FOREWORD

I am pleased to welcome readers to the first volume of *Inquiry-Based Learning*. This book is timely because, both at home and internationally, inquiry-based learning (IBL) is capturing the attention of educators and researchers in secondary and higher education. Although rich with potential for enhancing the way we teach and our students learn, IBL has presented challenges to some who have attempted it. Gonzalez (2013), chronicling his experiments with IBL, describes, "a difficult journey with the result that … he learned how to design courses that invite undergraduates to become more critical, more complex, and more autonomous thinkers" (p. 33). This first volume comes at the right moment, providing the research, guidance, and resources to make this journey not only less difficult, but also more productive for both new and experienced instructors and educational developers. The rewards that Gonzalez (2013) reports will await at the end of the journey are now multiplied and made accessible by the insights and direction provided by this excellent series.

This foreword offers readers a key recommendation for successful implementation of IBL in courses and programs, citing implementation science to confirm why this approach works. I have confidence in this implementation process because of my 35 years of experience as facilitator and researcher of structured, inquiry-based, academic communities of practice (CoPs). The outcomes of this process have provided colleagues, students, and institutions with effective practices and programs for teaching, learning, research, and organizational development (Cox & Richlin, 2004).

My recommendation is that the readers of these chapters employ structured, academic CoPs when implementing the opportunities surrounding IBL described here. In the United States, we call these faculty learning communities (FLCs). Membership is voluntary, multidisciplinary, of size 8−10 members, and open to those in all professions in higher education. FLCs are inquiry based, yearlong, and have the goals of building community, developing evidence-based solutions, and disseminating project outcomes, often as the scholarship of teaching and learning (Cox, 2004). FLC outcomes include increased student learning in areas high on Bloom's

taxonomy and can include design and assessment of new curricula or revised programs developed by the FLC as a group in concert (Beach & Cox, 2009).

For over 35 years in the United States, FLCs have engaged hundreds of topics, including some described in this book, namely, study abroad, equality in higher education, Web 2.0 tools, service learning, and non-science majors and scientific inquiry. Cohort-based FLCs, for example, early-career academics, build institutional capacity by developing leaders and scholars (Cox, 2006, 2013). Over the long term, FLCs enable an institution to become a learning organization (Cox, 2001, 2006; Senge, 1990). For example, the top-25 largest-enrolled courses at my university were transformed from lecture-based to inquiry-guided learning. This involved hundreds of course sections, instructors, and thousands of students (Taylor, Bakker, Nadler, Shore, & Dietz-Uhler, 2012). Importantly, instructors and educational developers accomplished this transformation by working in FLCs/CoPs (Stonewater, Taylor, Bakker, Nadler, & Shore, in press).

Implementation science confirms why educational developers are successful in using FLCs to implement challenging, evidenced-based opportunities such as IBL. Implementation is the art and science of incorporating innovations, interventions, and evidence-based programs into typical human service settings to benefit the clients of practitioners, for example, "bench to bedside" in the medical professions. The goal of implementation is "X is what we do" and the establishment of X as the norm in a system and a culture, day in and day out, even when no one is watching. The purveyor of the implementation is the organization, staff, and process that are engaged to achieve the implementation. Educational developers attempt to find a purveyor to ensure that their practitioners − instructors, staff, and administrators − employ IBL with fidelity and sustainability for their clients − students, programs, and institutions.

Lacking good information about implementation best practices, policy makers have invested heavily in the science of interventions, not in the science of implementation. The national implementation research network reports that the U.S. federal government invests 99% in intervention research and 1% in implementation of that research, leaving implementation to chance (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005). Purveyor approaches to implementation that have not worked include invitations (Please do X), demands (You must do X), incentives rather than penalties, additional evidence that the evidenced-based program works, and mass media approaches. What *does* work for successful purveyors is

diffusion by people talking to people who mentor and show why and how. People follow the lead of others they know and trust (Gawande, 2013).

The authors of *Inquiry-Based Learning* have provided research results, resources, and guidance showing that IBL is a doable, evidence-based program that enhances organizational development and student learning. The FLC model as purveyor is successful because it employs the effective approaches of implementation: FLC members talk to and mentor each other as practitioners, instructors, and scholars. They collaborate with their FLC colleagues − members they know and trust − to design, implement, assess, and disseminate IBL applications.

In conclusion, I recommend that readers employ the wisdom of this first volume and the proven success of the FLC model to implement IBL in courses, programs, and institutions. I extend best wishes for your IBL endeavors.

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