

Long lecture

Changing How Math is Taught and Learned Using MyMathLab

Hamza Duhaini
Department of Mathematics and Physics
Academic Bridge Program Affiliated with Qatar Foundation
Doha, Qatar
hduhaini@qf.org.qa

Abstract

High school students in Qatar are facing many challenges in learning Mathematics for many reasons some of which are:

1. Lack of motivation and interaction when working in Math whether at home or in class.
2. Memorizing instead of understanding mathematical principles
3. Difficulty with vocabulary and terminology of mathematics, understanding directions and explanations, or translating word problems—particularly when it involves irrelevant or out of sequence information;
4. Trouble learning or recalling concepts, definitions and meanings of abstract terms;
5. Difficulty reading texts to direct their own learning and communicating mathematics, including asking and answering questions;
6. Emotional block to mathematics originally due to Math anxiety.

In this session I will show a power point presentation about the features of MyMathlab and what it offers students and instructors to address some of these challenges.

With MyMathLab students can:

- Practice and learn mathematics when and where they want and at their own pace.
- Work through unlimited tutorial exercises correlated to the exercises in their textbook and get immediate feedback on their answers.
- Receive a personalized study plan to diagnose areas where they need to practice.
- Access a multimedia textbook with links to learning aids, such as animations and videos.
- Use online tools, such as a discussion board or virtual classroom, to communicate with the teachers and other students.
- Feel as if they have their own personal tutor, always available, and dedicated to their success.

With MyMathLab instructors can:

- Deliver all or a portion of their course online, whether the course is based in a lab, in a traditional classroom, or taught in a hybrid format.
- Create and assign online homework, quizzes and tests that are automatically graded and tightly correlated to their textbook.
- Manage and track students' results in a powerful online gradebook designed specifically for Mathematics and Statistics.
- Customize their courses depending on their syllabus and their students' needs.
- Use a variety of communication tools to create a supportive online community for their students

Observations

- The percentage of students earning As and Bs in their Math courses have increased since we introduced MyMathLab into our curriculum.
- The success rate of those students in their subsequent course at their college also increased.
- Students are spending more time practicing mathematics this year than any previous years.
- Teachers are tracking students' performance much better and providing extra help for struggling students.
- Teachers are interacting more with their students and are well aware of their strengths and weaknesses.

Keywords

MyMathLab, Homework, Quizzes and Tests, Study Plan, Grade Book.