

Strategic Plan – Initiative Work Plan FY2014

Initiative Name: Math Intervention for freshmen and Transfer Student support May 31, 2013

Goal # 1 Goal Chair(s) Jennifer Schriver, John Beacon, Carmen Tillery

Initiatives: #2b + 3,4,5,6,7,8 Initiative Chair: Dr. Robert English

Thesis Statement: Improve COT student retention and grades through math intervention while continuing general support for new transfer students.

1. Introduction/Background – What?

The College of Technology has enjoyed increased enrollment, but seeks to increase its retention of students. Poor math skills have been identified as a problem which has led to deficient grades, high dropout rates and unsatisfactory progress toward completion of educational goals. This has been especially troublesome for the COT, whose classes demand a higher level of math skills from its students.

2. Proposal/Purpose/Justification – Why?

We wish to expand the math intervention program which began in August, 2012, under the leadership of David Sivley. We feel the pilot program which he began for our transfer students was very effective in reaching the university goals. We want to expand his program to make it available for all incoming COT freshmen in addition to the transfer students he currently serves.

The pilot group was first tested for their math competency. Their average score of 58% confirms the lack of math preparation and further points out the need for this type of math intervention. Without it, many of these students would be lost. As we expand our target to include incoming freshmen we expect to find lower math skills than our transfer students, and more need for math intervention to help them get ready for classes.

Strategic Plan – Initiative Work Plan FY2014

3. Discussion of Past Years Results – Benchmark Successes?

While we do not have full-year comparisons, the preliminary statistics of first-semester students participating in the pilot program showed a marked improvement in student retention and GPA. After the first semester, only 1 student was lost due to poor grades - a student who would not participate in the math intervention program and was generally unresponsive to assistance.

RETENTION REPORT:

Aimee Agee	Was deployed to military service. Plans to return ASAP
Brock Deffenbaugh	Unresponsive student with failing grades
Colt Lavoine	Joined the Navy. Had a very positive experience at ISU
Demetrius McCalman	Had financial problems. Plans to return ASAP

Student grades in the pilot program were also good. Only 6 of the 62 students had below at 2.0 GPA, and 48 of the 62 were able to achieve a 3.0 or better.

GRADE REPORT

<u># of students</u>	<u>GPA</u>
48	3.0 to 4.0
8	2.0 to 2.9
3	1.0 to 1.9
3	0.0 to 0.9

Additionally, each student's improvement in math comprehension was evaluated by ongoing testing throughout the program. A number of students showed significant improvement.

18 students improved their overall math competency by at least 20%
9 students improved their overall math competency by at least 40%

For these students in particular, math intervention has made it possible for them to do better in classes and make progress toward graduation.

4. Work Plan, Next Fiscal Year – Action Steps – Process – How?

Our plan is to expand the program to include all freshmen in the COT and also continue the full support work being done for transfer students. With so many students deficient in math skills or at least needing to refresh their math skills, we feel this has the potential to favorable impact COT student retention, grades and progress to completion.

Math intervention works best when done early. We want to prepare our students and prime their thoughts so they arrive on campus ready to learn. We want to begin working with incoming freshmen this summer, before they begin classes in August. The math intervention program has been developed to work with students online and will serve this goal of advance preparation quite well.

Strategic Plan – Initiative Work Plan FY2014

5. Reporting and Deliverable Schedule – When?

Metrics can be updated soon after the Spring semester is completed. Year to year comparison reports to historical data should be published by June 1st of each year.

6. Budget – How Much, a General Discussion of Funds Use?

The proposed funding request is for:

\$50,000	Salary for Mr. Sivley as a full-time, visiting professor.
\$10,000	Benefits at 20% of salary
\$15,000	Licensing fee for the advanced learning platform being used for math intervention.
\$10,000	Student Mentor team who will continue to focus on transfer students.

\$85,000	Total cost of the program during the school year

7. Stakeholders and Management Plan – Who?

Dr. Robert English and David Sivley

8. Outcome Assessment & Future Testing

(How will we know that we were successful?)

Evaluation of the program's success will be determined in the following metrics:

Tested improvement in each student's math comprehension

- 50 Number of students who improve by at least 20%
- 15 Number of students who improve by at least 40%

Improvement in grades

While there are many factors which contribute to a student's success, we expect this program to have a favorable impact on student grades. An increase of 0.10 GPA in the overall freshmen GPA would be statistically significant. Grades of students participating in the program will be especially evident.

Improvement in retention

This program pays for itself with a gain of 5 students per year. While we expect more, this is the significant criteria for continuation of the program.

9. Line Item Budget Discussion that tracks Budget Templates ...

(These sections also need to be as long as is necessary to articulate each of the budget line items.)