

Highland Community College, IL

Project: Developing a Comprehensive Transitional (Developmental) Math Studies Program

Version 1.0- Project

Q: What is the current status of your project?

A: In-progress

Q: Please indicate the original project start date, original project end date, and anticipated completion date if project is not completed. Please list dates on separate lines.

A: Project start date: 08/25/2014

Planned project end date: 12/13/2016

Q: Briefly describe the current status of the project. Explain how this project relates to any strategic initiatives or challenges described in the institution's most recent or soon-to-be submitted systems portfolio, if applicable.

A: Phase 1 of the project has been completed. This included making changes to the physical learning space and to curriculum. Phase 2 focused on faculty development and improving teaching methodologies used in the Math Achievement Center (MAC). It will be completed December 2016. This project relates to the institution's realization that the College is serving a steadily increasing number of developmental/transitional students. Since these students are underprepared for college-level courses, we have strengthened efforts to provide programs to increase their completion and retention rates.

Q:

List the project goals as stated in the original project declaration along with the metrics/measures for assessing the progress for each goal.

A: Our primary goal for this Action Project was to build upon progress toward a stronger support network for transitional students in order to:

1. Reduce the amount of time it takes to complete transitional/developmental coursework so that students are able to move into transferable college level courses sooner
2. Increase the retention rate for these students
3. Increase the completion rate for these students

The project goals were to be measured by the following:

- 10% increase in the course completion rates of transitional math courses offered in the Math Lab
- 10% increase in the Fall to Spring retention rates for transitional students

Describe what has been accomplished with this project over the past year, specifically referring to quantifiable results that show progress. You may need to

Q: include a discussion clarifying how the original goals and anticipated outcomes may have shifted during the year.

A: We have completed Phase 1 of the project which included the redesign of the physical structure of the transitional math area and changes to the curriculum. The former design consisted of two separate rooms in which the learning was very passive for a large population of our transitional students. Students worked at their own pace, learning course material out of a book or by using computer based training and then testing when they felt ready. Active learning now takes place with more choices for those students with different learning styles. The redesign included changing the traditional and computer math labs into a combined computer lab with a room for mini-lectures and tables for small group work. An active learning table was installed in the mini-lecture room to enable collaborative learning.

There has been a movement away from a “students working at their own pace” format to one with direct targets. Students go as a group (based on their class) to mini-lectures in the new small room, participate in reviews and discussions with members of their own class, and solve application problems. The use of My MathLab in transitional math courses to improve the flexible delivery of course information and to appeal to more student learning styles was implemented on August 17, 2015.

The redesigned Math Achievement Center (MAC) allows us to engage more students in their learning process so they can better understand and complete required transitional

coursework faster. Other improvements were made to the learning environment. Academic support, in the form of embedded tutors, was added directly to the classroom beginning August 17, 2015. Testing was removed from the area on June 8, 2015. It was directed to the Testing Center for a more optimal testing environment for students, secure conditions, and expanded hours. Previously all testing was done in the traditional lab while class was in session.

Phase 2 included providing professional development for Math Achievement Center faculty. The College replaced a part-time Math Lab coordinator position with a full-time Math Achievement Center manager position, which allows that individual to focus on professional development and teaching methodologies in the MAC. Many of the faculty have been using the same teaching techniques for over 25 years. Focus has been placed on the use of technology in transitional education and implementing active learning best practices. While we will be completing Phase 2 and closing the project in December 2016, our plan includes adding additional training topics each semester moving forward.

The College monitored the project progress by measuring the following:

- the increase in small group lectures provided in the MAC
 - Prior to Fall 2015-0 lectures
 - Fall 2015-960 lectures
 - Spring 2016-1296 lectures
- the increase in the number of tutors embedded in the MAC
 - Prior to Fall 2015-0 per class
 - Fall 2015- 1 per class
 - Spring 2016-1 per class
- the increase in Math Lab students testing in the Testing Center
 - Previously, all MAC students tested in the traditional math lab room. While the number of MAC students testing in the Testing Center is not specifically noted, the chart below demonstrates a significant increase in number of tests provided in the Testing Center beginning with the summer 15 semester. MAC students officially began testing in the Testing Center June 8, 2015.

Number of Tests Provided by Testing Center			
	2014	2015	2016
Fall	3473	5395	tbd
Spring	4709	4526	5263
Summer	902	1826	1436

- the course completion rates of transitional math courses in the MAC
 - Initial Course Completion Outcomes: 15% improvement from second eight-week of spring semester 2015 to second eight-weeks of spring semester 2016. The data for fall semester 2015 was skewed because there had been a mix of students finishing the old format and some in the new. Students had been given until December 11, 2015 to finish under the old format.
- the fall to spring student retention rates for transitional math students
 - The Fall 14 to Spring 15 retention rate for transitional math students was 41.8%.
 - While our initial Fall 15 to Spring 16 retention data shows 35.0% of our students were retained, it too was skewed because of the mix of Math Lab and MAC formats used in the Fall 2015. The College will continue to measure retention rates and use the data to drive improvements. Considering the course completion rates for Spring 2015, we are anticipating increased retention rates for Fall 16-Spring 17.

Q: Describe how various members of the learning community have participated in this action project. Show the breadth of involvement by individuals and groups over the project's duration, particularly during the past year.

A:

The best practices of transitional education and instructional design were identified by a multidisciplinary committee composed of internal and external stakeholders. The goal to increase the number of students enrolling in college level courses was developed

during the strategic planning process and involved many community members. External stakeholders included the regional superintendent of schools and high school faculty members. Internal stakeholders included transitional math students, full-time and part-time faculty, student advisors, Academic Technology Resources, Admissions and Records, IT, Institutional Research, and Success Center staff. In addition to the development of a comprehensive transitional math program, implemented changes included:

- **Modularization of Math Courses** – The College invested in using COMPASS diagnostics in an effort to place people more accurately related to their math skill level. Courses which were previously 16 weeks in length were re-designed as eight-week modular courses in an effort to help students progress more rapidly and start at the point in which they needed to develop skills. If students do not complete a course in the eight-week format, they are allowed to re-enroll in that level. Students are also allowed to work ahead meaning that, if they progress rapidly, they can move to the next level without waiting for a new enrollment period.
- **Early Alert** – While the early alert program is available to all instructors in all subject areas, there was an intentional effort to engage the MAC faculty in using early alert to identify students who were struggling. Referred students receive information and encouragement about support services that are available.
- **Additional Pathways for Learners** – In 2012, an accelerated math course (MATH 157) was developed that combined an intermediate algebra course with a review of basic algebra. This provided a pathway for qualified AA students to complete their transitional math requirements and college level math coursework in one academic year. A new math literacy course is also being developed for spring implementation.
- **On-site Tutoring Support** – The Success Center located a tutor directly outside of the MAC room to provide tutoring support for students. This change markedly increased the number of students receiving math tutoring. This academic support was further improved August 17, 2015 by embedding the tutors directly in the MAC room.

Describe the effect that this project has had on the institution, students, and others in the learning community. What has the institution learned that can be identified as

Q: a good practice to use in other aspects of its quality work or from which other institutions might benefit?

A: There has been a positive effect from the implementation of our changes. More students are completing their transitional math courses. Due to curriculum changes

and improved teaching methods, students are taking fewer tests and retests. For Fall 14, students in the Math Lab took an average of 11.2 tests. In Fall 15, students in the MAC took an average of 5.3 tests. Anecdotally, students feel that they have more interaction with their learning/instructor in the lab, some instructors are noticing an increase in attendance, and fewer students are spending time retesting.

This institution has learned that this process and its best practices can be replicated in the transitional writing and reading programs. A writing program redesign is in progress now. The inclusive committee structure used for the math redesign served as a model for the committee configuration for the transitional writing and reading redesign project.

A transitional English/Rhetoric and Composition I (COMM 090/ENGL 121) pilot is being offered in the summer and fall of 2016 using a co-requisite model. The pilot is designed to allow students near the cut score to enroll in transitional and college level courses at the same time. Students will receive targeted support to help boost their understanding and learning of the college level course material.

Describe the anticipated challenges that may be encountered in successfully completing the project or for institutionalizing the learning from the project's goals.

A: One particular challenge should be noted. This curriculum redesign challenged the culture that has been in place for over 45 years. The original format of the lab was meant to be "learn at your own pace", which was taken to mean "go as slowly as you want." This perception was held by students as well as instructors. It was difficult to change to a format with direct target dates. More work needs to be done to fully realize the benefits of this curriculum and cultural change.

In light of the project goals, current circumstances, institutional learning from this project, and anticipated barriers to success, list the next steps to be taken over the course of the next 12 - 24 months in order to complete or institutionalize the results of this action project. Provide a timeline for completing each next step.

A: While the project is being closed December of 2016, we will continue each semester to provide professional development opportunities for faculty on best practices and software training.

. The schedule for the rest of the Fall 2016 semester includes:

Step 1. October –Train the faculty on how to teach students to use MyMathLab software

Step 2. November-Train faculty on how to teach new students the Testing Center processes

Step 3. December-Publish MAC faculty handbook outlining best teaching practices for the new educational format.

Provide any additional information, inquiries, or concerns that the institution wishes Q: reviewers to understand regarding this Action Project. Enter N/A if not applicable.

A: N/A

Declaration

Briefly describe the project in less than 100 words. Be sure to identify the key Q: organizational areas (departments, programs, divisions, units, etc.) and key organizational processes that this action project will affect, change, and/or improve.

A: Our primary goal for this Action Project is to build upon progress toward a stronger support network for transitional students in order to:

1. Reduce the amount of time before they are able to move into transferable college-level courses
2. Increase the retention rate for these students
3. Increase the completion rate for these students

Q:

Describe your institution's reasons for initiating this action project now and how long it should take to complete it. Why are this project and its goals high among your institution's current priorities? Also, explain how this project relates to any strategic initiatives or challenges described in the institution's recent or soon-to-be submitted Systems Portfolio.

A: Like most community colleges, Highland is enrolling an increasing percentage of students under-prepared for successful completion of college-level coursework. Although this has been documented in all general education disciplines, the discipline with the highest percentage of under-prepared students is mathematics, with as many as 73% of incoming students testing into developmental math courses. In our economically depressed college district, at-risk students who fail to complete college degrees or certificates here have very little chance of supporting themselves and their current or future families successfully. Many have termed Highland as their "last chance" for academic success, and it is critical that we serve these students in ways that increase their odds of successful degree or certificate completion.

Q: List the project goals, milestones, and deliverables along with corresponding metrics, due dates, and other measures for assessing the progress toward each goal. Be sure to include when you anticipate submitting the project for formal reviews.

A: We plan to research best practices of transitional education in Fall 2014.

Necessary instructional design changes will be made in the Spring 2015.

Implementation of best practices and instructional design changes would occur Fall 2015 and Spring 2016.

The project will be measured by the following:

- 5% increase in the course completion rates of transitional math courses offered in the Math Lab
- 5% increase in the Fall to Spring retention rates for transitional students

Based on the Reviewer's comments, the project goals have been modified and will be measured by the following:

- 10% increase in the course completion rates of transitional math courses offered in the Math Lab
- 10% increase in the Fall to Spring retention rates for transitional students

Key Performance Indicators (KPIs) used at Highland to measure performance will include:

- The percentage of students placing into transitional reading, writing, and mathematics courses

- The percentage of students with attempted hours in at least one or more transitional courses
- The percentage of students attempting transitional courses for the first-time or in a subsequent attempt
- The retention, enrollee success, and completer success rates in transitional courses
- The retention, enrollee success, and completer success rates of students in their first college-level English and mathematics course after completing transitional courses

Q: Describe how various members of the learning community will participate in this action project. Show the breadth of involvement by individuals and groups over the project's duration.

A: Likely areas and people affected include Transitional Education Math Students, Math Faculty, Academic Advisors, Academic Technology Resources, Admissions and Records, IT, and Success Center staff.

Q: Describe how the institution will monitor project progress/success during, and at the completion of this project. Be sure to specifically state the measures that will be evaluated and when.

A: Process to educate transitional math students.

Process to retain transitional education students.

Process to train faculty on best practices.

Process to hire faculty.

We will monitor:

- the increase in small group lectures provided in the Math Lab
- the increase in the number of tutors embedded in the Math Lab
- the increase in Math Lab students testing in the Testing Center
- the course completion rates of transitional math courses in the Math Lab
- the Fall to Spring retention rates for transitional math students

Q: Describe the challenges that may be encountered in successfully completing the project or for institutionalizing the learning from the project's goals.

A: 1. Changing the current Math Lab culture.

-- It has operated using the same processes for over 44 years.

-- This is true for students, faculty, and staff.

2. Changing from a "work at your own pace" format to one with direct targets.

Provide any additional information that the institution wishes reviewers to understand regarding this Action Project.

A: In the Fall of 2013, 30.4 percent of our students were in transitional classes. An average of 84 percent of students enrolled in transitional courses were taking them for the first time. Subsequent attempts go down to an average of only 15.6 percent. These data suggest that their experience in transitional classes often makes or breaks their decision to continue with college. Students face social and economic barriers to their return. Those students who are able to complete their transitional math coursework are more successful in their first college-level course than those reported in the National Community College Benchmark Project (NCCBP) in 2010.