

Wesley R. Habley  
Jennifer L. Bloom  
Steve Robbins

# INCREASING PERSISTENCE

RESEARCH-BASED STRATEGIES  
FOR COLLEGE STUDENT SUCCESS

# **Contents**

[Preface](#)

[The Authors](#)

[Acknowledgments](#)

## [Section 1: What Do We Know About Retention and Persistence to Degree?](#)

[Chapter 1: Defining, Refining Perspectives on Student Success](#)

[Terms Associated with Students](#)

[Terms Associated with Institutions](#)

[Terms Associated with Interaction Between Student and Institution](#)

[Reflections on the Definitions and Constructs](#)

[A Broader Perspective on Student Success](#)

[Chapter 2: Overview of Theoretical Perspectives on Student Success](#)

[Theoretical Perspectives](#)

[Conclusion](#)

## Section 2: The Case for Intensified Campus Efforts

### Chapter 3: The Demographic Challenge

Characteristics of College Students

The Demographics of the Educational Pipeline

The Impact of Educational Attainment

Conclusion

### Chapter 4: Public and Private Benefits of College

History of Higher Education's Benefits

Public and Private Benefits of Higher Education

Conclusion

### Chapter 5: Retention or Recruitment: Examining the Return on Investment

The Costs of Recruitment

The Costs of Attrition

Contrasting Recruitment and Retention

Investing in Retention Interventions

Conclusion

## Section 3: Core Components of Student Success

## Chapter 6: Institutional Culture and Student Engagement

Defining Institutional Culture

Institutional Culture and Student Engagement Studies

Conclusion

## Chapter 7: Academic Preparation

High School Grades on the Rise

Dual Enrollment on the Rise

Advanced Placement on the Rise

Assessment Results Stagnant (at Best)

Underpreparedness and College Success

The Impact of Preparation on College Success

Academic Preparation and College Success: Now What?

## Chapter 8: Psychosocial Characteristics

Psychosocial Constructs from Educational Persistence Model and Motivational Theory Perspectives

Toward a Comprehensive Model for Understanding Psychosocial Development and Risk Behaviors

Unraveling the Differential Effects of Psychosocial and Traditional Predictors of College Success

## Chapter 9: Career Development

Some Context: Structured Career Exploration and Planning

A Foundation of Career Planning: Person-Environment Fit

Fit-Based Enhancements for Institutions

Final Thoughts

## Chapter 10: Assessing the Impact of Academic, Psychosocial, and Career Development Factors on College Student Success

Testing the “Pyramid for Success” Model on Academic Performance and Timely Degree Attainment

Success in College Developmental Courses

An Evidentiary Based Approach to Institutional Intervention Strategies

Conclusions

## Section 4: Proven Student Success Practices

## Chapter 11: Historical Perspective on *What Works in Student Retention*

Overview of the Four Studies

Comparing WWISR Findings

Retention and Degree Completion Rates

Minority Student Attrition and Retention

## Conclusion

## Chapter 12: Assessment and Course Placement

Defining Course Placement

Benefits of an Effective Placement Program

Sources of Information Supporting Placement Decisions

Course Placement Models

Conclusion

## Chapter 13: Development Education Initiatives

Defining Developmental Education

Issues in Developmental Education

Results from the 2010 *What Works in Student Retention Survey*

Promising New Models for Innovation in Developmental Education

Conclusion

## Chapter 14: Academic Advising

History of Academic Advising

Top Five Advising Related Topics

Promising New Models for Innovation in Academic Advising

Conclusion

## Chapter 15: First-Year Transition Programs

[Orientation Programs](#)  
[Learning Communities](#)  
[First-Year Seminar](#)  
[Framework for Implementation](#)

## [Section 5: Making Student Success a Priority](#)

### [Chapter 16: Expanding the Retention Framework: Implications for Public and Institutional Policy](#)

[Limitations of the Retention Framework](#)  
[Expanding the Traditional Retention Framework](#)  
[Public Policy](#)  
[Institutional Practices](#)  
[Conclusion](#)

### [Chapter 17: Creating a Student Success Culture](#)

[A Typical Institutional Approach to Student  
Success](#)  
[Why a New Approach to Implementing Student  
Success Initiatives Is Needed](#)  
[Appreciative Inquiry: A Different Approach to  
Change](#)  
[Conclusion](#)

## Chapter 18: Leading the Campus to Student Success

Cognitive Skills

Interpersonal Abilities

Intrapersonal Factors

Conclusion

## Appendices

A: What Works in Student Retention, 2004 Survey

B: What Works in Student Retention?

References

Name Index

Subject Index



# Increasing Persistence

## **Research-Based Strategies for College Student Success**

Wesley R. Habley  
Jennifer L. Bloom  
Steve Robbins

 **JOSSEY-BASS**  
A Wiley Imprint  
[www.josseybass.com](http://www.josseybass.com)

Copyright © 2012 by John Wiley & Sons, Inc. All rights reserved.

Published by Jossey-Bass

A Wiley Imprint

One Montgomery Street, Suite 1200, San Francisco, CA  
94104-4594—[www.josseybass.com](http://www.josseybass.com)

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning, or otherwise, except as permitted under Section 107 or 108 of the 1976 United States Copyright Act, without either the prior written permission of the publisher, or authorization through payment of the appropriate per-copy fee to the Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923, 978-750-8400, fax 978-646-8600, or on the Web at [www.copyright.com](http://www.copyright.com). Requests to the publisher for permission should be addressed to the Permissions Department, John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030, 201-748-6011, fax 201-748-6008, or online at [www.wiley.com/go/permissions](http://www.wiley.com/go/permissions).

Limit of Liability/Disclaimer of Warranty: While the publisher and author have used their best efforts in preparing this book, they make no representations or warranties with respect to the accuracy or completeness of the contents of this book and specifically disclaim any implied warranties of merchantability or fitness for a particular purpose. No warranty may be created or extended by sales representatives or written sales materials. The advice and strategies contained herein may not be suitable for your situation. You should consult with a professional where appropriate. Neither the publisher nor author shall be liable for any loss of profit or any other commercial damages, including but not limited to special, incidental, consequential, or other damages. Readers should be aware

that Internet Web sites offered as citations and/or sources for further information may have changed or disappeared between the time this was written and when it is read.

Figures 8.1, 8.2, 8.3, 8.4, 9.1, 9.2, 9.3, 9.4, 9.5, 9.6, 10.1, 10.2, 10.3, 10.4, and 10.5 and Tables 7.5, 7.6, 7.7, 7.8, 7.9, 7.10, 7.11, 8.5, 8.6, 10.1, 10.2, 10.3, 10.4, 10.5, 10.6, 10.7, 10.8, 11.1, 11.2, 11.3, 11.4, 11.5, 11.6, 11.7, 13.1, 13.2, 14.1, 14.2, 15.1, 15.2, and 15.3 are used by permission of ACT and are © 2012 by ACT, Inc. All rights reserved. Tables 8.1, 8.2, 8.3, 8.4, 8.7, 8.8, 8.9, and 8.10 Copyright © by the American Psychological Association. Reproduced with permission. The Official citation that should be used in referencing this material is Robbins, S., Allen, J., Casillas, A., Peterson, C. H., & Le, H. (2006). Unraveling the differential effects of motivational and skills, social, and self-management measures from traditional predictors of college outcomes. *Journal of Educational Psychology*, 98(3), 589. The use of this information does not imply endorsement by the publisher.

Jossey-Bass books and products are available through most bookstores. To contact Jossey-Bass directly call our Customer Care Department within the U.S. at 800-956-7739, outside the U.S. at 317-572-3986, or fax 317-572-4002.

Wiley publishes in a variety of print and electronic formats and by print-on-demand. Some material included with standard print versions of this book may not be included in e-books or in print-on-demand. If this book refers to media such as a CD or DVD that is not included in the version you purchased, you may download this material at <http://booksupport.wiley.com>. For more information about Wiley products, visit [www.wiley.com](http://www.wiley.com).

***Library of Congress Cataloging-in-Publication Data***

Habley, Wesley R.

Increasing persistence : research-based strategies for college student success / Wesley R. Habley, Jennifer L. Bloom, Steve Robbins.—First edition.

pages cm

Includes bibliographical references and index.

ISBN 978-0-470-88843-8 (cloth), ISBN 978-1-118-22108-2 (ebk.), ISBN 978-1-118-23484-6 (ebk.), ISBN 978-1-118-25947-4 (ebk.)

1. College dropouts—United States—Prevention. I. Bloom, Jennifer L. II. Robbins, Steven B. III. Title.

LC148.15.H33 2012

378.1'69130973—dc23

2012011835

# Figures and Tables

## Figures

- [Figure 2.1](#) Habley Retention Model
- [Figure 8.1](#) Student A: Low ACT, Low Motivation
- [Figure 8.2](#) Student B: Low ACT, High Motivation
- [Figure 8.3](#) Student C: High ACT, Low Motivation
- [Figure 8.4](#) Student D: High ACT, High Motivation
- [Figure 9.1](#) Example Outcomes That Effective Career Planning Can Support at Different Life Stages
- [Figure 9.2](#) The World-of-Work Map
- [Figure 9.3](#) Percentage of Students Persisting in Their Current Major, by ACT Scores and Interest-Major Fit
- [Figure 9.4](#) Percentage of Students Attaining a Timely Postsecondary Degree, by ACT Scores and Interest-Major Fit
- [Figure 9.5](#) Example Interest-Major Fit
- [Figure 9.6](#) Example of Risk Indices
- [Figure 9.7](#) Career Decision Making Model
- [Figure 9.8](#) Career Center Resources by Stage
- [Figure 10.1](#) Pyramid for Success
- [Figure 10.2](#) Expected and Hypothesized Paths to Outcomes
- [Figure 10.3](#) Results-Path Model
- [Figure 10.4](#) College Developmental Course Best Practices
- [Figure 10.5](#) Three Pillars of Success
- [Figure 12.1](#) Test Only Placement Model
- [Figure 12.2](#) Multiple Conditions Placement Model
- [Figure](#) Multiple Considerations Placement Model

### [12.3](#)

[Figure](#) Decision Zone Placement Model

### [12.4](#)

[Figure](#) Considerations in the Change Process

### [18.1](#)

[Figure](#) Attitudes Toward Change

### [18.2](#)

## **Tables**

[Table](#) Projected Population Percentage Change in Regions by Race and Hispanic Origin: 1995–2025

[Table](#) Projected Percentage Change in Public High School Graduates from 2008–09 to 2018–19 by Region and Race/Ethnicity

[Table](#) High School to College Pipeline by Race/Ethnicity

### [3.3](#)

[Table](#) Degree Completion Rates at Two- and Four-Year Institutions

### [3.4](#)

[Table](#) Percentages of College Participation/Completion of the U.S. Population 18 Years and Over by Race and Hispanic Origin: 2009

[Table](#) The Public and Private Benefits of Higher Education

### [4.1](#)

[Table](#) Cost to Recruit an Undergraduate Student: 1983–2009

### [5.1](#)

[Table](#) Cost of Tuition and Fees: 1983–2009

### [5.2](#)

[Table](#) Impact on Tuition/Fees Revenue: Typical University

### [5.3](#)

[Table](#) Impact of 3% Improvement in Retention Rates on Tuition/Fees Revenue: Typical University

[Table](#) Impact on Cost of Recruitment

### [5.5](#)

[Table](#) NAEP Pipeline—Reading Scores 1984–2008

### [7.1](#)

[Table](#) NAEP Pipeline—Math Scores: 1986–2008

### [7.2](#)

[Table](#) NAEP Pipeline—Writing Scores: 1998–2007

### [7.3](#)

[Table](#) NAEP Pipeline—Science Scores: 1996–2005

### [7.4](#)

[Table](#) Entering Class Admission Test Pipeline to College—2006–2010

### [7.5](#)

[Table](#) ACT's College Readiness Benchmarks

### [7.6](#)

[Table](#) Percentage of Students Meeting Benchmarks for 8th Graders, 10th Graders, and High School Graduates (2010e)

### [7.7](#)

<a href="#"><u>Table 7.8</u></a>	Percentage of Students Achieving at Least a 2.5 GPA by Performance Level
<a href="#"><u>Table 7.9</u></a>	Percentage of Students Retained from Year-to-Year by Performance Level
<a href="#"><u>Table 7.10</u></a>	Percentage of Students Making Reasonable Progress by Performance Level
<a href="#"><u>Table 7.11</u></a>	Percentage of Students Persisting to Degree by Performance Level
<a href="#"><u>Table 8.1</u></a>	Salient Psychosocial Constructs from Educational Persistence Model and Motivational Theory Perspectives
<a href="#"><u>Table 8.2</u></a>	Psychosocial and Study Skill Factor Constructs and Their Representative Measures
<a href="#"><u>Table 8.3</u></a>	Meta-Analysis Results: Predictors of Retention
<a href="#"><u>Table 8.4</u></a>	Meta-Analysis Results: Predictors of GPA
<a href="#"><u>Table 8.5</u></a>	SRI Scale Definitions and Sample Items by Student Control Factor
<a href="#"><u>Table 8.6</u></a>	Sample SRI-College Profiles
<a href="#"><u>Table 8.7</u></a>	Results of Hierarchical Linear Regression Models for Predicting GPA at Four-Year Institutions
<a href="#"><u>Table 8.8</u></a>	Results of Hierarchical Linear Regression Models for Predicting GPA at Two-Year Institutions
<a href="#"><u>Table 8.9</u></a>	Results of Hierarchical Logistic Regression Models for Predicting Retention at Four-Year Institutions
<a href="#"><u>Table 8.10</u></a>	Results of Hierarchical Logistic Regression Models for Predicting Retention at Two-Year Institutions
<a href="#"><u>Table 10.1</u></a>	Success Rates Passing Foundational Studies Math (Spring 2009), by COMPASS Pretest and Behavioral Rating Levels
<a href="#"><u>Table 10.2</u></a>	Success Rates Passing Elementary (Precredit) Math, by COMPASS Pretest and Behavioral Rating Levels
<a href="#"><u>Table 10.3</u></a>	Mean Math Gain Scores for Elementary (Precredit) Math, by Math Pretest and Behavioral Rating Levels
<a href="#"><u>Table 10.4</u></a>	Categorizing College Interventions
<a href="#"><u>Table 10.5</u></a>	Categorizing Psychosocial Factors (PSFs) & SRI Scales
<a href="#"><u>Table 10.6</u></a>	One-on-One Meetings in Student Affairs
<a href="#"><u>Table 10.7</u></a>	2007 Retention in 2008
<a href="#"><u>Table 10.8</u></a>	Resource and Services Utilization
<a href="#"><u>Table</u></a>	Association of Risk Level & Academic Service Use on Retention & First-

<a href="#"><u>10.9</u></a>	Year GPA
<a href="#"><u>Table</u></a>	2004 Survey Respondents
<a href="#"><u>11.1</u></a>	
<a href="#"><u>Table</u></a>	2010 Survey Respondents
<a href="#"><u>11.2</u></a>	
<a href="#"><u>Table</u></a>	Dropout-Prone Characteristics, 1980 and 1987 WWISR Studies
<a href="#"><u>11.3</u></a>	
<a href="#"><u>Table</u></a>	Practices with the Greatest Mean Contribution to Retention
<a href="#"><u>11.4</u></a>	
<a href="#"><u>Table</u></a>	Interventions Cited as One of the Top Three Interventions by 9% or More
<a href="#"><u>11.5</u></a>	Respondents
<a href="#"><u>Table</u></a>	Summary of Retention Rates by Institutional Type: 1983-2011
<a href="#"><u>11.6</u></a>	
<a href="#"><u>Table</u></a>	Percentage of Respondents Identifying Retention Interventions Among the
<a href="#"><u>11.7</u></a>	Top Three
<a href="#"><u>Table</u></a>	Five Select Learning Initiatives from the <i>What Works in Student Retention</i>
<a href="#"><u>13.1</u></a>	( <i>WWISR</i> ) Survey (Habley et al., 2010)
<a href="#"><u>Table</u></a>	Remaining Thirteen Learning Assistance Initiatives from the <i>WWISR</i>
<a href="#"><u>13.2</u></a>	Survey (Habley et al., 2010)
<a href="#"><u>Table</u></a>	Top Five Advising-Related Practices
<a href="#"><u>14.1</u></a>	
<a href="#"><u>Table</u></a>	Incidence and Mean Ratings of 10 Remaining Advising Practices
<a href="#"><u>14.2</u></a>	
<a href="#"><u>Table</u></a>	Ratings and Incidence Rates for First-Year Transition Programs by
<a href="#"><u>15.1</u></a>	Institutional Type
<a href="#"><u>Table</u></a>	Transition Programs Identified Among Top Three Interventions $\geq 10\%$ of
<a href="#"><u>15.2</u></a>	Respondents
<a href="#"><u>Table</u></a>	Percentage of First-Year Seminar Types
<a href="#"><u>15.3</u></a>	
<a href="#"><u>Table</u></a>	The Expanded Retention Framework
<a href="#"><u>16.1</u></a>	
<a href="#"><u>Table</u></a>	Prevention, Intervention, and Recovery Initiatives Chart
<a href="#"><u>17.1</u></a>	



# Preface

This is not simply another book on college student retention. In fact, although college student retention may be the most studied and discussed aspect of American higher education, over the last forty years, nearly every empirical study on the causes of attrition and the impact of interventions on retention has yielded only modest results. Some studies yield confounding and even contradictory results. The literature is also replete with “how-to” retention advice on virtually every campus program—advice which is either anecdotal in nature or difficult to adapt to other campus cultures. One would expect that observable strides in college student retention would coincide with the proliferation of retention studies, but this is not the case. Sadly, one out of every three students who enters higher education in a given fall term will not return for a second year (ACT, 2010e) and approximately 40% (Tinto, 1993) of all college students will never earn a degree anywhere, at anytime in their lives. Those percentages have not changed appreciably since the middle of the twentieth century.

Our firm conviction is that because of stagnant college retention and persistence-to-degree rates, this cannot be just another book on student retention. We do highlight the urgency of the retention issue and its impact on individuals and society and we provide brief overviews of retention theory and research. We also document the direct and indirect costs of recruiting versus the return on investment of students who succeed. We respect and believe in the necessity of theoretical perspectives and in the importance of empirical research, but this book does not include a comprehensive review of the retention literature. There are many other places where readers may go to find such reviews. We will, however, focus on research to the extent

that it supports our assertions. For example, a thread throughout the book is our use of the results from ACT's *What Works in Student Retention* (WWISR) (Beal & Noel, 1980; Cowart, 1987; Habley & McClanahan, 2004; Habley, McClanahan, Valiga, & Burkum, 2010) surveys because they provide three decades of longitudinal results from institutions of higher education. The consistency of WWISR results on the causes of attrition and on practices that lead to student success are at the core of this book. In addition, authors affiliated with ACT, Inc. have made significant contributions to the literature on student success, particularly on the impact of psychosocial characteristics and career development. Most of the references contributed by ACT researchers are attributed to major juried journals and published books on measurement and on applied research. Those works provide a focal point for our discussion of student success.

If this isn't simply another book on retention, then what is it? First and foremost, this is a book for practitioners and those who are responsible for coordinating and leading retention efforts at both the institutional and the public policy levels. We urge these individuals to focus intensively on those components and interventions that have been consistently tied to student success. Our study of the literature caused us to peel back the layers of theory and identify the core conditions that are necessary for students to succeed in college. We concluded that there are three primary—and, perhaps in the reader's mind, intuitive—conditions necessary for students to be successful in college. The first of these is that students must learn. Although this condition may seem so obvious that it needs no further discussion, the fact is that many students are not academically prepared to learn and thus succeed in college. Many do not demonstrate the academic skills necessary for

success in the classroom and, as a result, their ability to learn is compromised. Students will succeed if they learn!

The second condition necessary for success is that students must exhibit behaviors and develop personal characteristics that contribute to persistence. Among those are motivation, commitment, engagement, and self-regulation. The degree to which these characteristics fuel the desire to achieve an educational objective is directly related to the likelihood of success. Students will succeed if they are committed to their academic goals.

The third and final core condition is the ability to identify and commit to a plan of study that is congruent with interests and abilities. The attrition landscape is filled with students who entered academic programs where their choices were based on inaccurate information, inappropriate advice, or simply unrealistic expectations. Students will succeed if they connect to a plan of study that fits with their interests and abilities.

Hand in hand with these core conditions are the retention programs that support them. One of our concerns is that many institutions are using a shotgun approach to retention programming. That is, although we believe that all aspects of campus life contribute to retention, this book will not be a “how-to” compendium of multiple programs and services. There are many far more detailed, indeed book-length, resources on specific campus programs and services aimed at improving retention. This book is focused not on such details but rather on the basic principles that guide retention practices. We believe that institutions must focus on those programs that maximize the possibility that the core conditions above are addressed. In addition, we agree with current critics of retention efforts who suggest that many retention efforts involve simply layering on of additional services when an at-risk population is identified. The result is a hodge-podge of unintegrated programs.

Our focus has been narrowed down to four intervention areas: assessment/course placement, developmental education initiatives, academic advising, and student transition programming. There are multiple reasons why we focus only on these four intervention areas. First, in over four decades of research, these areas have been consistently cited as the most important retention initiatives in all institutional types. Second, these areas best support the three essential conditions for student success. Third, in an era of finite resources, institutional student success strategies that stress these areas are most likely to maximize the return on the investment of scarce institutional resources, both fiscal and human.

As important as these intervention programs are, we felt that the existing institutionally based retention framework supported only a limited definition of student success. The framework is both linear and temporal. It is predicated on the notion that when students enter specific colleges, they should be retained, they should persist from year to year, and they should earn a degree in a reasonable time frame. If these conditions are met for a significant percentage of the student body, then the institution is successful. Measures of institutional quality and accountability are based on the linear and temporal assumptions. As a result, the outcome metrics are retention and graduation rates. The rates tell a story about institutional success, but not about student success.

We will make the case that the existing retention framework must be expanded to account for additional measures of student success. We will argue that true student success is predicated on student achievement of educational goals regardless of the institution where the goals are achieved and the time it takes a students to achieve them. The expanded framework is not confined to one institution and it is not constrained by time or a narrow

definition of student outcome. The outcome measure is the student's attainment of an educational goal even if the achievement of that goal includes enrollment in multiple institutions and ultimate completion over an undefined time period. The framework poses the question: What would we do (or do differently) if the outcome was individual student success? While many would argue that student success is the underlying goal of all postsecondary institutions, the fact is that success is an institutional metric that discounts the educational achievements of students who pursued and perhaps achieved their educational goals at other institutions.

Finally, everyone associated with higher education has a role to play in improving student success. Those who make policy and allocate resources can have a positive effect by reviewing and revising accountability measures and structuring interinstitutional cooperation. Campus leaders must envision and work at developing a student success culture. In addition, administrators, faculty members, student affairs, and technical and support staff must recognize that the quality of relationships that students have with all members of the campus community are pivotal to student success.

Following are brief introductions to the five sections of this book.

# **Section 1: What Do We Know About Retention and Persistence to Degree?**

We review the evolution of complex student departure terminology in Chapter One, suggesting that the semantics surrounding student departure have evolved considerably over the last sixty years. Early definitions defined departure as a student problem—one of curiosity but limited institutional consequence. Students who departed before earning a degree were dropouts, nonpersisters, or simply leavers. Later definitions (retention, attrition) focused on institutional descriptors. Current thinking acknowledges that the causes of departure are shared by students and institutions. Recognition of this evolution positions institutions and their representatives for a breakthrough to create solutions based on a much broader definition of retention.

In Chapter Two, noting that this book was not intended to provide readers with an exhaustive review of the literature on retention theory, we provide a brief overview of the five major perspectives from which retention theory is drawn: sociological, psychological, organizational, economic, and cultural. We argue for an eclectic, integrative approach to these theoretical perspectives, observing that no single perspective can completely capture the complexity of student retention. In addition to these theoretical perspectives, we describe two models that are useful in conceptualizing factors influencing student retention: Seidman's Retention Formula (2005b) and Habley's Staying Environment Model (1981). This chapter also includes a review of student and institutional characteristics, as well as

institutional retention interventions. In simplifying theoretical underpinnings that are varied and intertwined, we assert that educators are now coming to understand that virtually all of what we know about student and institutional characteristics related to retention and about practices that promote retention has not changed appreciably in more than four decades. This chapter opens the door to consider new ways of looking at retention from the broader perspective of student success.

## **Section 2: The Case for Intensified Campus Efforts**

Higher education is changing. Institutions are facing major demographic shifts in their student bodies, new technology influxes, and pressures created by the global economy that have an impact on students, faculty, and staff. It is in this context that institutions must grapple with a decades-old issue: student persistence and retention. In this first section, we offer what we believe to be compelling reasons why increasing the number of students who succeed in college is a national imperative.

In Chapter Three we review the basic demographic changes that are affecting student success, chiefly that by 2050 50% of the United States population will be minorities. The implications of these major demographic shifts are multifold. For example, it is expected that the U.S. Hispanic population will increase dramatically, yet college enrollment and persistence to degree among Hispanic students is significantly lower than that of all other racial/ethnic groups. In addition to the Hispanic population, the college access and completion picture for black and for Native American/Alaskan Native students is also bleak. These demographics provide significant cause for concern when considering the future preparedness of the U.S. workforce in relation to increasing global competition. If the U.S. educational system is not able to ensure that more underrepresented minorities have access to and are able to complete college, the nation will be at a competitive disadvantage with the economies of other developed countries.

In Chapter Four we explore both the public and private benefits of higher education, arguing that the government



has long taken an active role in promoting higher education through legislation such the Morrill Acts, National Defense Acts, and through other government funding subsidies. This vested public interest should come as no surprise given the number of public economic and social benefits of higher education. College graduates provide benefits such as increased tax revenue, greater productivity and consumption, decreased reliance on government support, and a positive economic community. As individuals, college graduates earn higher salaries, have greater mobility, have increased personal savings, have access to better health care, have longer life expectancies, provide a better quality of life for their offspring, and enjoy increased personal status, to name only a few benefits. When looked at in their entirety, the benefits of a single college graduate can be quantified at \$97,180 (McMahon, 2009), with the public benefits outweighing the private benefits.

Institutional economics of retention are explored in Chapter Five as we discuss the cost of recruitment in relation to the cost of retention. Direct costs of recruitment are relatively simple to calculate. They include personnel, travel, facilities, and supplies. Indirect costs are more difficult to calculate, but they are part of the costs of providing a competitive recruitment process. Indirect costs of competing for students include, but are not limited to, such things as classroom technology, recreation centers, and residence hall renovations.

Retention costs, however, are difficult to calculate and include lost tuition, cost of replacing a lost student, lost student aid, and reduced need for instructional staff. While it would be problematic to produce an exact figure, and it is far easier to measure recruitment costs than it is to calculate retention costs, the authors maintain that it is more cost-effective to retain a student through to degree completion than it is to replace a lost student. In addition,

the benefits to the individual student retained are immeasurable.

We build a strong case that because retention and degree completion statistics have been stagnant for nearly a half century, investing in retention programming is not only cost-effective but is also an institutional imperative. Finally, we call for concerted efforts to provide evidence and empirical data on student success beyond anecdotes and heartwarming stories. In an environment of finite resources, it is critical that institutions show that what they do makes a difference in student success.

# **Section 3: Core Components of Student Success**

Building on the previous section's focus on the need to intensify retention efforts, this section addresses what we believe to be the most important components that should guide campus retention programming.

First, in Chapter Six we examine the roles of institutional culture and student engagement in student persistence. The strength of the American higher education system is in its diversity, which creates unique campus cultures, each with its own ethos. This diversity means that there is no such thing as the "right" institutional culture just as there is no such thing as a typical student. Our review includes the results of the Project on Documenting Effective Education Practice (DEEP), which is derived from the National Survey of Student Engagement (NSSE), as well as Kramer's elements that foster student success (2007). Those reports suggest that student success must be woven throughout the culture of an institution. Student success is everyone's responsibility. Finally, we present concrete suggestions for creating a culture that supports and encourages student success.

Chapter Seven includes a brief review of relevant literature that underscores the importance of student academic preparation for college-level coursework and the dramatic impact it has on college success. We describe the level of preparation necessary for college success and the effect of solid preparation on student grade point average, progression, retention, and persistence to degree. Then, we examine the purported key indicators of college readiness,

including high school grades, dual enrollment programs, and advanced placement courses. We conclude that grade inflation, dual enrollment, and advanced placement may actually mask the college readiness picture because (1) grade inflation is on the rise and (2) students who participate in dual enrollment and AP programs are those who are already most likely to succeed in college. Such programs focus on the academically talented students, not on average students and certainly not on at-risk students. Despite these initiatives, overall academic preparedness is not improving, and some would suggest it is declining. One certainly is that the global competitiveness of U.S. students is in decline. Finally, we discuss the role that postsecondary institutions can and do play in college academic readiness.

Chapter Eight focuses on the relationship between psychosocial development and student success. Along with other researchers, we contend that to fully understand student persistence one must understand student personality, attitudes, and behavior, and we offer a meta-analysis supporting that position. The meta-analysis pinpoints the relationship between educational persistence and theories of motivation and self-efficacy. We explore nine domains that encompass students' psychosocial development in relation to persistence, including: achievement, goals, commitment to institution, perceived social support, involvement, self-efficacy, self-concept, academic skill, financial support, size of the institution, and institutional selectivity. Of these factors, the academically related ones are the most significantly correlated with student success. Finally, we focus on the use of psychosocial assessment tools to assist colleges in the creation of targeted initiatives to improve retention and academic success in high-risk areas.

Chapter Nine focuses on the role of career development in student success. We present a review of the literature,

concluding that career development and direction are a critical component of student persistence. Our belief is that structured career exploration is necessary because students frequently lack the knowledge, confidence, and social support to engage in significant career exploration on their own. For many students college is the first opportunity they have to explore career options in a meaningful way. Our assertions are bolstered by empirical data showing that career planning has a positive impact on student success because it broadens student opportunities, increases a student's sense of purpose, creates academic relevance between coursework and a student's real-life goals, and increases a student's overall engagement with the institution. Career exploration and development also is an element of student-environment fit, drawing attention to students' strengths and encouraging persistence by aligning students' educational goals with their interests and their values. Finally, we offer a number of practical ways for an institution to guide students through the career exploration process.

In Chapter Ten we provide an analysis of the collective impact of academic, psychosocial, and career development initiatives on student persistence and success. All three areas are incorporated into a comprehensive model that informs and supports academic persistence and success. Academic success builds confidence and thus drives all other indicators and success outcomes. Finally, we present a pyramid for success, which depicts a cognitive foundation upon which the psychosocial and career factors rest. Within the pyramid framework, we offer specific intervention strategies to successfully integrate the components of student success outlined in the preceding chapters.

## **Section 4: Proven Student Success Practices**

Guided by the critical components (culture, academic preparation, psychosocial development, and career preparation) discussed in the previous section, the focus of section IV includes the identification and discussion of the practices that provide the best opportunity to successfully address those components. This examination is based on a review of three decades of data derived from ACT's *What Works in Student Retention* Surveys (WWISR).

In Chapter Eleven, we report on the first comprehensive and collective review of all four WWISR studies comparing and contrasting the common themes that run throughout. This comparative view, including all institutions, provides a broad perspective of practices that are particularly successful in student retention. Following our review of the themes, we explore the data patterns from three perspectives: institutional characteristics that contribute to attrition; student characteristics that contribute to attrition; and retention programs, practices, and interventions. In all four WWISR surveys, student characteristics were rated as the single greatest cluster of factors contributing to attrition. Finally, utilizing additional data reports run on WWISR (Habley, McClanahan, Valiga, & Burkum, 2010), we examine high-risk populations and the specific factors that contribute to minority student attrition and retention. We conclude that over the last forty years most of what we know about the causes of attrition and about successful retention initiatives may have varied in semantics but not in substance.

Chapter Twelve provides an overview of the impact of course placement practices on student success. Based on