## Andrew K. Koch EDITOR

Improving Teaching, Learning, Equity, and Success in Gateway Courses



Wiley Online Library

NUMBER 180 » WINTER 2017



A Wiley Brand

»

New Directions for Higher Education

Betsy O. Barefoot Jillian L. Kinzie CO-EDITORS

> Improving Teaching, Learning, Equity, and Success in Gateway Courses

Andrew K. Koch Editor

> Number 180 • Winter 2017 Jossey-Bass San Francisco

Improving Teaching, Learning, Equity, and Success in Gateway Courses Andrew K. Koch New Directions for Higher Education, no. 180

Co-editors: Betsy O. Barefoot and Jillian L. Kinzie

NEW DIRECTIONS FOR HIGHER EDUCATION, (Print ISSN: 0271-0560; Online ISSN: 1536-0741), is published quarterly by Wiley Subscription Services, Inc., a Wiley Company, 111 River St., Hoboken, NJ 07030-5774 USA.

Postmaster: Send all address changes to NEW DIRECTIONS FOR HIGHER EDUCATION, John Wiley & Sons Inc., C/O The Sheridan Press, PO Box 465, Hanover, PA 17331 USA.

### Copyright and Copying (in any format)

Copyright © 2017 Wiley Periodicals, Inc., a Wiley Company. All rights reserved. No part of this publication may be reproduced, stored or transmitted in any form or by any means without the prior permission in writing from the copyright holder. Authorization to copy items for internal and personal use is granted by the copyright holder for libraries and other users registered with their local Reproduction Rights Organisation (RRO), e.g. Copyright Clearance Center (CCC), 222 Rosewood Drive, Danvers, MA 01923, USA (www.copyright.com), provided the appropriate fee is paid directly to the RRO. This consent does not extend to other kinds of copying such as copying for general distribution, for advertising or promotional purposes, for republication, for creating new collective works or for resale. Permissions for such reuse can be obtained using the RightsLink "Request Permissions" link on Wiley Online Library. Special requests should be addressed to: permissions@wiley.com

### Information for subscribers

New Directions for Higher Education is published in 4 issues per year. Institutional subscription prices for 2017 are:

Print & Online: US\$454 (US), US\$507 (Canada & Mexico), US\$554 (Rest of World), €363 (Europe), £285 (UK). Prices are exclusive of tax. Asia-Pacific GST, Canadian GST/HST and European VAT will be applied at the appropriate rates. For more information on current tax rates, please go to www.wileyonlinelibrary.com/tax-vat. The price includes online access to the current and all online back-files to January 1st 2013, where available. For other pricing options, including access information and terms and conditions, please visit www.wileyonlinelibrary.com/access.

### **Delivery Terms and Legal Title**

Where the subscription price includes print issues and delivery is to the recipient's address, delivery terms are **Delivered at Place (DAP)**; the recipient is responsible for paying any import duty or taxes. Title to all issues transfers FOB our shipping point, freight prepaid. We will endeavour to fulfil claims for missing or damaged copies within six months of publication, within our reasonable discretion and subject to availability.

Back issues: Single issues from current and recent volumes are available at the current single issue price from cs-journals@wiley.com.

### Disclaimer

The Publisher and Editors cannot be held responsible for errors or any consequences arising from the use of information contained in this journal; the views and opinions expressed do not necessarily reflect those of the Publisher and Editors, neither does the publication of advertisements constitute any endorsement by the Publisher and Editors of the products advertised.

Publisher: New Directions for Student Leadership is published by Wiley Periodicals, Inc., 350 Main St., Malden, MA 02148-5020.

**Journal Customer Services:** For ordering information, claims and any enquiry concerning your journal subscription please go to www.wileycustomerhelp.com/ask or contact your nearest office.

Americas: Email: cs-journals@wiley.com; Tel: +1 781 388 8598 or +1 800 835 6770 (toll free in the USA & Canada).

Europe, Middle East and Africa: Email: cs-journals@wiley.com; Tel: +44 (0) 1865 778315.

Asia Pacific: Email: cs-journals@wiley.com; Tel: +65 6511 8000.

Japan: For Japanese speaking support, Email: cs-japan@wiley.com.

Visit our Online Customer Help available in 7 languages at www.wileycustomerhelp.com/ask

Production Editor: Abha Mehta (email: abmehta@wiley.com).

Wiley's Corporate Citizenship initiative seeks to address the environmental, social, economic, and ethical challenges faced in our business and which are important to our diverse stakeholder groups. Since launching the initiative, we have focused on sharing our content with those in need, enhancing community philanthropy, reducing our carbon impact, creating global guidelines and best practices for paper use, establishing a vendor code of ethics, and engaging our colleagues and other stakeholders in our efforts. Follow our progress at www.wiley.com/go/citizenship

View this journal online at wileyonlinelibrary.com/journal/he

Wiley is a founding member of the UN-backed HINARI, AGORA, and OARE initiatives. They are now collectively known as Research4Life, making online scientific content available free or at nominal cost to researchers in developing countries. Please visit Wiley's Content Access - Corporate Citizenship site: http://www.wiley.com/WileyCDA/Section/id-390082.html

Printed in the USA by The Sheridan Group.

Address for Editorial Correspondence: Co-editors, Betsy Barefoot and Jillian L. Kinzie, New Directions for Higher Education, Email: barefoot@jngi.org

#### Abstracting and Indexing Services

The Journal is indexed by Academic Search Alumni Edition (EBSCO Publishing); Higher Education Abstracts (Claremont Graduate University); MLA International Bibliography (MLA).

Cover design: Wiley Cover Images: © Lava 4 images | Shutterstock

For submission instructions, subscription and all other information visit: wileyonlinelibrary.com/journal/he

# CONTENTS

EDITOR'S NOTES Andrew K. Koch
<ul> <li>Part I. The Issue</li> <li>1. It's About the Gateway Courses: Defining and Contextualizing the Issue</li> <li>Andrew K. Koch</li> <li>This introductory chapter defines the phrase gateway courses, describes why these courses are one of the most compelling issues in the contemporary student success movement, and details what is at stake if the issues associated with these courses are left unaddressed.</li> </ul>
<ul> <li>Part II. Data-Based Decisions and Actions</li> <li>2. Guiding Early and Often: Using Curricular and Learning Analytics to Shape Teaching, Learning, and Student Success in Gateway Courses</li> <li>Matthew D. Pistilli, Gregory L. Heileman</li> <li>This chapter provides information on how the promise of analytics can be realized in gateway courses through a combination of good data science and the thoughtful application of outcomes to teaching and learning improvement effortsespecially with and among instructors.</li> </ul>
3. Putting the "Evidence" in Evidence-Based: Utilizing Institutional Research to Drive Gateway-Course Reform <i>Emily A. Berg, Mark Hanson</i> This chapter provides an example of how one university's institutional research office played an active role in using data from institutional studies to guide the university toward courses ripe for change, faculty toward successful teaching strategies, students toward successful learning behaviors, and the university toward assessing the impact of the changes.
<ul> <li>Part III. The Role of Academic Stakeholders</li> <li>4. The Case for Intentionally Interwoven Peer Learning Supports in Gateway-Course Improvement Efforts</li> <li>Johanna Dvorak, Kathryn Tucker</li> <li>This chapter describes how peer learning support programs can be used to improve learning and success in gateway courses. It provides</li> </ul>

examples from two institutions to further illustrate how this promising approach can improve student outcomes.

5. Fostering Evidence-Informed Teaching in Crucial Classes: Faculty Development in Gateway Courses <i>Susannah McGowan, Peter Felten, Joshua Caulkins, Isis Artze-Vega</i> Faculty and faculty developers can improve student learning and outcomes in gateway courses by improving course design, integrating active learning, and aligning assessments with course goals. Drawing on the authors' varied experiences and a large national initiative, this chapter outlines challenges and strategies to support gateway-course faculty development.	53
<ul> <li>6. Chief Academic Officers and Gateway Courses: Keys to Institutional Retention and Persistence Agendas <i>Roberta S. Matthews, Scott Newman</i></li> <li>Among persistence and retention agenda initiatives undertaken by colleges and universities, gateway-course improvement efforts are often overlooked. However, the engagement of diverse institutional stakeholders in the transformation of gateway courses can contribute significantly to student success. Chief academic officers are in a unique position to sponsor such initiatives.</li> </ul>	63
7. Why Gateway-Course Improvement Should Matter to Academic Discipline Associations and What They Can Do to Address the Issues <i>Julia Brookins, Emily Swafford</i> Academic faculty members often maintain strong identities based on the primary discipline of their graduate training and teaching. While teaching cultures differ across fields, discipline associations like the American Historical Association have been active in supporting student-centered curricular work.	75
<b>Part IV. Integrated Approaches and Systems</b> 8. Intentionally Linking Gateway-Course Transformation Efforts with Guided Pathways <i>Martine Courant Rife, Christine Conner</i> Offered as a case study, this chapter shows how Lansing Community College intentionally combined efforts to redesign eight high-risk courses with efforts to create clearer guided curricular pathways for the college's students.	89
9. Maximizing Gateway-Course Improvement by Making the Whole Greater Than the Sum of the Parts <i>Andrew K. Koch, Richard J. Prystowsky, Tony Scinta</i> Drawing on systems theory, this chapter uses two different institutional examples to demonstrate the benefits of combining gateway-course improvement initiatives with other student success efforts so that the combined approach makes the whole greater than the simple sum of the pieces.	99

This introductory chapter defines the phrase gateway courses, describes why these courses are one of the most compelling issues in the contemporary student success movement, and details what is at stake if the issues associated with these courses are left unaddressed.

## It's About the Gateway Courses: Defining and Contextualizing the Issue

Andrew K. Koch

## The Situation

In 1992, political strategist James Carville rallied Bill Clinton's campaign workers around the mantra "It's the economy, stupid." Carville was not attempting to insult anyone's intelligence. Rather, he was making the simple yet profound political point that discussing issues other than the economy would waste resources and time, and probably result in Clinton's defeat. Originally posted on an office wall placard and intended only for the campaign staff, Carville's quip quickly became the de facto slogan for the entire campaign. It helped the Clinton team develop and maintain a focus that ultimately won the election. In years since, "It's the economy, stupid," has become part of American political pundits' vernacular—a mechanism for quickly pinpointing what matters most in an election (Galoozis, 2012).

Carville's mantra and its associated lessons also happen to form the perfect rhetorical concept for explaining why an increased focus on gateway courses—foundational college courses that are high-risk and highenrollment—is necessary. This volume is intended to provide guidance for the faculty, staff, and administrators in the vanguard of gateway-course improvement who are taking steps to advance and bring to scale this new direction for higher education. I, along with the chapter authors featured in this volume, argue that in 2017, what matters most in the student success movement is our ability to develop and maintain a focus on gateway courses.

Many of us who have worked in and provided thought leadership for the student success movement in the United States over the past 40 years have not paid attention to gateway (or "killer") courses in which students face the greatest risk of poor performance or outright failure. Instead, we have focused on other efforts such as learning communities, orientation programs, first-year seminars, and a whole host of other "high-impact practices" (Barefoot et al., 2005; Barefoot, Griffin, & Koch, 2012; Greenfield, Keup, & Gardner, 2013; Koch, 2001; Koch, Foote, Hinkle, Keup, & Pistilli, 2007; Kuh, 2008; Stein Koch, Griffin, & Barefoot, 2013; Upcraft & Gardner, 1989; Upcraft, Gardner, & Barefoot, 2005). To date, these high-impact practices have circumvented the experiences that undergraduates have in gateway courses—experiences that may, in fact, matter most to their success. And until recent years, there has been no concomitant effort to substantively transform the way gateway courses are designed and taught. As a result, failure rates in gateway courses have largely remained unchanged. The effect of these courses can be devastating, particularly for America's least advantaged, first-generation, and historically underrepresented students (Koch, 2017; Koch & Gardner, In Press).

Early student success leaders, however, should not be faulted for their lack of focus on foundational courses. They and their efforts were products of the space, place, and time in which they were operating. David Pace, the accomplished historian and scholar of teaching and learning, aptly described the environment in which student success pioneers were acting. Making his opening comments during a workshop at the 2017 American Historical Association annual meeting, Pace quipped, "In the 1970s and 1980s, the classroom was like the bathroom. You knew something important happened there, and you *never* talked about it!" (Pace, 2017). To date, student success thought leaders have generally focused their actions on activities other than undergraduate courses, including gateway courses, and have had little interaction with faculty.

But this is 2017. And we can now safely say that the sum total of the student success efforts created and initiated in the four-plus decades spanning the late twentieth and early twenty-first centuries have not managed to budge the retention and completion needle in any significant manner. For example, according to ACT, 68.3% of all students who started in a college of any type in fall 1999 returned to that college in fall 2000 (ACT, 2000). In 2015, 15 years later, the rate was 68.0% (ACT, 2015). The good news is that since the 1960s, legislation such as the Civil Rights Act and the Higher Education Acts greatly expanded access to postsecondary education. And contrary to what might have been logically predicted, increased access did not lead to decreases in retention and completion. But neither have there been widespread gains in these outcomes, even though there has been a large influx of state and federal resources to support student success programs.

Thanks to a new and growing body of scholarship on teaching and learning that has emerged over the past decade, we can now point to an array of evidence-based approaches and strategies that have the potential to move student success rates measurably beyond their persistently static level (ACT, 2000, 2015). And unlike most of the efforts that preceded them, these strategies are directly embedded in gateway-course classrooms of all kinds—online, blended, or face-to-face.

### **Gateway Courses Defined**

This publication's chapter contributors and I are all drawing on a definition for *gateway courses* that is being used in the Gateways to Completion (G2C) project sponsored by the nonprofit John N. Gardner Institute for Excellence in Undergraduate Education (Gardner Institute). Forty institutions, including 2- and 4-year, public and private, not-for-profit, and proprietary, enrolling nearly 700,000 undergraduates, have been involved in the G2C effort since it was launched in fall 2013. With significant input from a national advisory committee, Gardner Institute staff members crafted the following definition, which is applicable to diverse institutions.

Gateway courses are defined by Koch and Rodier (2014) as any courses that are:

- **Foundational**: These courses may be non-credit-bearing developmental education courses—which often serve as initial paths to the gateway courses—and/or college credit-bearing, generally lower-division courses.
- **High-risk**: Such courses are identified by the rates at which D, F, W (for any form of withdrawal on the transcript) and I (for incomplete) grades are earned across sections of the course(s). Note that there is no set threshold rate; what constitutes an acceptable rate should be discussed and defined in local institutional contexts. Also note that W and I grades are included in the mix. Some argue that W and I grades should not be included because these grades do not factor into the grade point average. However, W and I grades do very much have deleterious implications for students over time.

W grades indicate withdrawal for any reason once the formal drop period has ended—usually a few weeks after the start of a term. Unlike a drop, Ws do appear on the transcript, and often they reflect a student's leaving the course before the end of a term as an alternative to earning a D or an F. What's particularly important about the W grade is the fact that the federal government only allows Ws to constitute a certain proportion of overall grades in its "Satisfactory Academic Progress" (SAP) formula, which is associated with determining eligibility for financial aid. In short, if students earn too many Ws, they will lose eligibility for federally backed loans and grants. For many students, failure to qualify for federal aid of any kind essentially rules out attendance and completion altogether. It does not, however, absolve students' responsibility for past loans. Thus, students—especially those from low- and middle-income families—who no longer qualify for federal aid leave college in debt, without their degrees, and with debt collectors soon to follow when the students discover they lack the credentials to get jobs that would help them pay back what they owe.

Unlike W grades, I grades do carry grade point average implications, even if they are not as immediate as those associated with the D or F grades. These implications are realized after the term limit has expired. As explained on the website for the University of Missouri's Office of the Registrar, "An undergraduate student who receives an I grade must complete the course requirements either (1) within one year from the date it was recorded ... or (2) before the date of graduation, whichever comes first." The policy continues, "When an incomplete is satisfactorily resolved, the faculty member responsible for the grade change will notify the registrar of the revised grade. Otherwise, the registrar will remove the I and record a grade of F in classes graded A-F ..." (University of Missouri Office of the Registrar, 2017). The University of Missouri's policy reflects common practice across the majority of colleges and universities in the United States. What also is fairly common across colleges and universities is that there is a significant proportion of students for whom I grades revert to Fs—significant enough to prompt the former U.S. Department of Education researcher Cliff Adelman to begin tracking the I grade as part of a "DWI index," where DWI stood for "Drops (legitimate, in the drop-add period), non-penalty Withdrawals, Incompletes" (Adelman, 1999, 2006).

• **High-enrollment**: These courses are identified by the number of students enrolled within and/or across course sections. Note here that we do not set a number threshold, since context matters. My colleagues and I believe that all institutions, whether they enroll 400 or 40,000 undergraduates, have high-enrollment courses. What constitutes high enrollment at one institution differs from another—but the courses are a ubiquitous feature in U.S. higher education.

### Why This Issue Matters

To better understand the impact of gateway courses in contemporary twenty-first-century postsecondary education, we must further explore the issue within the context of who is coming to college and what educators must do to meet the demands associated with changing demographics.

There is something very important at stake in gateway courses. Simply stated, as supported by a growing body of scholarship produced over the past decade, the students who do not succeed in gateway courses disproportionately come from lower-income, first-generation, and underrepresented minority groups (Koch, 2017). They are the students least likely to attempt college, and, even when they do attend, are the least likely to complete a degree. Also, their failure in gateway courses is directly correlated with their departure from college. They leave with their dreams diverted if not extinguished and frequently with debt that they might never be able to repay.

My Gardner Institute colleagues and I believe that these findings have serious and negative implications for equity and social justice in U.S. higher education.

Institutional enrollment management and related financial factors also must be considered when examining gateway-course issues. The pool of high school graduates is projected to decrease nationally for the near term (approximately 15 years). Where and when the number of high school graduates grows, it will do so primarily in high-risk demographic pools historically underserved students who are unlikely to attend college and even less likely to complete a postsecondary degree even if they enroll (Prescott, 2008; Prescott & Bransberger, 2012). In short, if nothing is done to transform the gateway-course experience, institutions and their budgets will be much smaller—and less able to support their missions.

The situation and conditions described in the previous two paragraphs should never be misconstrued as a call to "give everyone an A." We believe that expectations should be high; standards should be maintained. However, it is one thing for students to leave college if they fail to put forth effort. It is another thing altogether if students do put forth strong effort and the institutions that they attend fail to reciprocate by investing effort in course improvement.

Twenty-first-century learners require twenty-first-century teaching and learning strategies—strategies that take into account the students' potential gaps in social and cultural capital (Braxton et al., 2013; Wells, 2008a, 2008b). Alas, many faculty and institutions are not using these strategies (National Research Council, 2012; Seymour & Hewitt, 1997), even if these approaches are correlated with so much improvement that, as one researcher put it, "if the [course redesign] experiments analyzed here had been conducted as randomized controlled trials of medical interventions, they may have been stopped for benefit" (Freeman et al., 2014).

Because gateway courses are largely untouched territory in the contemporary student success movement and because they increasingly enroll some of postsecondary education's most at-risk students, we believe they constitute the greatest higher education student success challenge of the early twenty-first century in the United States and, potentially, in many other countries across the globe. But attempting to focus on improving student success in gateway courses without focusing on improving gatewaycourse teaching and learning is folly.

In the present day, responsible academic leaders and academic communities must undertake wide-scale efforts to transform teaching and learning in their gateway courses and, where they already exist, these efforts must be expanded so they are not limited to a few motivated, but overwhelmed, faculty members. These actions will be difficult and complex, but, in light of demographic changes and societal needs, doing otherwise borders on malfeasance—because, when it comes to the twenty-first-century student success movement, the focus clearly needs to be on gateway courses.

### References

- ACT. (2000). National collegiate dropout and graduation rates—2000. Available from http://www.act.org/content/dam/act/unsecured/documents/retain\_2000.pdf
- ACT. (2015). National collegiate retention and persistence-to-degree rates—2015. Available from http://www.act.org/content/dam/act/unsecured/documents/retain\_2015.pdf
- Adelman, C. (1999). Answers in the toolbox: Academic intensity, academic patterns, and bachelor's degree attainment. Washington, DC: U.S. Department of Education.
- Adelman, C. (2006). The toolbox revisited: Paths to degree completion from high school through college. Washington, DC: U.S. Department of Education.
- Barefoot, B. O., Gardner, J. N., Cutright, M., Morris, L. V., Schroeder, C. C., Schwartz, S. W., ... Swing, R. L. (2005). Achieving and sustaining institutional excellence for the first year of college. San Francisco, CA: Jossey-Bass.
- Barefoot, B. O., Griffin, B. Q., & Koch, A. K. (2012). Enhancing student success and retention throughout undergraduate education: A national survey. Brevard, NC: John N. Gardner Institute for Excellence in Undergraduate Education. Available from http://www.jngi.org/wordpress/wp-content/uploads/2012/04/JNGInational\_survey\_ web.pdf
- Braxton, J. M., Doyle, W. R., Hartley, H. V., III, Hirschy, A. S., Jones, W. A., & McLendon, M. K. (2013). *Rethinking college student retention*. Hoboken, NJ: Wiley.
- Freeman, S., Eddy, S. L., McDonough, M., Smith, M. K., Okoroafor, N., Jordt, H., & Wenderoth, M. P. (2014). Active learning increases student performance in science, engineering, and mathematics. *Proceedings of the National Academy of Sciences*, 111(23), 8410–8415.
- Galoozis, C. (2012, October 17). It's the economy, stupid. *Harvard Political Review*. Retrieved from http://harvardpolitics.com/united-states/its-the-economy-stupid/
- Greenfield, G. M., Keup, J. R., & Gardner, J. N. (2013). Developing and sustaining successful first-year programs: A guide for practitioners. San Francisco, CA: Jossey-Bass.
- Koch, A. K. (2001). The first-year experience in American higher education: An annotated bibliography (Monograph No. 3). Columbia, SC: University of South Carolina, National Resource Center for the First-Year Experience and Students in Transition.
- Koch, A. K. (2017, May). Many thousands failed: A wakeup call to history educators. *Perspectives on History*, 55, 18–19. Available from https://www.historians.org/ publications-and-directories/perspectives-on-history/may-2017/many-thousands-fail ed-a-wakeup-call-to-history-educators
- Koch, A. K., Foote, S. M., Hinkle, S. E., Keup, J. R., & Pistilli, M. D. (2007). The firstyear experience in American higher education: An annotated bibliography (Monograph No. 4). Columbia, SC: University of South Carolina, National Resource Center for the First-Year Experience and Students in Transition.
- Koch, A. K., & Gardner, J. N. (In Press). Transforming the "real first-year experience": The case for and approaches to improving gateway courses. In R. Feldman (Ed.), The first year of college: Research, theory, and practice on improving the student experience and increasing retention. New York, NY: Cambridge University Press.
- Koch, A. K., & Rodier, R. (2014). *Gateways to Completion guidebook*. Brevard, NC: John N. Gardner Institute for Excellence in Undergraduate Education.
- Kuh, George D. (2008). High-impact educational practices: What they are, who has access to them, and why they matter. Washington, DC: Association of American Colleges and Universities.
- National Research Council. (2012). Discipline-based education research: Understanding and improving learning in undergraduate science and engineering. Washington, DC: National Academies Press.
- Pace, D. (2017, January). Focus on teaching pre-conference workshop sponsored by the International Society for the Scholarship of Teaching and Learning in History. Paper presented at the American Historical Association 2017 Annual Meeting, Denver, CO.

- Prescott, B. T. (2008). Knocking at the college door: Projections of high school graduates by state and race/ethnicity, 1992–2022. Boulder, CO: Western Interstate Commission for Higher Education.
- Prescott, B. T., & Bransberger, P. (2012). Knocking at the college door: Projections of high school graduates. Boulder, CO: Western Interstate Commission for Higher Education.
- Seymour, E., & Hewitt, N. M. (1997). *Talking about leaving: Why undergraduates leave the sciences*. Boulder, CO: Westview Press.
- Stein Koch, S. J., Griffin, B. Q., & Barefoot, B. O. (2013). National survey of student success initiatives at two-year colleges. Brevard, NC: John N. Gardner Institute for Excellence in Undergraduate Education. Available from http://www.jngi.org/wordpress/ wp-content/uploads/2014/07/National-2-yr-Survey-Booklet\_webversion.pdf
- University of Missouri Officer of the Registrar. (2017). *Grades, incomplete.* Columbia, MO. Available from http://registrar.missouri.edu/policies-procedures/grades-incomp lete-grades.php
- Upcraft, M. L., & Gardner, J. N. (1989). The freshman year experience: Helping students survive and succeed in college. San Francisco, CA: Jossey-Bass.
- Upcraft, M. L., Gardner, J. N., & Barefoot, B. O. (2005). *Challenging and supporting the first-year student: A handbook for improving the first year of college.* San Francisco, CA: Jossey-Bass.
- Wells, R. (2008a). Social and cultural capital, race and ethnicity, and college student retention. *Journal of College Student Retention: Research, Theory & Practice*, 10(2), 103–128.
- Wells, R. (2008b). The effects of social and cultural capital on student persistence: Are community colleges more meritocratic? *Community College Review*, 36(1), 25–46.

ANDREW K. KOCH is the president and chief operating officer of the nonprofit John N. Gardner Institute for Excellence in Undergraduate Education, located in Brevard, North Carolina.