From the Looking Ahead Editor

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Advances in Engineering Education has recently expanded to the publication of work-in-progress articles within the field of engineering education. These AEE Looking Ahead articles showcase preliminary implementations or research that has the strong potential for implementation and subsequent improvement of learning. In this second edition of Looking Ahead, we are publishing an article I recruited while at the 2019 Frontiers in Education conference. It caught my interest because of its connection to faculty coaching and professional development related to instructional change efforts. This thought-provoking article resides at the intersection of curriculum change, broadening and diversifying the engineering student body and the options that are available, faculty perceptions of rigor, and systems modeling, with a hint at the interesting topic of the perceived rigor of educational scholarship activity. Specifically, this article describes how a large-scale curriculum redevelopment effort in an engineering department, with a goal of broadening student choices as well as student “types,” drew faculty concerns about lessened rigor, which subsequently resulted in resistance to the changes. A systems thinking and modeling approach was applied as a productive means of moving forward through the change process by elucidating the issues that were competing and hindering project progress.

AUTHOR

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