32nd International Conference on Technology in Collegiate Mathematics

VIRTUAL CONFERENCE

ictcm.com | #ICTCM
Reduced Lecture Time Improves Student Success Rates

John Burke
Assistant Professor
UNM-Gallup
Course Strategies and Goals

Implemented since Spring 2017

Two sequential 8 week courses: meeting 5 days a week

Computer based learning platform used for the course in a computer lab

Identify students on the first day of class with “Math Fear”
Course Strategies and Goals

Develop relationships with every student

Emphasize the need for the student to request assistance

Help each student find the best way for them to increase understanding

Decrease the time for the student to get answer feedback
Student relationship

Early identification of students with “Math Fear”

Build student confidence and increase motivation

Use verbal and written feedback within computer platform to provide feedback
Sequential 8 week courses 5 days a week

Students are able to complete two courses in one semester

Reduces the time for completion of the core classes

Student Financial Aid impact due to semester limits

The instructor can identify and work on each student deficiencies daily
Computer Based Strategy:

Students are given immediate feedback on their coursework.

Students determine when they are ready for a chapter test.

Targets dates are set for every chapter to support course completion.
Computer Based Strategy:

Students are given reminders about due dates

Students can work ahead on computer based platform

Class in computer lab assists those students with limited access to internet
Embedded Tutors:

This a student tutor who is present during classtime

Student helping student

The tutors are part of the campus Center for Academic Learning (CAL) staff

Student tutors gain experience with helping different learning styles
Embedded Tutors:

Ten different students tutors have participated

When a student requests assistance, the first available person responds

Students are expected to show their work prior to requesting assistance
Impact to students:

Increases student willingness to ask for help.

Reduces wait time to get assistance during class time.

Exposure to support services for future classes.

Gain understanding that asking questions is beneficial

Supports the student’s ability to set priorities to identify their best practices
Course Evaluations Summary

Custom questions added to course evaluation survey

Feedback for embedded tutors show student high satisfaction on surveys
Students rated tutors: Highly Effective 85%, Effective 15%

Computer based instruction
Students comments indicate strong preference for this approach.
Own pace, work outside of class time, student responsibility
Course Evaluations Summary

Reduced lecture time:

Students overwhelmingly, greater than 80%, indicate a preference for the reduced or no lecture

High Student satisfaction with course design
Summary

Reduced lecture time provides more opportunities for helping students increase their understanding.

Higher student success rates compared to other sections of same class for previous 9 semesters.

High degree of student satisfaction with course design and implementation.

Embedded tutors are highly effective.
Contact Information

Name: John Burke
Title: Assistant Professor
Institution: UNM-Gallup

Email: jburke02@unm.edu