Challenges of Teaching-Learning in Higher Education During the COVID-19 Pandemic

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Background

The hybrid model has proven to create a plethora of obstacles for faculty and students to ensure a high quality of education.

Research Aims

Aim 1: The first goal of this study is to gauge teacher experiences in the ISEN department whilst teaching under the hybrid model in order to determine their viewpoint regarding the efficacy of this learning method. Through their opinions of the pitfalls, and effective aspects of this method a more thorough plan on how to properly implement hybrid models in the future may be curated.

Aim 2: The second goal of this study is to learn from the perspectives of students in the ISEN department regarding the hybrid model of education. Their opinions can be further used to create a more student friendly learning model in the future.

Methods

Faculty Questionnaire (Previous Study)
Faculty of the Industrial Engineering Department (ISEN) at TAMU were interviewed to discuss their experiences and lessons learned while teaching under the hybrid model in the previous semester in comparison to prior semesters. Such questions asked included how they believed their efficiency in delivering knowledge was altered, levels of participation and attendance, and did they find any positive aspects in using the hybrid model over previously used conventional educational models.

Student Questionnaire
The student population enrolled in the Industrial Engineering program were recruited through bulk email/listserv to participate in the survey study administered through Qualtrics. The survey responses will gauge students thoughts and opinions regarding the current implementation of the hybrid model in recent semesters. This information can then be further utilized to improve student experiences in future uses of the hybrid model.

Results

The main findings of the previous study and example questions that will be used when performing the follow-up study with students from the TAMU ISEN department:

Student Questionnaire:
According to statements from the previous study, professors indicated they believed students suffered from a lack of motivation and engagement with their courses.
In almost all cases professors indicated a drop in attendance expected when surveying students. Other questions to be asked include a description of their overall experience under the hybrid model, aspects of this education modal they enjoyed, alterations to participation and performance under this model, etc.

Future Work

Firstly, a greater focus on the challenges that affect faculty and students alike can be applied to these studies once a larger sample size has been generated. Since the hybrid model has only been in widespread usage for approximately 1-2 semesters, since the COVID-19 protocols have been placed at universities. The larger emphasis on challenges faced over time will allow for a greater understanding on how to properly change different aspects of the hybrid model to be more professor and student friendly.

Secondly, new methods and aspects of teaching could be introduced in the hybrid model, and its effects observed to see if these changes made a positive impact on the experiences of teachers and students under this educational model. This would allow for definitive observations to be made on how this method of education can be improved in the future.

Finally, the sample population can be expanded to include students from various different departments and levels of education in order to determine if similar hardships are experienced between different parties.