Enhancing efficiency and engagement with MyLab Math

Institution: Abu Dhabi University, UAE
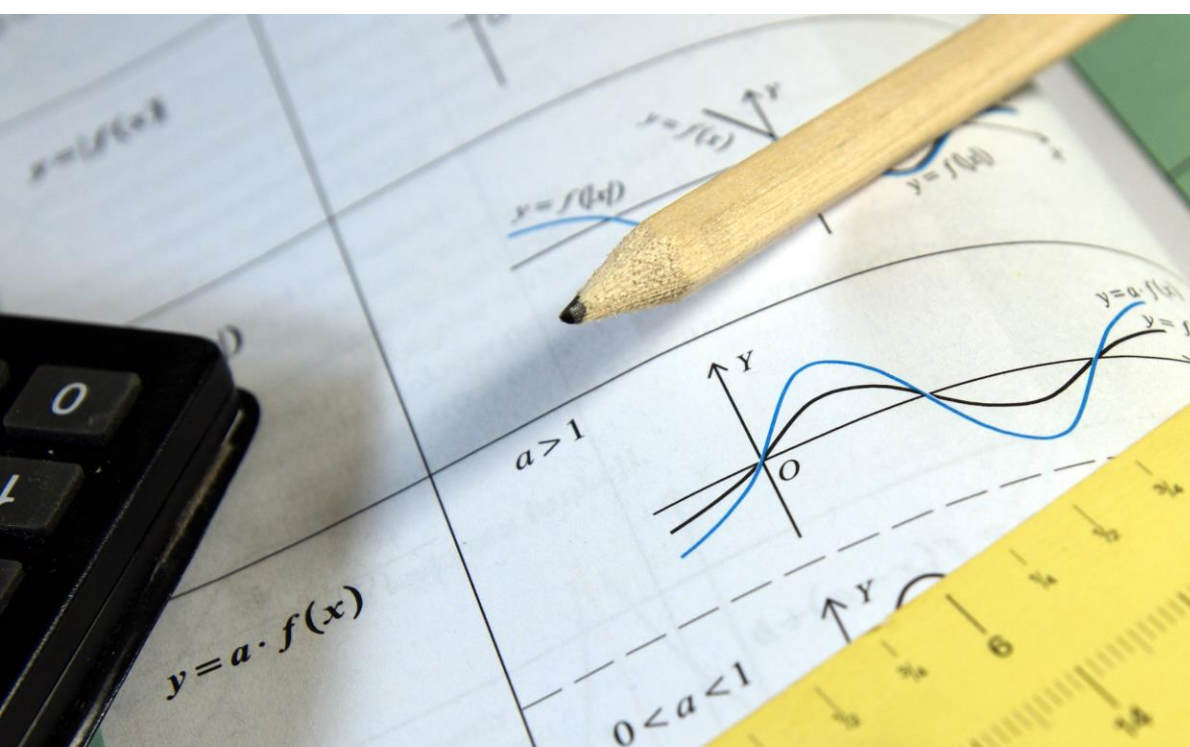**Instructors:** Madeleleine Al Tahan and 3 other instructors
Courses: Pre-Calculus, Calculus 1, Calculus 2, Calculus 3,
Linear Algebra, Math for Business,
General statistics, Intermediate statistics,
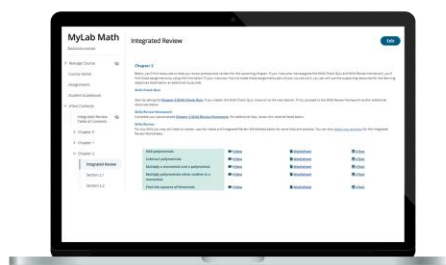Math for life, Algebra remedial.
Platform: MyLab Math

2024

Madeleleine Al Tahan and 3 other instructors from Abu Dhabi University, UAE *talk about how they use MyLab Math, benefiting from its grading automation, Blackboard integration, and user-friendly interface, which streamline the sharing and modifying of assignments and enhance efficiency.*

Course

In our classes, each section typically has over 30 students, with around **120 students** across four sections. We have adopted certain course titles for the past four years. For structuring the courses, we primarily use the **MyLab Math** platform for homework and assignments, benefiting from its **grading automation** and **integration** with Blackboard. The platform is particularly effective for sharing and modifying assignments between instructors, ensuring consistency and ease of grading.

Our experience with the MyLab Math platform has been positive, especially with its **user-friendly interface** and **strong support team**. Students appreciate its features and find it beneficial for their studies. The inclusion **of critical thinking questions** in subjects like linear algebra ensures that students understand the material rather than relying on external aids. Colleagues also find the instructional resources valuable, often using them with minimal edits.

Overall, the platform enhances both teaching and learning experiences, making it a preferred tool in our courses.

> *"This transition has saved us considerable time and effort, allowing us to focus more on teaching and less on administrative tasks."*

Overcoming challenges

One of the significant advantages of using digital tools for **graphing functions** is the **accuracy** they provide. When I used to graph functions by hand, it was challenging to achieve precision, and students often saw inaccurate representations. With digital tools, students can see exact graphs, which enhances their understanding and allows for clearer explanations.
The **precise visualisation** helps in addressing issues directly and accurately.

Before adopting this product, we did use other digital tools, but they often required additional time to set up and navigate. Now, with the current platform, the functions and questions are readily available, **saving considerable time and effort**. The **built-in examples** and **instant access** to functions streamline the teaching process, allowing us to focus more on instruction and less on setup. This efficiency is a significant improvement over previous methods, making the teaching and learning experience smoother and more effective.

In teaching statistics, we encounter topics where answers can vary based on the method used, which can be confusing for students. This is particularly true for tasks like preparing histograms, where different methods can yield different yet correct answers. To address this, we allow students **multiple attempts** per question and explain various methods in class.

MyLab Math also **saves us significant time**, particularly in **grading and checking homework**. Before transitioning to digital tools like MyLab, we faced serious challenges in preparing lecture materials and homework. We had to create everything from scratch, often relying on course files from colleagues and sourcing questions from textbooks or other materials. This was time-consuming and inefficient. With MyLab, we now have a baseline of course materials and a vast pool of questions to choose from, significantly easing the preparation process. This transition has saved us considerable time and effort, **allowing us to focus more on teaching** and less on administrative tasks.

How well does MyLab Math align with your curriculum?

Using MyLab Math generally aligns well with our course objectives, particularly in calculus and related subjects where the **syllabus directly matches the textbook** used by Pearson. This alignment allows us to use MyLab Math seamlessly for teaching and assessing students without the need to create additional materials.
MyLab Math has been instrumental in providing structured, in-class assignments that allow us to gauge students' understanding and ensure they grasp key concepts effectively. It's a valuable tool, but achieving our goals still necessitates additional effort and resources.

Assessment

In our assessment structure, we incorporate **various methods** alongside MyLab Math to evaluate students comprehensively. Typically, we assign **one homework per chapter**, each out of 20 marks, and take the average for final grading. Depending on the course, we might split these marks across smaller segments to better align with the course's objectives and student needs. For instance, in precalculus and calculus, we assign one 20-mark homework and take the average to gauge student understanding.

Besides MyLab Math, our assessment methods include **summative exams**, which make up 80% of the overall grade. These exams are conducted in class and are divided into **mid-term and final exams**, ensuring a thorough evaluation of the students' grasp of the material. Additionally, in some courses, students engage in **projects** which account for 15% of their grade. These projects involve creating reports, presentations, and posters, providing a **practical application of their learning**. This combination of MyLab Math, exams, and projects ensures a **balanced and comprehensive assessment approach**.

"MyLab Math enables us to share and compare homework assignments with colleagues, ensuring consistency across sections and facilitating common exams."

Benefits

We find that using MyLab Math **significantly reduces preparation time** since the resources are readily available. Compared to creating our own materials from scratch each year, using MyLab Math allows us to save time on homework creation and resource preparation. MyLab Math also provides the advantage of easy homework duplication and consistent question pools, **reducing errors and preventing student cheating**. Additionally, MyLab Math enables us to share and compare homework assignments with colleagues, ensuring **consistency** across sections and facilitating common exams. Overall, MyLab enhances efficiency and collaboration in our teaching processes.

Student feedback

We observe that the majority of our students **prefer using MyLab Math** for their homework over traditional paper-based methods, appreciating the ease and convenience of online assignments.

They also favour using **online textbooks** provided by MyLab Math over traditional print books, finding it more convenient and reducing the need to carry heavy books. While some students still prefer traditional methods, most are satisfied with the digital approach.

"When implementing it for the first time, it's beneficial to start gradually, perhaps with the eTextbook and practice assessments, before fully integrating it into the curriculum."

Tips for first-time users

In our experience, using MyLab Math does require an **initial investment of time** to thoroughly understand the platform. Even with training sessions, we need to test each feature ourselves before introducing it to students. This allows us to **anticipate** and address any issues students might face. We need to interact with MyLab Math from a student's perspective to effectively guide them.

When implementing it for the first time, it's beneficial to **start gradually**, perhaps with the eTextbook and practice assessments, before fully integrating it into the curriculum. Our team has found MyLab Math support resources invaluable in navigating and maximising the platform's capabilities.
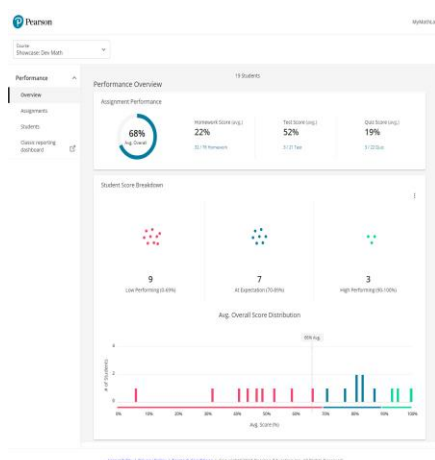
Working with Pearson

We are committed to Pearson because it effectively meets our needs, and our students find it user-friendly. Our colleagues can share and review each other's homework assignments easily, ensuring **consistency and quality** in our teaching.

For more information about MyLab Math, please visit

https://www.pearson.com/en-gb/higher-education/products-services/mylab/mylab-math.html