

Letter from the Editors

The ethical, economic, and political burden on educational leaders in the current milieu may be heavier than it has been during any other historical period in American higher education. As the baby boomers prepare for a coming exodus from the professions and as the demands for professional newcomers sophisticated in science, mathematics, engineering, and technology (STEM) increase, our college and universities face the daunting challenge of producing large numbers of highly knowledgeable graduates who can think critically, creatively, quantitatively, and ethically; who can communicate using not just traditional language and literacy practices and processes, but also technical codes, mathematical systems of thought, and digital algorithms; who can collaborate and problem solve and synthesize new meanings; and who have made a commitment to civic engagement and social justice. To achieve this ambitious yet non-negotiable end, the system must engage in serious and deep organizational learning to provide access and success to millions of students who, in times past, would never have dreamed of going to college. Transformational leaders are needed now more than ever. This issue of *JTLPs* includes a collection of articles targeted specifically for up-and-coming as well as established higher education leaders looking to preserve California's commitment to serving its diverse student population while increasing the quality of learning that takes place on our campuses.

JTLPs seeks to include articles on STEM education and is pleased to offer two studies that give us an opportunity to stop and think about the pipeline spanning from K-12 schools to community colleges to baccalaureate institutions. Liang and Heckman's study of the consequences of California's Algebra for All policy provides evidence of the ways in which good intentions, acted upon in the absence of good evidence, can backfire. While fully recognizing the central role of Algebra in the intellectual development of young people, these researchers also demonstrate the significance of a developmental perspective. Transformational leaders interested not just in Algebra,

but in all aspects of the curriculum can take a lesson from this study: One size does not fit all - learners are not widgets on an assembly line. MacDonald and Gomes's study of the failure of the science curriculum in high school and in college to promote deep understanding and knowledge about genetic expression underscores Liang and Heck's message: The readiness is all. It is not enough to provide classes and test for recall of information; conceptual development of complex ideas and the associated vocabulary takes years to develop and requires coherent instruction. We hope these studies will be read so that the larger lessons pointing to the need for more profound professional development among teachers at all levels is not lost on educational leaders.

Readers and prospective authors ought to take note of Hansen's study of the impact of African American Learning Communities on this segment of the student population for several reasons. First, the study illustrates that *JTLPs*, though dedicating a portion of each volume to STEM education, has not narrowed its scope to the degree that more general articles of interest to educational leaders are excluded. Second, the study makes the argument quite forcefully that even transformational leaders would do well to look to the past for answers. Hansen studies existing learning communities for which evidence of a positive impact exists and finds important insights useful not just to those working in classrooms, but for leaders working in boardrooms. Third, this study illuminates the profound importance of readiness—pedagogical readiness on the part of instructors as well as social and cultural readiness on the part of learners. It is not enough simply to open the doors of the classroom and invite in underrepresented students. Preparation must be made for them to succeed.

JTLPs offers in this volume what we believe may be a new genre in the scholarship of leadership: The professional reflective essay. Nancy Shulock, a policy researcher studying the ecology of the community colleges to shed light on issues of importance to

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decision-makers, tells her own compelling, personal story of transformation during a time of tumult for the colleges. Her essay gives us all insights into the difficult role of a researcher as change agent. It could become assigned reading in any number of doctoral courses where leaders are being groomed to take on these challenges in the future. Brice Harris, our new Chancellor of the California Community Colleges, offers a glimpse into his personal and professional development and the incredible complexity of serving as a leader in a loosely structured system where mandates from the top cut against the grain and are often counterproductive. Like the articles on *Algebra for All* and on genetic expression, these two articles make a perfect pair: one about what it means to try to help the college system from outside, and one about what it means to be on the receiving end of such help.

We hope our readership finds these five offerings as thought provoking, inspirational, intellectually stimulating, and useful as we have found them.

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