

# Preface

The purpose of this volume is to compile and recognize the many wonderful higher education lean programs from around the world. This compilation is not a fully comprehensive list, but it does indicate that there is a lot of exciting curricular work occurring in the study of the Lean Body of Knowledge (BoK).

What is particularly of interest is that these programs represent disciplines beyond engineering, where lean has been traditionally placed in higher education programming. This highlights that Lean is powerful BoK due to its broad applicability. Also, lean encumbers both critical content and competency learning. For example, if one is to be a good lean practitioner, theoretical and empirical knowledge of the continuous improvement cycle is needed. But, also, a series of competencies, such as the ability to communicate, think critically, and manage change are also required. It is the theory to practice and practice to theory dynamic in the Lean BoK that makes it so interesting.

In addition, there is a business case for higher education institutions to offer Lean programming. And that is because lean training and credentials are valued in the workplace. The potential for university-business partnerships is immense with lean program offerings.

The higher education institutions featured in this volume are to be commended for their lean program offerings. In some cases, developing lean curricula has been pioneering work for these faculty and instructional designers. It takes a tremendous commitment to bring forth new programming in the higher education world and designing new courses, learning experiences, and formal degree programs from scratch is not easy. We believe that faculties have engaged in this work because they understand the incredible value in the Lean BoK for students.

This volume is offered with an insightful Preface from Earll Murman. The first chapter sets the stage for the volume, providing an argument for the value in formal lean programming in higher education, including a summary of feedback from the authors on critical areas of curriculum: quality of the learning experience, method of delivery, and valued student outcomes. The remaining chapters highlight

internationally programs offered at institutions with detailed descriptions of various stages of planning, development, and deployment of lean programs. It is our hope that this volume is both informative and inspirational to those practicing and emerging champions of the Lean BoK. Enjoy!

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