at level 3 can expect delays in their progress.

Of course, you are not entering college right now. You have the opportunity during your senior year to take more mathematics and raise your placement level. Why not talk to your counselor or math teacher about the appropriate course to take?

For level 5:

Your score on the test was 8 out of a possible 32 points. This puts you at a placement level of 5 on a scale ...
...Your placement level of 5 means that if you were entering college right now, you would likely be placed in pre-algebra course. This course provides a review of arithmetic and beginning algebra. From a college perspective, it is a remedial level course, and at most schools, it does not earn you credit toward graduation. It prepares you for an intermediate algebra course (also remedial) which prepares you for the collegiate level mathematics which your program may require.

Clearly starting college at level 5 is going to add to the time and money it takes to get a degree. This may put some fields of study of interest to you out of reach.

But, of course, you are not beginning college now. You still have your senior year in high school in which to take a mathematics course and improve your placement level. Talk to your counselor or math teacher about what would be the best course for you. Take the course, and really work at it. The payoff will be very real -- in terms of dollars, time and broadened opportunity -- when you get to college.