Future state of the evolving classroom in mathematics

BATHI KASTURIARACHI
Kent State University at Stark, United States

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The renewal movement in undergraduate mathematics in the United States has roots that trace back to the 1986 Tulane Conference that outlined a vision for change in calculus along with suggestions for implementation. The movement, with its bold and innovative approaches focused on student-centered learning, was able to uncover the richness in undergraduate mathematics by supporting reform that was curriculum driven at the bow and technologically backed at the stern. As we approach the three decade mark of the renewal movement we see a rapid evolution that is occurring, which without proper streamlining, could have a profound impact on all of undergraduate mathematics education. Outstanding pedagogical practices take into account the environment in which learning occurs as well as the background of the student body, making the finest practices, institution dependent. This presentation reports on three models of delivery that are currently being used and have worked successfully to varying degrees. We will emphasize one of these – the blended model, and explain how it could be used to motivate students to excel in mathematics. Details of these pedagogical practices, as well as appropriate evidence of success, are presented.