

Texas House Higher Education Committee,

Thank you for allowing me this opportunity to respond to the posted requests for your information gathering purposes on interim charge #4.

My name is Gwendolyn Vastine, Associate Professor of Mathematics, at Lone Star College Atascocita Center. My statements within this submission are not affiliated with Lone Star College, but instead represent my personal viewpoint.

Please see my submission below for interim charge #4.

Interim Charge 4: Study the prevalence of online courses and degrees in higher education. Examine how institutions providing online courses and programs are accredited, particularly courses and programs originating from states other than Texas. Evaluate how students whose courses and degrees are primarily online perform in terms of persistence and degree completion versus students who take courses in traditional classroom settings. Study labor market outcomes for students with primarily online courses and degrees versus more traditional programs.

1. What are the existing barriers to online learning for students and faculty? What have institutions done to alleviate and eliminate these barriers?

Barriers to online instruction of math include how to deliver quality content to the student, have them engage with the content and how to have proctored testing of what they have learned in the online environment.

3. With institutions having shifted instruction to online-only in the Spring of 2020 because of the pandemic, what lessons have been learned?

When all our math classes went online, it was quite a challenge for those of us, including me, who had only taught face-to-face. Fortunately for our campus, a representative of McGraw-Hill reached out and assisted in helping transition all our classes to the ALEKS software platform where our greatest concerns were met.

The ALEKS program from McGraw Hill is a web-based math mastery program that uses artificial intelligence to determine what a student knows about the topics in the course, gives credit for what is known and creates an individualized learning plan in the form of a pie chart for students to fill in the missing content.

Not only did McGraw-Hill assist in the transition of all our content to the ALEKS program, they also provided free subscriptions to the students so they were able to transition without having to pay additional fees.

Using the instructional material provided with the course, I was able to use Blank Lecture Notes provided by the author of the textbook aligned with the course to create teaching videos which I posted in D2L, our learning management system.

The students would watch the Lecture Videos, filling in the Blank Lecture Notes as they watched the video. They would then watch a Homework Video where I gave examples of the homework problems. They would complete their homework, assisted by ALEKS robust explanations. Finally, they would upload their filled in notes and their written homework to D2L for grading.

Proctored testing was a concern for math testing. Fortunately, ALEKS has Respondus Lockdown Monitor with webcam which allowed the students to test in a way that discourages cheating.

My students did extremely well after Spring Break and were able to switch over to the online environment easily. Very few students dropped. The success rates for my classes remained high.

Many students said they actually preferred the online lectures where they could pause, rewind, and make me repeat myself again and again, unlike the face-to-face classroom.

4. What are the challenges related to technology, quality, accessibility or other considerations? The Committee is seeking the perspectives of college/university administration, faculty and students.

As stated above, delivering quality content that engages the student and having a proctored method to test students.

Respectfully,

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