

Walking the Crossroads in Developmental Mathematics: Student Learning Environment

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Abstract

Learning is a student responsibility; however the learning environment is also the responsibility of faculty (supported by the institution). *Beyond Crossroads* Chapter 4 provides recommendations and standards in both areas of responsibilities. This Standard and the Recommendation, suggest a goal that all students be successful in mathematics, even those with a ‘weak background’ or ‘poor study skills’. The new approaches such as the Carnegie Foundations ‘Pathways’ and the Charles A. Dana Center at the University of Texas at Austin Dana Center New Mathways Program seek to apply sound cognitive research to create conditions that support all students. This represents a dramatic shift from a traditional approach that tends to blame students for not being successful, towards a positive outcomes approach. Essentially, these new approaches seek to eliminate any correlation between student characteristics and learning outcomes, to provide equally high chances of success for all students.



Jack received his MA in mathematics from Michigan State University and has been at Lansing Community College since 1973. His main focus has been on developmental mathematics education. He has been active in a number of Michigan professional organizations, with multiple presentations and offices. Nationally, Jack has contributed to the AMATYC standards (both “Crossroads” and “Beyond Crossroads”), and has chaired the AMATYC Developmental Mathematics Committee twice for a total term of nine years. Currently, he is leading a team working on a project to re-invent developmental mathematics – the AMATYC “New Life for Developmental Mathematics” group of the Developmental Mathematics Committee. Jack was involved with the “Pathways” of the Carnegie Foundations for the Advancement of Teaching (Statway™ and Quantway™), and has also been involved with the work on the Dana Center New Mathways Project, as well as textbook projects for the new courses from the major publishers. He seeks to combine an understanding of mathematicians, of college mathematics, and of cognitive psychology to bring a new perspective on mathematics in the first two years of college. Readers can find more about this perspective at www.devmathrevival.net.