



Ensuring Quality & Taking High-Impact Practices to Scale



BY GEORGE D. KUH AND KEN O'DONNELL
WITH CASE STUDIES BY SALLY REED





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*Association
of American
Colleges and
Universities*

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Contents



ACKNOWLEDGMENTS.....	IV
FOREWORD	V
BY CAROL GEARY SCHNEIDER AND DEBRA HUMPHREYS	
PART 1	1
Taking HIPs to the Next Level	
BY GEORGE D. KUH	
PART 2	15
Bringing HIPs to Scale: Turning Good Practice into Lasting Policy	
BY KEN O'DONNELL	
PART 3	23
Case Studies	
BY SALLY REED	
<i>California State University–East Bay Creates High-Impact Clusters</i>	23
<i>Elon University Engages Students on Campus and Around the Globe</i>	28
<i>Hendrix College Makes an Odyssey.....</i>	32
<i>Queensborough Community College Scales Up a Freshman Academy.....</i>	36
<i>University of Wisconsin–Oshkosh Builds New University Studies Program.....</i>	40
APPENDIX A.....	45
NSSE Deep/Integrative Learning Scale	
APPENDIX B	46
Relationships between Selected High-Impact Activities, Deep Learning, and Self-Reported Gains by Student Background Characteristics	
APPENDIX C	49
A Guide to High-Impact Practices	
ABOUT THE AUTHORS.....	50

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We also are grateful to the other members of the Liberal Education and America's Promise National Leadership Council for their continued guidance and wise insights, and to many members of the AAC&U staff who contributed to the research and preparation of this manuscript, especially Shelley Johnson Carey for her expert editing.

In California, the dozens of colleges and universities participating in the Give Students a Compass project have done the real work of learning how to take the best of what we do, and make it universal.

Finally, we thank the thousands of faculty and staff at AAC&U member and other campuses all across the country that are helping to further develop, test, and refine the high-impact practices featured in this publication. Their continuing efforts to enhance student learning and personal development by ensuring that more undergraduates reap the benefits of an engaged liberal education will be essential to fulfilling the promise of American higher education.



Foreword



CAROL GEARY SCHNEIDER

President, Association of American Colleges and Universities

DEBRA HUMPHREYS

Vice President for Policy and Public Engagement,
Association of American Colleges and Universities

As part of the Association of American Colleges and Universities' (AAC&U) centennial initiative, Liberal Education and America's Promise (LEAP), we are pleased to publish another report in our series on educational practices that successfully prepare today's college students to meet twenty-first-century challenges.

LEAP is a national initiative launched in 2005 that now involves hundreds of private and public colleges, universities, and community colleges; several consortia; and eight formal partnerships with state systems of higher education. LEAP engages the public with core questions about what really matters in college, works to give students a compass to guide their learning, and makes the aims and outcomes of a liberal education—including broad knowledge, intellectual and practical skills, personal and social responsibility, and integrative learning—the expected framework for excellence at all levels of education. The LEAP initiative also strives to “make excellence inclusive” and is especially concerned with students who, historically, have been underserved by higher education.

This new LEAP report builds from the ground-breaking and bestselling research report by George D. Kuh, *High-Impact Educational Practices: What They Are, Who Has Access to Them, and Why They Matter*, published in 2008. That publication probed the insights and evidence initially articulated by the LEAP National Leadership Council in its 2007 signature report, *College Learning for the New Global Century*. In an appendix to that report, Kuh and AAC&U President Carol Geary Schneider identified a set of teaching and learning practices that had been widely implemented and that had shown evidence of effectiveness in fostering completion, higher levels of achievement on key learning outcomes, or both. They noted, however, that “on almost all campuses, these practices remain optional rather than essential” (AAC&U 2007, 53). The practices identified include first-year seminars and experiences, learning communities, service learning, undergraduate research, internships, capstone projects, and more. (See Appendix C for a fuller description of the high-impact educational practices.)

Subsequently, using several years of data reported by the National Survey of Student Engagement (NSSE), Kuh and his NSSE colleagues demonstrated a high degree of correlation between student

participation in these recommended practices and students' NSSE self-reported gains on key outcomes of high-quality learning. In his 2008 report on this research, Kuh made a strong argument for why colleges, community colleges, and universities of all sorts should take a second look at these practices—now demonstrated to be “high-impact”—and figure out a way to make them expected rather than optional. Kuh noted as well that NSSE data showed a compelling extra benefit for students in groups that often have fared poorly in higher education—selected minorities and students with lower test scores.

When it was first published, Kuh's report on *High-Impact Practices* touched a nerve and produced a groundswell of interest in the higher education community. This follow-up report makes clear, however, that we still have a long way to go before the kinds of effortful, active learning that characterize these practices become the norm rather than the exception on college campuses.

That said, it also is true that in 2013, many more educators *understand* the need to move from “boutique” programs that provide these kinds of high-impact practices for selected students to new curricular pathways that provide multiple, scaffolded encounters with high-impact practices for all students. AAC&U currently is working, through several grant-funded projects, with many broad-access campuses, two-year and four-year, to accelerate the incorporation of these high-impact practices in what we call the “unavoidable curriculum,” both face-to-face and online. The evidence is compelling, we believe, that when students are actively engaged in forms of learning that move students' own effortful work to the center, they are more likely to complete college and more likely to achieve the intellectual capacities that democracy needs and the economy rewards.

Ken O'Donnell, the coauthor of this new report, *Ensuring Quality and Taking High-Impact Practices to Scale*, takes us inside these pace-setting efforts to make student involvement in high-impact practices expected rather than optional. He speaks for a reform-minded generation of higher education leaders and faculty members who have energetically engaged with the idea of, and research about, high-impact practices as a coherent body of work that has the potential—taken as a whole—to redefine the component elements of quality in higher education. But practitioners involved in these initiatives also have noted significant challenges: (1) how can we be sure that particular courses, programs, or curricula that seem to fall within the definitions of these proven practices are truly of high quality? and (2) how, exactly, can we bring these practices to scale even in the midst of constrained resources and resistance to significant curricular change?

We are very pleased to offer in this publication at least some preliminary answers to those questions, as well as both current data on the level of student participation in high-impact practices and new data on their benefits. In addition to the essays by Kuh and O'Donnell, this report features five case studies of institutions that have made significant curricular changes to bring high-impact practices to scale.

In 2013, AAC&U also will release two other publications related to high-impact educational practices. These include *Investing in Success: Cost-Effective Strategies to Increase Student Success* by Jane Wellman and Rima Brusi and *Assessing High-Impact Learning for Underserved Students* by Ashley Finley and Tia McNair.

We hope that this family of studies and examples will help you ensure that all college students will reap the benefits of an engaging and rigorous twenty-first-century liberal education.



PART 1

Taking HIPs to the Next Level



GEORGE D. KUH

Director, National Institute for Learning Outcomes Assessment;
Adjunct Professor, University of Illinois; and Chancellor's Professor of Higher Education
Emeritus, Indiana University

Collegiate experiences known today as high-impact practices (HIPs) have been around a long time. But it is only in the past few years that they have been labeled as such and attracted interest from scholars, practitioners, and policy makers as promising vehicles for promoting student success and enriching student learning. Indeed, interest in HIPs has mushroomed since the publication of *High-Impact Educational Practices* (Kuh 2008), in which I summarized the connections between HIPs and a range of desirable student behaviors and outcomes. This discovery was sparked by my personal experience and the scholarly literature—equal parts exhortation and empirical research—which suggested that students who participate in these activities benefit in a variety of ways. For example, we had previously reported strong relationships between learning community participation and engagement as measured by the National Survey of Student Engagement (NSSE) (Zhao and Kuh 2004). The HIPs analysis also was prompted by my participation in AAC&U's LEAP initiative, which sought to identify educational practices that help students develop a broad set of "Essential Learning Outcomes" (AAC&U 2007).

The results we reported in 2008 were consistent with a substantial body of work examining the educational potential of learning communities (Lenning and Ebbers 1999; Matthews 1993; Smith et al. 2004; Tinto 1995), as well as the results of inquiries into service learning (Eyler 2009; Eyler and Giles 1999; Jacoby and Associates 2009). Moreover, the strength of the relationships between student engagement, self-reported learning outcomes, and participation in these and other HIPs on the list promulgated by AAC&U was unusually strong, warranting closer examination. Since then, other studies using objective outcomes measures have found positive links between high-impact practices, persistence, and learning gains (Blaich 2009).

On balance, the patterns of positive results are generally consistent across all studies (Brownell and Swaner 2010), even though most of the research about HIPs does not take into account the structural aspects of the program or practice or how well specific high-impact practices are

implemented. That is, as practitioners know, some service-learning courses are “better” than others, especially if there are frequent instructor-mediated discussions among students and shared personal reflections about the relevance of course readings to what they are encountering in the field. Similarly, some first-year seminars and learning communities are organized in ways that more effectively compel students to reach high standards of performance while providing ample feedback along the way from peers as well as teachers. Thus, it is somewhat surprising that despite likely variation in quality from one HIP to another, students generally benefit from the experience.

In this chapter, I update the findings about high-impact practices and engagement, comparing 2012 NSSE data to those from 2007 (Kuh 2008). I also briefly describe the work underway by the Center for Community College Student Engagement at the University of Texas at Austin to identify what constitutes promising practices in the two-year sector. Throughout, the emphasis is on the critical importance of the quality of the implementation of these and other promising approaches in order to further enrich the undergraduate experience of greater numbers of students from all backgrounds.

The News About HIPs: Still Good and Could Get Better

For the past several years, NSSE’s annual reports have displayed the percentages of students participating in high-impact practices, their engagement levels, and selected self-reported gains, statistically controlling for pertinent variables. Tables 1, 2, and 3 show the most recent results, which essentially mirror the findings reported in 2008 (see also appendixes A and B). That is, the overall pattern shows the advantages in engagement and self-reported outcomes favoring HIPs participants from different backgrounds and majors. That’s all to the good.

Table 1
Relationships between Selected High-Impact Activities, Deep Learning, and Self-Reported Gains

	Deep Learning	Gains: General	Gains: Personal	Gains: Practical
<i>First-Year</i>				
Learning Communities	+++	++	++	++
Service Learning	+++	++	+++	+++
<i>Senior</i>				
Study Abroad	++	+	+	++
Student-Faculty Research	+++	++	++	++
Internships	++	++	++	++
Service Learning	+++	++	+++	+++
Senior Culminating Experience	+++	++	++	++

+ p<0.001, ++ p<0.001 & Unstd B > 0.10, +++ p<0.001 & Unstd B > 0.30

Table 2

Relationships between Selected High-Impact Activities and Clusters of Effective Educational Practices

	Level of Academic Challenge	Active and Collaborative Learning	Student–Faculty Interaction	Supportive Campus Environment
<i>First-Year</i>				
Learning Communities	+++	+++	+++	++
Service Learning	+++	+++	+++	+++
<i>Senior</i>				
Study Abroad	++	++	++	++
Student–Faculty Research	+++	+++	+++	++
Internships	++	+++	+++	++
Service Learning	+++	+++	+++	+++
Senior Culminating Experience	++	+++	+++	++

+ p<0.001, ++ p<0.001 & Unstd B > 0.10, +++ p<0.001 & Unstd B > 0.30

The Bad News: Too Few Students Take Part in HIPs

Unfortunately, not much has changed in terms of the proportions of students from various backgrounds who do them. Except for service learning, where there has been a small but steady increase since 2006, the percentages of participating students are flat (table 4). It is particularly worrisome that certain groups of students remain underrepresented in some of these practices. Proportionately fewer first-generation students, black and Hispanic students, and transfer students do research with a faculty member, study abroad, do an internship, or have a culminating senior experience. For example, in terms of study abroad, only 8 percent of African American students and 8 percent of first-generation students have such an experience, compared with more than twice as many white students and those with college-educated parents—15 percent and 19 percent, respectively (table 3).

Recent NSSE annual reports also have described features common to certain HIPs. For example, student–faculty research is especially engaging when students do more than just help collect data, but participate in the entire inquiry cycle—identifying the problem to be investigated and articulating the research questions, finding and reviewing the relevant literature, designing and implementing the data collection and analysis procedures, interpreting the findings, discussing the results and drawing conclusions, and presenting the research in one or more public forums (NSSE 2007).

Table 3
Percent Participation in High-Impact Activities by Institutional and Student Characteristics

	<i>First-Year Students</i>		<i>Senior Students</i>				
	Learning Community	Service Learning	Student-Faculty Research	Study Abroad	Service Learning	Internships	Senior Experience
<i>2010 Basic Carnegie</i>							
Doc RU-VH	19	37	26	18	43	54	31
Doc RU-H	22	41	20	13	45	48	31
Doc DRU	17	45	13	10	42	37	28
Masters-L	17	40	18	12	51	49	33
Masters-M	16	45	19	12	53	49	33
Masters-S	16	42	22	16	54	54	38
Bac-AS	13	43	33	36	54	66	59
Bac-Diverse	16	47	20	9	54	55	38
<i>Sector</i>							
Public	18	39	20	11	47	48	30
Private	18	45	20	19	49	52	39
<i>Barron's Selectivity</i>							
Less Selective	17	42	18	10	50	48	31
More Selective	20	42	26	23	48	60	41
<i>Gender</i>							
Male	17	41	22	13	44	47	35
Female	18	41	19	15	51	51	32
<i>Ethnicity</i>							
Black	19	45	18	8	53	41	29
Asian	18	47	24	15	52	45	32
White	17	39	20	15	47	53	35
Hispanic	19	41	18	11	48	42	25
Other	16	49	22	13	52	41	32
Multiracial	21	40	23	16	45	51	34
<i>Enrollment</i>							
Part-time	11	28	11	7	38	36	23
Full-time	18	42	22	16	50	53	36
<i>First-Generation</i>							
No	19	42	24	19	49	55	38
Yes	16	40	16	8	47	43	28
<i>Transfer</i>							
Started Here	18	42	25	20	52	59	40
Started Elsewhere	14	34	14	8	44	39	25

Table 3, continued

Percent Participation in High-Impact Activities by Institutional and Student Characteristics

	<i>First-Year Students</i>		<i>Senior Students</i>				
	Learning Community	Service Learning	Student-Faculty Research	Study Abroad	Service Learning	Internships	Senior Experience
<i>Age</i>							
Under 24 Years	19	43	26	20	53	60	41
24 Years & Older	10	25	12	6	41	35	23
<i>Major Category</i>							
Arts and Humanities	19	38	20	22	43	46	39
Biological Sciences	18	41	42	16	44	53	35
Business	17	41	10	14	40	39	32
Education	19	49	13	8	67	70	26
Engineering	19	36	29	12	34	55	46
Physical Sciences	17	38	41	13	38	48	34
Professional (other)	19	44	15	10	64	53	23
Social Sciences	18	42	24	18	51	48	37
Other	17	40	17	11	46	49	32
Undecided	14	37	8	6	48	24	11
Overall Participation	18	41	20	14	48	49	33

Table 4

Percent Participation in High-Impact Activities by Year (2006 to 2012)

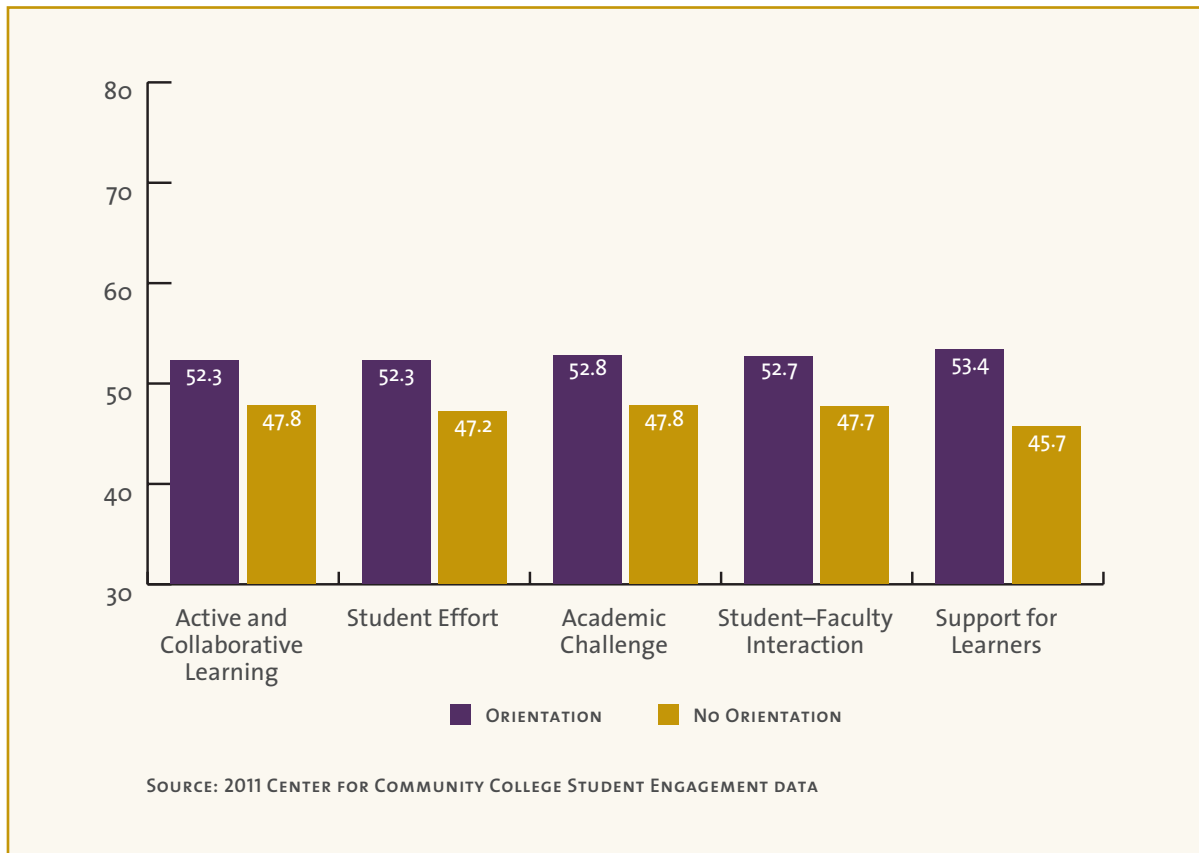
	2006	2007	2008	2009	2010	2011	2012
<i>First-Year</i>							
Learning Communities	16	17	16	18	16	18	18
Service Learning	35	36	41	39	41	40	41
<i>Senior</i>							
Study Abroad	14	14	15	15	14	15	14
Student-Faculty Research	19	19	20	19	19	20	20
Internships	53	53	53	52	50	50	49
Service Learning	46	46	49	47	49	48	48
Senior Culminating Experience	32	32	32	33	33	32	33

The Center for Community College Student Engagement (CCCSE) is searching for promising practices in the two-year sector. Thus far, the center has identified thirteen promising practices, based on emerging evidence from the field. Five of them CCCSE calls “structured group learning experiences,” all associated with high levels of engagement. They are:

- Orientation
- First-year experience course
- Learning community
- Student success course
- Accelerated developmental education.

Two of these practices, a first-year experience course and a learning community, have counterparts on the AAC&U HIPs list; the other three do not. And yet, preliminary findings based in part on results from the Community College Survey of Student Engagement (CCSSE) and related tools show that students who participate in orientation are more engaged across the board as figure 1 shows.

Figure 1
2011 Community College Survey of Student Engagement Benchmark Scores by Orientation



This line of inquiry is in an early stage. Funded by grants from several foundations, CCCSE staff are digging deep into the data with an eye toward identifying the programmatic components common to orientation programs associated with higher levels of engagement. Analyses are also underway for the other structured learning experiences identified by CCCSE. That is, how do various components of these programs or practices contribute to student engagement and success? Preliminary evidence from the Community College Survey of Student Engagement indicates that the following components are common to learning communities in the two-year sector, with more than half of the colleges that report offering learning communities including the following experiences for their students:

- Use of information resources (e.g., library—finding and evaluating sources)
- Study/assignments focused on a common theme
- Common reading(s)
- Information about and/or use of the college’s academic support network
- Assigned group projects/assignments

The 2011 CCCSE report, *A Matter of Degrees: Promising Practices for Community College Student Success (A First Look)*, presents additional findings about the search for promising practices in the two-year sector—some of which in due course may qualify as “high impact”—and the specific features of such practices.

Where to Go from Here

Several issues warrant attention to confirm and ensure the salutary effects of HIPs, better understand why they work, and possibly identify other practices, activities, and experiences that may have similar positive influences on undergraduate student learning and personal development.

Implementation Quality

The NSSE national data and other sources show definite advantages associated with HIPs participation. At the same time, as noted earlier, it is common knowledge on campuses that within a given type of HIP, such as learning communities or service-learning courses, not all are equal in terms of their quality and impact on students due to variations in overall design, expectations for student performance, nature of assignments and in-class and out-of-class activities, and frequency of feedback, among other factors. As a result, student effort can and typically does vary across, for example, service-learning courses on the same campus (just ask the campus coordinator of such courses, if there is one) as well as between campuses. In the 2008 monograph, I briefly outlined six characteristics that are more or less common to HIPs which begin to explain why participating in them fuels engagement and supports students in achieving their goals. Since then, I have added two more that to my mind establish the conditions that account for why students engage at high levels and benefit from a high-impact practice. These might form a basis for evaluating whether something that is “called” a HIP has the necessary quality dimensions that foster student

accomplishment in terms of persistence, graduation rates, and desired learning outcomes. These eight conditions include:

- Performance expectations set at appropriately high levels
- Significant investment of time and effort by students over an extended period of time
- Interactions with faculty and peers about substantive matters
- Experiences with diversity
- Frequent, timely, and constructive feedback
- Periodic, structured opportunities to reflect and integrate learning
- Opportunities to discover relevance of learning through real-world applications
- Public demonstration of competence

Figure 2 on page 10 provides some additional information about these conditions along with some examples.

Next Steps for Research and Data Collection

Needed now are inquiries guided by a more advanced logic model that will allow us to document the relative importance and influence of the structural and programmatic characteristics of HIPs in terms of inducing student effort and other desirable outcomes. It would be most helpful to learn to what extent these features are associated with conditional effects (do some types of students benefit more than others?), and what is required in the way of faculty and staff expertise and other resources to effectively implement them more consistently across the institution in order to realize their promise for advancing undergraduate student accomplishment and success.

We also need to be more precise in defining what features are integral to individual promising practices, whether or not they meet the high-impact standard. For example, courses labeled first-year seminars vary widely in terms of their structure, purpose, organization, staffing, instructor preparation, student performance expectations, and content. At some institutions, a first-year seminar may have purposes and feature components that essentially mirror what other institutions call a student success seminar. At others, the seminar might provide a rigorous immersion in inquiry, analysis, and research.

The “learning community” label encompasses a range of approaches that are likely to be tied to variable student experiences and outcomes. For example, one fairly common learning community approach is to link two or more courses taken by the same groups of students. In some linked course arrangements, faculty members work together to design assignments that require information be used from the multiple courses with an eye toward enhancing students’ capacity for integrative learning. In other linked course approaches, participating faculty simply allow their course to be listed as a linked course, make no effort to collaborate with the instructional staff of the other linked course(s), and do not incorporate activities that ask students to make substantive intellectual connections between the courses. Still other learning communities are made up of a single course taught by an instructional team, the composition of which varies, such as some combination of a faculty member, student affairs professional, librarian, and peer preceptor or mentor.

Despite variations in structure, staffing, and surely implementation quality, the national data show that the experiences of students who have been in a learning community or participated in other HIPs are uniformly positive. Imagine how much greater the benefits could be if we discovered which of the operational characteristics of various HIPs were most influential. For example, Pike (1999, 2002) has shown that it is not necessarily the structure of residential learning communities that is the precursor to the positive outcomes associated with participation such as higher levels of engagement and persistence; rather, it is the substantive interactions with peers that seem to be the key. This means that to further enhance the potential of learning communities, more attention should be paid to systematically creating situations where peers work together to address scripted and unscripted problems relevant to course content, and instructors and peer mentors provide frequent, timely feedback. Making sure that students have ample opportunities to periodically reflect on their experiences and practice giving feedback to their peers about their performance also appears to be related to more frequent practice with deep learning skills (Chapman, Ramondt, and Smiley 2005; Dochy, Segers, and Sluijmans 1999; Mayhew et al. 2012).

Certain features built into the learning community experience seem to induce students to invest the level of effort that will result in high levels of engagement and enriched, deep learning (NSSE 2007; Pike, Kuh, and McCormick 2011). They are:

- Instructors teaching the linked courses use engaging pedagogies and also structure class activities and design assignments that require students to integrate and apply material from one course to another, such as reflective journaling and class discussion;
- At least one of the linked courses is writing- or inquiry-intensive or has a service-learning component;
- Peer preceptors facilitate student participation in out-of-class activities that complement the learning goals of the linked courses;
- Learning community students and peer mentors or preceptors live on campus in close proximity; and
- One of the learning community instructors is the academic advisor for the students in the learning community for the first year.

To promote persistence, especially among at-risk, academically underprepared students, it may be wise for one of the linked courses in the learning community to be a gateway, “weed-out” course in which a pronounced proportion of students typically earn D or F grades or withdraw from the course. The social bonds that form among students in this type of learning community—when well-designed and effectively implemented—can help compensate for what is often low academic self-esteem by encouraging struggling students not to give up and to work even harder to reach an acceptable level of performance.

In the final analysis, what an activity is called may not matter, as long as students who participate in it perform at high levels and are satisfied enough with their experience to continue and complete their studies. However, as more campuses attempt to infuse high-impact practices into the undergraduate experience, clear, widely accepted operational definitions will help focus campus teams responsible for whether and how to implement certain HIPs. Another area where precision

Figure 2

High-Impact Practices: Eight Key Elements and Examples

Performance expectations set at appropriately high levels

Example: A writing- or inquiry-intensive first-year seminar in which assignments, projects, and activities—such as multiple short papers, problem sets, or projects—challenge students to achieve beyond their current ability levels as judged by criteria calibrated to students' precollege accomplishment evidenced by placement tests or ACT or SAT scores.

Significant investment of time and effort by students over an extended period of time

Example: A multiple-part class assignment on which a student works over the course of the academic term—beginning with a synopsis of the problem or issue to be examined and the methods or procedures that will be used; followed subsequently with narrative sections describing the methods, findings, and conclusions which together culminate in a completed paper; concluding with demonstration or performance evaluated by an independent third party or faculty supervisor.

Interactions with faculty and peers about substantive matters

Example: Out-of-class activities in which students in a learning community or first-year seminar come together at least once weekly to attend an enrichment event—such as a lecture by a visiting dignitary and/or a discussion of common readings and assignments facilitated by an upper-division peer mentor.

Experiences with diversity, wherein students are exposed to and must contend with people and circumstances that differ from those with which students are familiar

Example: A service-learning field assignment wherein students work in a setting populated by people from different backgrounds and demographics, such as an assisted living facility or shelter for abused children, which is coupled with class discussions and journaling about the connections between class readings and the field assignment experience.

Frequent, timely, and constructive feedback

Example: A student–faculty research project during which students meet with and receive suggestions from the supervising faculty (or staff) member at various points to discuss progress, next steps, and problems encountered and to review the quality of students' contributions up to and through the completion of the project.

Periodic, structured opportunities to reflect and integrate learning

Example: Linked courses in a learning community wherein an instructor of one course designs assignments that require students to draw on material covered in one or more of the other linked courses, supplemented by a peer preceptor who coordinates student attendance and discussion at relevant campus events, or a capstone course in which students submit a portfolio and explain the relative contributions of the artifacts contained therein that represent the knowledge and proficiencies attained at various points during their program of study.

Opportunities to discover relevance of learning through real-world applications

Example: An internship, practicum, or field placement that requires that students apply the knowledge and skills acquired during their program of study, or supervisor-mediated discussions among student workers that encourage students to reflect on and see the connections between their studies and experiences in the work setting.

Public demonstration of competence

Example: An oral presentation to classmates of the required capstone seminar product that is evaluated by a faculty member and/or an accomplished practitioner, or a narrative evaluation of an internship, practicum, or field placement by the work setting supervisor and/or supervising faculty or staff member.

in labels, or lack thereof, is relevant will be to help explain equivocal results of HIPs-related studies (some of which may be a function of comparing apples and oranges), implementation quality, and the conditional effects phenomenon.

Finding and Creating More HIPs

Postsecondary educational institutions offer a wide range of opportunities for students, and taking part in some of these may confer benefits similar to those practices on the AAC&U HIPs list. Thus, it behooves us to devote some attention to identifying and empirically verifying their impact. Several come to mind that warrant investigation: musical and theatrical ensembles—especially those that perform off campus—as well as intercollegiate athletics and debate teams. Imbedded in all of these are the conditions more or less common to HIPs I listed earlier.

Another potentially powerful activity is writing for the student newspaper, literary magazine, or something akin to them. Almost every national and regional newspaper reporter I have met over the past fifteen years recounts their work in this realm to be their single most memorable and lasting undergraduate learning experience. And no wonder: they spent more time preparing articles than on most other class assignments; they devoted long hours to gathering information and writing the story; they typically got prompt, if not always personally uplifting, feedback from editors who were usually peers; and their work—after it passed muster—ultimately became public, which was another opportunity for people to pass judgment on their competence. All in all, a pretty powerful learning experience when viewed this way.

As we learn more about the components of HIPs that make them enriching educational experiences, we may see other areas on and off the campus where conditions similar to those listed above can be created to engage students in meaningful, personally relevant ways. Some institutions have made high-impact practices impossible to avoid by sewing them into the curriculum in the form of general education or major field requirements, such as a writing-intensive first-year seminar, or a capstone experience. Some colleges and universities, such as California State University–Monterey Bay, require students to have at least one service-learning course or to participate in a learning community, such as at Wagner College.

Other types of classes may well yield effects similar to those mentioned above. It almost certainly is the case that a course that combines the features of a HIP described earlier with carefully constructed assignments designed to cultivate the Essential Learning Outcomes, such as those described in the Degree Qualifications Profile (DQP) (Ewell 2013), would do so. It remains to be seen whether technology-enhanced delivery systems, such as those offered in a massive open online course (MOOC) format, can be structured to foster high levels of student engagement and the other features characteristic of a high-quality HIP. It would be especially challenging and time consuming, for example, to determine whether multiple thousands of students are able to demonstrate a capacity to apply their learning to concrete, unscripted problems beyond those presented in the MOOC itself.

As I have mused elsewhere (Kuh 2010), one area that could be morphed into a high-impact experience, if structured as such, is student employment. After attending class, working on or off campus while going to college is the second most common activity among undergraduates. Seven US colleges are classified by the US Department of Education as “work colleges,” where students are required to work on campus as part of their financial aid package and their employment

experience is purposefully integrated with academic coursework (www.workcolleges.org). At these colleges and some others, such as Berry College, the symbiotic relationship between education and work is deeply rooted in the institution's ethos. But with a little effort, work can be used by staff and faculty at other institutions to help students realize the practical relevance of their studies. Among the more advanced efforts in this area is the Guided Reflection on Work (GROW) initiative at the University of Iowa (<http://studentlife.uiowa.edu/initiatives/iowa-grow/>), which uses brief, structured conversations between work supervisors and their student employees to help students reflect on and make connections between their studies and work on campus. Some connections are more natural than others, such as a graphic design major working on the campus union marketing team; others require more thought to get students to see how what they are studying has personal meaning to their job and other areas beyond the classroom.

Seeing the relevance of academic work to other aspects of one's life—what I call goal realization—is an essential step toward deepening the commitment to finish a degree or certificate program. This is a likely indirect effect of participating in a HIP. Consider the data from California State University–Northridge, where fewer than two-fifths (38 percent) of Latino students who did not do a HIP finished in six years compared with almost half (48 percent) of their peers who did. About two-thirds (65 percent) of students who did two HIPs finished in six years. Students who are not Latino show a similar positive pattern of effects.

Two other issues warrant attention in the near term to more fully harness the educational power of HIPs and their contribution to student success. The first is to better understand what it costs to establish and sustain a high-quality HIP and then to scale it up so that large numbers of students participate. Ken O'Donnell addresses this key issue in his chapter of this publication. Another is calculating the return on investment. That is, while some HIPs may require more by way of faculty and staff time, such an investment by individuals and the institution may be offset by increased tuition revenues and student success metrics as persistence rates inch upward. Thus, investing in HIPs becomes a win for students and a win for the institution by way of higher educational attainment rates.

Another pressing issue is making sure more of the students who can most benefit from HIPs participate. While it is true that virtually all students, no matter their background, report positive effects, as noted earlier certain groups are systematically underrepresented in HIPs. Thus, a first order implication is that institutions redouble their efforts to steer students into high-impact practices. It is important that academic advisors—whether professional staff or faculty—explain to students what high-impact practices are and how the student will benefit from the experience. Such conversations are especially important for many low-income and first-generation students who have never entertained the prospect of, for example, study abroad, research with a faculty or staff member, or an internship. This cannot be a “one and done” discussion. Rather, in every face-to-face meeting and in-between electronic communication, advisors should ask their advisee *when*, not *if*, they will participate in one or more high-impact practices that complement their educational goals and program of study.

Caveat Emptor

Whenever I visit a campus or present somewhere about HIPs, one or more colleagues tell me about something they are doing that they are convinced is a high-impact practice. One large university was poised to send a survey to all its faculty members, asking them to identify the high-impact practices

for which they were personally responsible. I'm told I successfully dissuaded them from doing so, as the outcome was predictable, meaning that large numbers (not all by any means) would in good faith report something they were doing that profoundly affected in positive ways some of their students. I have no doubt this is so. And I do not wish to discourage colleagues from creating in their classrooms, laboratories, studios, and a host of out-of-class venues—situations that engage students at high levels built on features similar to those apparently associated with HIPs. Indeed, these features can be intentionally infused into almost every learning opportunity, on and off the campus.

But in the absence of a fulsome description of the practice or activity, including the student behaviors it is intentionally designed to induce and evidence beyond anecdote to support such claims, polling the campus community to identify the number of available high-impact practices is likely to be an exercise in institutional self-aggrandizement. Certainly, campuses need a systematic approach to inventory who is doing what along these lines as well as which students participate, and AAC&U has worked toward this end with various campuses participating in the LEAP Compass project. The larger point about this issue is that we need to clearly delineate what constitutes a high-impact practice and expect empirical data to justify the claim. Moreover, just as we know students benefit more when expectations are high and performance metrics are applied, we should hold ourselves to similarly high, empirically verified standards when defining what constitutes a high-impact activity before declaring it is such.

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PART 2

Bringing HIPs to Scale



Turning Good Practice into Lasting Policy

KEN O'DONNELL

Senior Director, Student Engagement and Academic Initiatives and Partnerships,
Office of the Chancellor, California State University System

In 2008, the California State University (CSU) joined with a few other systems in AAC&U's Give Students a Compass project, as part of its centennial initiative—Liberal Education and America's Promise (LEAP). Since that time, institutions in the CSU system have worked to advance ambitious goals for college completion and high-quality learning outcomes. High-impact practices have played a key role in these efforts. Although our state is unusual in some ways, what we've been learning may be useful to other states that need to increase degree production without sacrificing quality.

California's colleges and universities serve students with a daunting range of learning styles, shaped by academic preparation, cultural expectations, and prior experiences with education. For the past fifty years, we've addressed that range by dividing public higher education into three segments (see fig. 3).

Figure 3

California's Publicly Funded Postsecondary Institutions by Segment

	California Community Colleges	California State University (CSU)	University of California (UC)
Classifications	Two-year	Four-year comprehensive	Four-year research
Institutions	112	23	10
Enrollment	2,400,000	412,000	237,000
Selectivity	"All who can benefit"	Top 33% of high school graduates	Top 12.5% of high school graduates

I work in the CSU system (the middle segment of fig. 3), where the focus is on high-quality, accessible education through the baccalaureate and master's levels, for the state's civic and economic health and the economic and social mobility of its citizens.

For decades our state universities have provided education that includes, at least for some students, what we now call “high-impact practices” (HIPs). For example, remedial students benefit from robust summer bridge programs at one of our most selective comprehensives—San Diego State University—as well as one of our open-enrollment universities—CSU–Dominguez Hills in Carson, California, part of the Los Angeles megalopolis. Our giant campuses use learning communities to make college feel more personal. Our selective polytechnic at San Luis Obispo attracts students with its commitment to “learning by doing” through project-based learning and undergraduate research.

We also have a tradition of supporting this work from the system office. CSU was created in 1962, and has had a central office of international programs the whole time. Since 1998, every one of our campuses has had its own full-time office dedicated to service learning, coordinated by the Center for Community Engagement. And for almost as long, the system office has brought together campus practitioners of undergraduate research in a variety of discipline-based affinity groups.

George Kuh's *High-Impact Educational Practices* (2008) took these disparate structures and—for the first time—grouped them together. Years later, it's easy to forget that before publication of this book, many of us hadn't yet grasped the commonalities of our learning communities, undergraduate research, and community engagement programs.

And Kuh's book did something else: by arguing that these learning experiences may raise completion rates and narrow achievement gaps, the publication connected our best educational practices to the national push for degree production, reconciling anew CSU's twin missions of quality and student success.

Moving High-Impact Practices from the Margins to the Center

When I talk to CSU faculty about the ideas I discovered in *High-Impact Educational Practices*, a number of them respond with vaguely supportive smiles often reserved for the enfeebled. For these colleagues, having it both ways isn't new: they see every day that deep, engaged, and contextualized learning not only improves understanding but also brings their students back for more. Our problem is that current policy is blind to this synergy, treating experiential and high-impact learning as separate from the push for additional degree production.

The default educational practice recognized by large-scale publicly funded higher education is the traditional lecture. We're paid according to tallies of the students enrolled in our typical classes, conceived as listen-memorize-repeat, and everything else—everything—has to make room for itself within that. So HIPs survive on the margins, like opportunistic mammals in the Jurassic Age, tolerated only so long as they don't get in the way of the dinosaurs. Most of them live on grants from Learn and Serve America or NSF, or as AAC&U pilot projects, or on off-book allocations from enlightened provosts, or—too often—as simply the extra effort of individual faculty, working in this sense as volunteers.

In this context, bringing HIPs to scale doesn't mean inventing them from scratch, or even convincing our colleagues of their merit; we're well beyond that. Instead it means making them visible, credit-bearing, and funded, so they can count toward our degrees. It means making them legitimate.

Efficiency, Mobility, and the Role of High-Impact Practices

In our current environment, mobility has become key to access. Students whose high school experiences make college look like a stretch will test the waters at the local community college. Those whose obligations to work and family preclude full-time enrollment will pick up individual courses as they can, assembling a degree over many years and institutions.

So, since the 1970s, our state's separate public systems have shared course outlines of record for lower-division general education requirements, assigning them to breadth categories like "English communication" and "critical thinking" or "social science." Once a prospective transfer student fills in the blanks, the receiving university considers that part of the baccalaureate finished.

This is a neat trick of articulation, matching community college courses not to other courses, but to areas of content. And it works: each year, over 60 percent of CSU's diplomas go to students who began somewhere else, nearly all of them at our community colleges, and most of them preparing for transfer by taking classes that are guaranteed to meet the general education degree requirements of the UC and CSU systems.

As a result, few course units go to waste. But that apparent efficiency is misleading. It prizes absolute modularity, the principle that curriculum in one place should count the same way anywhere else. Consequently, we design our courses in isolation, disconnected from each other, from the major, and, to all appearances, from the futures for which our students are preparing. This is where students are likeliest to ask, "Why do I need this course?" Whoever answers gets little help from our publications, which foreground the course requirement checklist and portability and obscure the purpose. No wonder the common answer is, "To get it out of the way."

And this is where the inefficiency comes in. Even our slowest learners see that you can get a course out of your way fastest by simply dropping out. Around half of the students who begin at CSU as full-time, first-year students don't graduate within six years. Disproportionately, they drop out in the first two years. The overwhelming majority of their counterparts who begin in the community colleges and say they intend to transfer never make it to the university—by some estimates 75 percent of them just disappear. Attrition in the community colleges is so high that mere course completion has become the goal.

And so, within this system of vaunted transfer efficiency, the educational waste is sickening. Every unconsummated degree is an opportunity missed—for the student, for that student's family and community, and for the state, whose investment won't be realized. Because of attrition, on average California is paying double for each baccalaureate it confers, and at least twice that for the baccalaureates earned by transfers.

As usual, losses are steepest for those most at risk: some ethnic minorities, the economically disadvantaged, and the students whose parents didn't go to college.

This is connected to a longstanding blind spot in public higher education, a failure to see that providing real access doesn't just mean getting all qualified students onto our campuses, but also getting them the rest of the way to graduation. Over the last decade or so, we've seen public institutions laboring to remedy that failure by more intelligently allocating financial aid, improving advising, and generally trying to make college feel less like a four-year slog through the DMV.

There's a lot of work for us to do on all those fronts, but if we confine our student success efforts to such student support functions alone, then we will fail. We also need to look seriously at the center

of what we do, at curriculum and pedagogy, and at how we can make the first two years of college—so critical to the students who aren’t sure they should be here in the first place—more visibly relevant, purposeful, connected, and useful.

In other words, we need a better answer for students’ often asked question: “Why am I taking this course?”

High-impact practices can help. By embedding coursework in real-world contexts, these varied educational approaches all show our lower-division students that broad and versatile college learning can have immediate benefits, for the outside world via undergraduate research, for fellow students through peer mentoring and learning communities, and for surrounding neighborhoods through service learning and community-based research.

Within CSU: The Graduation Initiative

Shortly after the call to increase educational attainment in President Obama’s 2009 address to Congress, CSU joined Access to Success, an initiative organized by the National Association of System Heads and the Education Trust. As a state system, we pledged to raise our six-year graduation rates by eight percentage points, and to cut in half the gap in those rates between students of color and other students, all by 2015 (see fig. 4). Each of our campuses has its own goals that, if met, will mean success for the system.

Figure 4

CSU’s Plan to Raise the Six-Year Graduation Rates and Close the Gap between Underrepresented Minorities and Other Students

CSU Graduation Rates	Baseline	2015	Percentage Point Increase
Overall	46%	54%	8%
Underrepresented Minorities	41%	51%	10%
Non-Underrepresented Minorities	48%	55%	7%

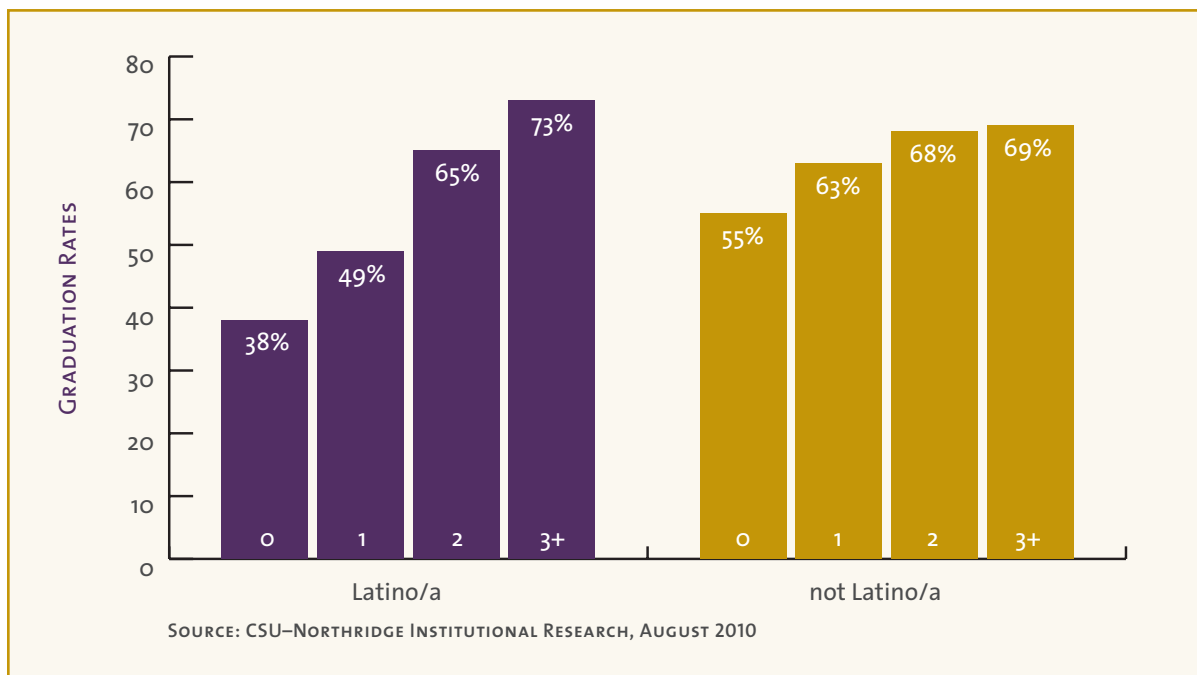
Such commitments—clear, public, and quantifiable—are a mixed blessing. It’s good to be unequivocal and accountable, rare virtues in large bureaucracies. But there’s also the risk that by focusing on reductive metrics we’re really just inviting people to game the system. (Want to boost your grad rates? Then admit only the likeliest to succeed, or better still, simply wave everyone through.)

And so, although our degree-production push originated from the top down, as soon as we could, we added a more bottom-up emphasis on HIPs. We’ve interacted primarily with campus faculty and local student success teams, to make sure that the “success” of graduation is matched with the more meaningful victory of college learning. We’ve hosted twice-annual workshops around learning communities, the use of “leading indicator” data to drive decision making at all levels, and low-cost educational strategies that engage students. Two years ago we brought teams from eight of our campuses to the AAC&U Summer Institute on High-Impact Practices and Student Success.

We've used these occasions to promote key elements of the research on HIPs (Kuh 2008; Brownell and Swaner 2010). First, despite their different settings, these practices share an emphasis on the social nature of learning, exploiting the student–faculty relationship, time on task, purposeful effort, and real-world contexts. And second, putting them to more systematic use will leverage their ability to raise persistence and graduation rates overall, while reducing prevailing achievement gaps.

That second point got a boost in the form of corroborating data from our Office of Institutional Research at CSU–Northridge. Director Bettina Huber used student record-level data to relate six-year graduation rates to students' participation in select HIPs, as reported on the National Survey of Student Engagement. Controlling for typical predictors like eligibility for financial aid, parents' educational attainment, and high school academic history, she found significant gains among students who reported participating in at least one high-impact practice, with a dramatic narrowing of the gap in graduation rates between Latino students (the largest minority group at CSU–Northridge) and others (see fig. 5 below).

Figure 5
The Results of a CSU Regression Analysis to Isolate the Effects of Participation in Multiple High-Impact Practices on Six-Year Graduation Rates



Students who reported participating in two HIPs—that is, those in the third column of each group—are graduating at a nearly two-thirds rate, and the gap is down to 3 percentage points. In other words, the goals of the Graduation Initiative are easily exceeded, without gaming the system. You can see the full report at calstate.edu/engage.

Even without a high-profile push like the Graduation Initiative, results like this would be making people on all our campuses think about how to build HIPs into more of what they do. But there's a catch: if such reforms are undertaken one institution at a time, then they risk leaving out that majority of our students who transfer.

For lasting change of the kind we're attempting in California, HIPs need to be more than recognized and valued; they also need to count toward our degrees, no matter where the student begins.

Between CSU and California Community Colleges: Give Students a Compass

With state systems in Oregon and Wisconsin, the CSU was among the first participants in work AAC&U calls "the LEAP States Initiative." The goal has been to make the association's mix of innovation and advocacy available at large scale, in part by using state systems like mine to support and propagate the advances made on individual campuses.

One of the first LEAP States projects was "Give Students a Compass: A Tri-State LEAP Partnership for College Learning, General Education, and Underserved Student Success." It began the same year Kuh's publication appeared, and participants were soon calling for more systematic incorporation of HIPs into lower-division general education. One of the CSU campuses participating in the project, San José State University (SJSU), had proposed involving a local two-year partner, Evergreen Valley College. Under the leadership of Associate Dean Debra David, the university worked with writing faculty at both institutions to embed peer mentoring and service learning into the required second-semester writing course—a course many of the community college students take just before transfer to SJSU.

Results were striking. A writing course that ordinarily saw attrition of up to 33 percent had held onto all but one of the thirty-six students enrolled at the outset. Student panelists at successive Compass project conferences in California reported seeing for the first time what good writing can do—both for them personally, and as a means to effecting positive change around them.

One of the key innovations of this local project: HIPs weren't optional. Kuh's 2008 *High-Impact Educational Practices* publication reported that the students likeliest to benefit (i.e., the traditionally underserved) are also the least likely to participate. This may be truest at the community colleges, where students are notoriously pressed for time and unlikely to opt in to "enrichment experiences." In the words of Kay McClenney, director of the Community College Survey of Student Engagement, "Community college students don't do optional."

In other words, the Compass project developed a policy agenda from the ground up. As the work evolves into a second phase in California—into what we call Compass II—partnership campuses are embedding HIPs into the lower-division transfer curriculum in general education, intentionally involving—and benefiting—all our students. In this sense it's the converse of the Graduation Initiative, which began from the top down and ended up being mostly about cultural attention to metrics on student persistence and completion. This one started as a kind of grassroots meeting place for those focused on learning, and has wound up looking at change on a more pervasive and multidimensional level.

Building on discoveries of the first phase of the Compass project, California's efforts to bring HIPs to scale have embodied an observation made by Susan Albertine, vice president in AAC&U's Office of Diversity, Equity, and Student Success. Good policy is developed in tandem with actual behavior,

recognizing and documenting existing best practices at least as often as it shapes new ones. In her words, “Real change can’t be just top-down or bottom-up; it has to be both at once.”

The collaboration at Evergreen Valley and SJSU became the template for the second phase of the Give Students a Compass project in California. Debra David relocated to the Long Beach system office to become statewide project director and issued a new request for proposals, exclusively for partnerships of public two-year and four-year institutions. And although funding and leadership in this second phase have been California-based, the project has kept the AAC&U LEAP name and heritage. The goal is unchanged: to explicitly incorporate HIPs into the state’s shared curriculum in general education, making the first two years of college more meaningful, purposeful, and engaging for all students.

Now half a dozen full-blown pilot sites are underway around the state, each one pairing a CSU campus with at least one local community college and embedding HIPs into transfer requirements. Another dozen “networking partnerships” use smaller pools of money to keep tabs on the pilot sites, introduce their own innovations, and broaden awareness and support for the project’s long-term goals. At this point, about a third of California’s state universities and community colleges are connected to the Give Students a Compass project.

Last summer the project’s steering committee—a dozen representatives of the two faculty senates and system offices—met for three days to evaluate the work so far and recommend next steps. Here, as with the Graduation Initiative, the jury is out. As of this writing it isn’t clear whether we’ll see meaningful alternatives to the isolated course-and-content model of transfer credit.

And, as in every state, we’re seeing seismic changes in the context of our work. Faced with their own crises of public funding, the California Community Colleges have adopted a new set of priorities and metrics espoused by last year’s Student Success Task Force, putting a premium on degree and certificate completion and successful transfer. Around the same time, the state mandated new, efficient degree pathways for the most popular transfer majors.

By introducing student success to the usual conversations about access and efficiency, both of these developments are in clear sympathy with the Give Students a Compass project. But neither one mentions HIPs or educational quality of any kind, and so the high-profile attention comes (as always) with a measure of risk.

If we keep our focus on the things we care about, then we might turn this momentum and prominence to our advantage. Doing so will rely on our ability to change the common understanding of cost effectiveness, thinking not in dollars per hour of instruction, but dollars per completed degree. By that measure, high-impact practices aren’t merely competitively priced; they’re a downright bargain.

Next Steps: The Research Agenda

We have research from around CSU that corroborates the findings that Kuh published in 2008. The Northridge chart in figure 5 is unusual for connecting high-impact practices to graduation rates, but other campuses—notably CSU–Chico—have produced similar findings around year-to-year persistence.

What we need to know next is how feasible it would be to scale up HIPs around the state. We know they’re out there already, in the Career Technical Education courses offered at the community colleges, for example, and in the upper-division coursework required in all CSU

majors. What we haven't done before is build them into the shared lower division—territory which has been reserved practically by design for the low-cost lecture that loses students while it funds everything else. Our pilot and networking sites are yielding valuable evidence on that point.

We also need to know whether the gains we see with HIPs will hold up in the context of student mobility. It's one thing to measure persistence and graduation among the minority of students who sit still; it's another to see what happens with all the rest of them, who move from place to place.

Finally, we need qualitative data, focus groups, and case studies that address some early criticisms of the research to date. Although most analyses seek to control for the usual predictors of student success—parents' educational attainment, eligibility for financial aid, etc.—newcomers to the work still wonder whether we're just seeing a secondary effect of selection. In effect, they ask, "Aren't the students who opt into high-impact practices just temperamentally the go-getters who probably would have graduated anyway?"

A careful look at the early research suggests there's more going on, but it's a persistent skepticism that we should be ready for. Before we can really bring HIPs to scale, before we can turn good practice into lasting policy, we need to make sure these are the transformative educational experiences they seem to be.

And that means getting our next research from the students themselves.

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PART 3

Case Studies



SALLY REED

Education Writer

California State University–East Bay Creates High-Impact Clusters

There was a time at California State University–East Bay—known at that time as California State University–Hayward—when first-year students would come onto the campus for a class, then go sit in their cars and read a book until their next class. Or they would attend a class, leave immediately thereafter, and not return until they came back for another class. “There was very little social community,” said Sally Murphy, senior director of undergraduate studies and general education. “There wasn’t any serious thought to the curriculum or course pathways that students had in their first two years. And, we didn’t have any specific programs for these freshmen who would drive to campus.”

California State University–East Bay—or Cal State East Bay, as it’s been known since 2005—has been primarily a commuter campus. For years, most students were upper-division transfer students from other colleges and universities. But as the first-year enrollment increased, administrators began observing their behavior. They also noted the university’s low retention rates. They suspected there was a link between the two and concluded they had to reform the first-year experience, engage students early on, and foster a sense of community. The result: retention went up. Students wanted to stick around.

It Started with a Vision

One of the regional universities in the California State University (CSU) system, Cal State East Bay is a public state-supported institution serving two counties, Alameda and Contra Costa. This area spans thirty-three cities with 2.5 million residents. The university draws its students from thirty-six school districts and four community college districts and includes campuses in Hayward, Oakland, and Concord. It enrolls more than 13,000 students, mostly from the area, but increasingly from throughout the state and foreign countries. Nine percent of the students live on campus with new residence halls in the offing.

In 1996, the university began a major effort to revise its general education program. This was “stimulated by a serious critique by our accrediting agency for having a ‘smorgasbord,’ no coherence nor meaning in the general education package,” said Murphy. As a relatively new professor of communications, she got involved in the reform effort. She became chair of the committee that proposed a freshman learning community to the faculty senate, and then became the faculty member in charge of the program. At that time, the first-year class was but 5–6 percent of the total enrollment of about 10,000 students. It was “politically easier to change our general education at the lower division because there were so few students,” said Murphy. “Few departments saw it as a threat. So we focused on reforming the freshman year.”

Thus, in fall 1998, the university, known then as California State University–Hayward, started a mandatory year-long first-year learning community program that still operates today. All students at least close to full-time are required to enter one of these communities, which are essentially clusters of courses organized around a theme. The clusters primarily integrate disciplinary subjects and may be organized by topics such as the environment or by disciplines such as nursing. Students meet major prerequisites and graduation requirements and develop the writing, reasoning, and communication skills needed for upper-division coursework.

“We did it, in large part, not only to make sure freshman students got the skills as well as the discipline courses they needed,” said Murphy, “but also to create community. We are still a commuter campus. But more students stay on campus if they feel they have a social community, not just an academic community. Learning communities make up for the fact that we are a commuter campus.”

Since then, the first-year class has grown to almost 1,600 students this year. “There has been tremendous growth in the freshman class and part of that is that we are more serious about recruiting freshmen and helping to recruit those students with the freshman program,” Murphy added. “We saw an increase in retention pretty quickly starting in year two on the basis of freshman learning communities.”

In fact, for the first seven years, the retention rate for students in the program was higher than for CSU as a whole, according to Susan B. Opp, associate vice president of academic programs and graduate studies, which ultimately oversees the first-year program. She said the retention rates for first-year students are generally in the high 70 percents. There was a stretch of 81, 82, and 83 percent. But then, CSU’s overall retention rates took a dip, and in 2007–09, East Bay’s first-year retention rates went down as well. “We noted that we were slipping,” Opp said, “and we realized we needed to make changes and look at what we had done before.” It wasn’t hard to notice things had changed.

In the first five or six years of the program, faculty who taught in the learning communities received a \$1,000 stipend for coming together in the summer to develop an integrated curriculum. But in 2005, that money disappeared, and faculty were no longer paid for doing the work of integrated curriculum development. “If you just register students in the same classes as cohorts, that is not a learning community,” argued Murphy. “When we lacked the support for faculty, we were not doing the integrated work that made the learning community something of additional value.”

Also, the spring quarter of students’ first year had been devoted to service-learning programs in the community. These were cut for budgetary reasons. “We continued to work with freshmen as an ‘academic support model,’” said Murphy. “But we had to divide the courses across three terms and service learning went away.”

But then two things happened.

A Graduation Initiative

In 2009, CSU adopted a Graduation Initiative aimed at improving graduation rates and cutting the gap in degree attainment by underrepresented minority students. It called on all campuses to establish new graduation targets for all students. According to Ken O'Donnell, senior director of student engagement and academic initiatives and partnerships in the Office of the Chancellor, "CSU is feeling this pressure as intensely as those in other states. Everyone is saying, 'we need more baccalaureates.' But as the country focuses on that, at the state level, we're in a bind. Certainly, we know that for the state's economic and civic health, we need more degree holders. And yet, at the state level, our funding is going away. So the only solution we have is to beat attrition. Once a student starts, we have to be sure they finish."

That became Cal State East Bay's mantra. O'Donnell noted that East Bay addressed the Graduation Initiative by looking at how to increase its degree production. It had two options, he noted. One was to "simplify everything and lower the bar," he said. "What we prefer, and lead with, is the gospel of high-impact practices."

These high-impact practices (HIPs), such as the freshman experience program, are "things that make learning so engaging that students want to come back," he explained. "And that desire to return seems to be boosted the most with people who are most at risk. When they see, as they go along, how college learning can be applied in life and the real world, then they don't have those nagging questions, 'Why am I taking this course?' 'Is this really the best use of my time?' 'Shouldn't I be earning money?' East Bay has definitely picked up on that ethic, saying, 'this is the way you live up to the Graduation Initiative and still feel good about the education you deliver.'"

But as Cal State East Bay addressed the Graduation Initiative, there was another game changer. In 2010, James Houpis was named university provost and vice president of academic affairs. He'd arrived at East Bay with experience as an environmental scientist at the Lawrence Livermore National Laboratory in Berkeley and as a professor and dean at CSU-Chico. He noted that the national lab "dealt with real-world problems. When I got into academia, I found an overreliance on lecture-based learning which didn't represent the real world. And in terms of best practices, in the literature we know that lecture-based practices are not the best way to improve learning."

So when he learned what Sally Murphy was doing with HIPs in the clusters, "I was actually quite impressed," he said. "What they needed more than anything else was support from the administration to make sure that that got highlighted, but also didn't fall off the table."

He started restoring some of the funding that had been cut from the program. Retention rates started rising. Stipends were once again given to faculty to work together. Now there is additional financial support for integrated activities. The units of credit removed from the program were reinstated. One of the HIPs Houpis especially believed in was community engagement or service learning. So service learning was restored. First-year students now complete service hours by volunteering at an Alameda County Food Bank, for example, cleaning up the nearby bay, planting a garden, painting a school, or taking junior high students to a museum. The program sends students to about twenty-five to thirty such projects.

Murphy also began a peer mentor program in which sophomore students, recruited during their first year, return as mentors for the next group of first-year students. The peer mentors give their cell phone numbers to first-year students, organize study groups, and are given a budget for pizza

and popcorn. “They are the eyes and the ears of the early warning system for us in problems students are encountering,” said Murphy.

This part of the first-year experience program has also grown dramatically from eight mentors the first year to twenty-eight this year. The goal for next year is to have peer mentors in all learning communities. Yet the benefits are not just for the first-year students. In the Spring 2012 issue of *Cal State East Bay Magazine*, Nichole Maharaj, a sophomore mentor, said, “Becoming a peer mentor has allowed me to step out of my comfort zone. I’m more social and more confident...”

The Freshman Learning Communities program is touted to students before they enroll. A Freshman Book program encourages first-year students to read a common book and chat online before arriving on campus. Students are then able to select a cluster of classes based on their interests. Current clusters of classes are organized around such titles as *Atoms are Everything; Beats, Physics, and the Mind; Biology of Humans; Language and Culture; Sports in Our World; Structure, Expression, and Meaning in Music; The Ancient World; and Thinking Globally.*

Murphy remained director for the last fourteen years, but notes that the program “is a much more complicated machine,” and has much more impact than when she started as a faculty member, doing the job part-time. Her current title, senior director of undergraduate studies and general education, reflects a new enhanced position, reporting to Opp.

Administrative Challenges

What has been the response of the faculty to the freshman program? “Varied,” according to Opp. She taught in a first-year biology cluster until taking her administrative post. “Teaching freshmen who are only seventeen, eighteen, or nineteen years old is not for everyone,” she said. “There are ninety students in each cluster. But if you appreciate their freshness, newness, and enthusiasm and roll with those punches, it’s great. But they present different challenges for faculty who are only otherwise teaching upper-division classes. You need to be cognizant that it has to be a good match for both the faculty member and the students.”

At the same time, Opp noted that over the years, the learning communities have been taught by long-term lecturers, and for those who’ve stayed with the program, “The best part for them is to work across disciplines,” she said. “That is not an opportunity given to us very often. Some learning communities are designed for majors, such as biology, and those students take a sequence of biology-required courses freshman year. But, for most students, the learning communities are comprised of disciplines from across the humanities, social sciences, and sciences.”

For example, Robert Gorton, a lecturer in the philosophy department for twelve years, began teaching in the first-year program three years ago. He is grouped with a history teacher and a theater teacher and together they teach a cluster called “The Ancient World.” Each teacher has thirty students per quarter or ninety in the cluster. Gorton focuses on Plato’s *Republic*, “as an introduction to philosophy,” he said. “I tailor it to freshmen and I like teaching freshmen. I wasn’t sure if freshmen would be up for it. But it was a good decision.

“Three times a quarter we have joint classes that address the themes for that quarter and these are led by one of the three instructors,” he added. “I’ve dressed as Socrates arriving in America in a time machine. The history instructor presented ancient art work to show the history of the ancient world. The theater instructor showed a movie about the Trojan women. We also visited a theater in

Berkeley. We took everyone in the cluster and attended a play on the *Iliad*. Last year, we went to San Francisco to see *Bruja*, an update of a Greek tragedy by a Hispanic director. It enhances their college experience and they may be doing something they would not have done otherwise.”

Budgetary challenges remain. Colleges today are under pressure to “maximize” their enrollment, noted Opp. But Murphy and Opp have been able to get control of the enrollment process for the first-year students so that they are guaranteed to get their classes. There are no wait lists for first-year students as there are at some institutions. Students can pick their clusters and then they are handed a schedule.

Also, the number of students needing developmental work in math and English continues to pose a challenge. But the Freshman Learning Communities integrate developmental classes into the program to ensure students feel less ostracized because they take the classes while belonging to a learning community. “Where we have demonstrable success for the longest is in improving writing,” said Opp. “Integrating writing into subject areas, even physics or geology, really makes a difference.”

Cal State East Bay has gone on to reform other aspects of its education program. It recently created a Programmatic Excellence and Innovation Learning program. Last year, faculty and staff developed ten cross-disciplinary projects integrating high-impact learning experiences designed to increase student learning, retention, and graduation. The university joined the McNair Scholars Program, which seeks to advance undergraduate research among underserved students. And East Bay was recently awarded a Promise Neighborhood grant to build on the first-year service-learning practices throughout the rest of the university.

Both O’Donnell and Opp credit Murphy with the ultimate success of the first-year experience program. “One of the most crucial parts of having a program like this is to have a dedicated and visionary leader,” said Opp. “You have to have someone who, no matter what the latest roadblock or issue is, has the vision and understanding to keep something like this at the forefront. We have Sally Murphy.”

For more information, see www.csueastbay.edu.

Elon University Engages Students on Campus and Around the Globe

Chris Jarrett arrived at Elon University in 2007 with an interest in international studies and Spanish, “although I didn’t have an exact career trajectory,” he said. But the Elon foreign language department chair immediately offered him the chance to go to Mexico during his first year. That sparked his interest in studying the people of Central and Latin America. The university then awarded him a two-year undergraduate research grant to study in the Dominican Republic and complete an internship in Ecuador. An honors thesis on indigenous people followed. Immediately upon graduation he was awarded a Fulbright Scholarship. Today, Jarrett is a doctoral student in ecological anthropology at the University of Texas at San Antonio.

Jarrett’s description of his experiential learning and consequent engagement at Elon may sound unique, but it is not at Elon. To Jarrett, what makes Elon successful at engaging its students is “being able to offer opportunities early to students who are ambitious or have an idea about something.” But, he added that it was also important that the university offered funding opportunities to students so they could continue getting experience. It’s this integrated approach that enabled him, and others, to leave Elon, he said, “able to create a career.”

Nationally Known for Student Engagement

Elon University was founded by the Christian Church in 1889 in the Piedmont region of North Carolina, and while the small campus is nestled on 620 acres with a 56-acre forest, its view is decidedly global. A third of Elon’s students come from North Carolina, but the rest come from forty-eight states and forty-eight other nations, in pursuit of sixty majors. Regardless of their major, over 70 percent of Elon’s 5,357 undergraduate students study abroad. Elon also has developed a reputation for fostering community service programs and promoting undergraduate research, internships, and leadership opportunities. It provides a \$2,000 scholarship that students can use toward any experiential learning activity, be it leadership, undergraduate research, study abroad, or study elsewhere in the United States. And it has created centers of support for its faculty to undertake these programs.

Last year, when 797 Elon first-year students and seniors completed the National Survey of Student Engagement (NSSE), its seniors, according to officials at Elon, “far outdistanced seniors at other schools surveyed by NSSE in many categories. About 77 percent of Elon seniors said they had a study abroad experience, compared with only 25 percent of seniors at other universities in the survey. Nearly 90 percent of Elon seniors completed an internship or field experience, compared with only about 50 percent of students at other schools surveyed. Elon students were twice as likely to spend time participating in cocurricular activities and to complete foreign language coursework.”

In fact, Elon has been engaging students in experiential learning for more than twenty years. Administrators explain that experiential learning is embedded in the university’s mission and curriculum, and the school has made “engaged learning” a hallmark of its academic program. But what makes this engagement possible is, in large part, the way Elon approaches and supports its teaching as well as learning.

A Center for the Advancement of Teaching and Learning

In 2005, the university created a Center for the Advancement of Teaching and Learning to help faculty increase the engagement of students in their courses. There are 385 full-time faculty members at Elon, with a student-to-faculty ratio of 13:1. The average class size is twenty-one.

Peter Felten, assistant provost, came to Elon from Vanderbilt University and became the founding director of the center, which is located near the teaching and learning technologies center, designed to assist faculty with integrating technology into academic subjects, and near a resource room in one of Elon's halls. The Center for the Advancement of Teaching and Learning's official aim is to promote greater understanding of the learning process, support the implementation of teaching innovations and best practices, and foster the scholarship of teaching and learning at Elon University.

"It was built on a lot of what already existed here," said Felten, "but there were a lot of diverse initiatives." Felten said the university asked what exactly it meant by engaged learning. "We didn't want to just add programs," he noted, "but integrate Elon's quality teaching and define engaged learning as part of the university's strategic plan. And we wanted to see how we could bring it to scale."

Today, the university makes "engaged learning" the "Elon Experience." This experience includes four essential high-impact practices such as study abroad, research, service learning, and internships. The practices also have found a way of weaving through one another—study abroad and undergraduate research, for example.

Study Abroad Redefined

Elon's first study abroad trip was to England in 1969, but according to Woody Pelton, the current expanded focus started in 2009, when the university decided to house all international programs under one roof. Pelton was chosen to head the new Isabella Cannon Global Education Center, recently renamed the Isabella Cannon Center for Global Affairs. Armed with a Peace Corps experience, law degree, and administrative expertise, he was selected to spearhead Elon's study abroad initiatives.

Today the initiatives include forty-two programs in twenty different countries around the world. About twenty-five courses are offered each winter, all faculty-led. Elon has three international centers, in Florence, London, and Costa Rica. The university's Martha and Spencer Love School of Business recently signed a partnership for a dual-degree program with the Reims Management School in France.

Elon has awarded more than \$134,000 in scholarships for study abroad programs aimed at encouraging "traditionally underserved students" to study abroad and to encourage study in nontraditional destinations outside of Western Europe, Australia, and New Zealand. In fact, Elon's current strategic plan for the next five years calls for an increase in access to study abroad to 100 percent of the student body.

Donna Van Bodegraven, a professor of Spanish, said there are more programs and more students engaged in study abroad today, growing from a few art history majors who went to Paris or wealthy students in certain majors, to the expectation that all students can be involved. To reach as wide a group as possible, Elon sponsors study abroad fairs and workshops. Programs are offered in the summer for athletes or those in the performing arts who may not be able to get away in the fall or winter. "What we want to achieve is one global experience," she said.

Van Bodegraven is now a "faculty fellow," given release time from courses to work on the assessment of the experiences and serve as a liaison with the faculty. She's led a number of study

abroad programs including the one Chris Jarrett went on during his first year. “What I have seen is how students have grown,” she said, “linguistically, certainly, but also in terms of their cultural awareness and their self-confidence, all the things we’d like to see in terms of study abroad. I’ve also seen students come back and want to join Teach for America or the Peace Corps.”

Elon has widened its definition of “global awareness” and, in 2012, launched Study USA, also housed in its global affairs center. “You don’t have to have a passport to engage in experiential learning that has a multicultural component,” said Pelton. “We have a program that is going to take a group of human services students to West Virginia. A course on poverty is going to New York City. A course run out of environmental studies is addressing sustainable living and students are going to Arizona, where they have a biosphere, and to Costa Rica.”

Elon also offers programs in Alaska, Los Angeles, and New York City during the summer and winter terms. The Elon in Los Angeles and Elon in New York programs span nine weeks with classes and internships focused on the communication and media production industries in each city. Elon also offers programs in Hawaii and at the Sundance Film Festival. It does all this by supporting its faculty.

“All of those [programs] were operating independently,” said Pelton. “But there is some value in coordinating that and creating an infrastructure to facilitate more of that kind of activity. For example, in the past, if a faculty person had a good idea and wanted to do a course on poverty and spend some time in New York City and attend a United Nations session, the faculty person had to call Amtrak or figure out how to get into a youth hostel or cheap hotel and do all the logistics.”

“That discouraged some faculty,” he added. “We said, ‘let’s pull all that together and provide an infrastructure that would allow us to be more systematic about how we do things—making sure everybody has insurance, using transportation we feel comfortable about, providing forms for students to fill out, having information about students in one place. It’s also risk management. Now, if there is a hurricane in New Orleans, we know who from Elon is in New Orleans.”

Also in the past, if students wanted to learn about all these programs, “they had to stumble across them,” he said, with one course in religious studies, another in environmental studies or in communications. There was no centralized repository. Now there is a common website, an office, and a director of Study USA.

Undergraduate Research Includes Funding for Students

Elon also engages students with an undergraduate research initiative which has evolved over the last decade. Today, about one thousand students, or about 20 percent of all Elon students, engage in their own research and are individually mentored by faculty members. Doing research is a way to reinforce what students are learning in the classroom, and to develop a professional practice, according to Paul Miller, director of the undergraduate research program and professor of exercise science. Miller came to Elon as a faculty member sixteen years ago, became involved in undergraduate research as a mentor, and then served on an advisory committee.

For example, this year, one student is working on the link between concussion and recovery by studying the formulation of proteins and muscle recovery. One English student is researching Jane Austen to evaluate Austen’s male characters. Another student is designing a computer program that teaches the basics of programming to elementary students. A music student is studying Franz Liszt’s music and his influence on modern music.

“The program is open to every discipline on campus,” said Miller, “and we have participation from every major on campus. Elon has twenty-eight departments. The program also supports the professional schools.” This experiential learning experience takes many shapes. For example, every department on campus can offer independent research for academic credit.

Nearly every major has a research methodology course, a senior capstone course, and a variety of other courses in between that utilize research skills. There are also summer undergraduate research opportunities. About fifty student-mentored teams stay at Elon over the summer to conduct research. Students are compensated with a research stipend of \$3,000. “The rationale is that many students need summer employment,” said Miller. “We wanted to overcome that barrier so that students can actually engage in a high-level intellectual experience, not feel the pressure to go home and get a job, and give them concentrated one-on-one mentoring and time on task.” It is a competitive process to be accepted to that program. In addition, there are travel grants so that students can participate in disciplinary meetings and present their research and engage with a professional body.

Research grants are also awarded to support the acquisition of data bases, software, lab supplies, and other materials and to travel to archives. These, too, are competitive grants, ranging from \$1,000 to \$1,500. Last year, Elon awarded twenty-one of these grants. “We tell students early on to get involved, think of your interest, and connect with faculty,” said Miller. Students learn about the possible research opportunities in the admissions process, orientation, and in first-year core courses. An undergraduate research journal called *Perspectives* profiles undergraduate research projects. Two on-campus events a year celebrate undergraduate research so that all students can attend sessions, poster presentations, documentaries, and traditional slide presentations.

Faculty members are compensated above their salaries for mentoring activities, and they are compensated for summer activities. “But the more meaningful characteristic is that mentoring activities are woven into the core of what we do as faculty at Elon,” Miller added. “It is part of annual evaluations and the promotion and tenure process. Getting faculty to do this takes faculty to embrace it—not just monetary compensation, but valuing it as an institution.”

Other Essential High-Impact Practices

Student leadership also is promoted at Elon through various organizations and activities. Service is another practice also woven through the institution. In fact, Elon established a Center for Service Learning in 1993, which became the John R. Kernodle, Jr. Center for Service Learning in 1997. Cherrel Miller Dyce, professor of education, noted in *The Pendulum*, the student newspaper, that students, “Learn the importance of thinking about the world beyond themselves. They learn the importance of Elon’s role within the community.”

For example, while doing a teaching practicum, students get involved in service to the community outside the classroom. One student, shocked by the poverty she saw in a school, began volunteering at a school’s Backpack Friday program, whereby backpacks are filled with food to send home with students who might not get enough to eat over the weekend. Law school students are engaged in a Pro Bono Week in nearby Greensboro, NC, meeting with lawyers who provide free legal work in the community.

Paul Miller notes that, at Elon, the high-impact practices often overlap each other. “And when multiple experiences come together,” he said, “it’s magic.”

For more information, see www.elon.edu.

Hendrix College Makes an Odyssey

Hendrix College in Conway, Arkansas, went on an odyssey to create an entirely new program around high-impact practices. But it discovered that all it really needed to do was build on the practices it had and find new ways to expand and redefine them for a new generation of students. The seeds of the program were already firmly planted in its curriculum—students studied abroad and engaged in undergraduate research and service learning. But few outside the campus knew of its offerings, too few students participated, and more faculty members needed to be involved.

To Peg Falls-Corbitt, a philosophy professor, “It was a matter of taking what we were already doing, but not in a systematic way, and do[ing] it with a systematic approach.” To Jay Barth, chair of the department of politics and international relations, the key to bringing high-impact practices to scale was to make them a requirement. They are now “universal,” he said. “All students have to participate and it has to go beyond one niche to one in which all faculty and all students really see a place for themselves in the program.”

How Hendrix Scaled Up Its High-Impact Practices

Hendrix has always been a school with a mission. It was founded in 1876 as Central Institute in Altus, Arkansas, and in 1884 became affiliated with the United Methodist Church. In 1890, the institute moved to Conway and was renamed after Bishop Eugene R. Hendrix. Today, the four-year private residential coeducational college of liberal arts sits on a 175-acre campus. It recruits nationally and this year enrolled 1,388 students from forty-five states and thirteen countries. Just over 15 percent are minority students. Ninety percent of the 109 faculty members have a PhD or equivalent and the student-to-faculty ratio is 11:1.

But like many small private liberal arts colleges in the late 1990s, Hendrix College was struggling, according to Nancy Fleming, a music professor. Its enrollment had fallen below one thousand students. In spite of its best efforts, by 2003, enrollment had inched up to only 1,059 students. School administrators knew they had to take action. J. Tim Cloyd, president of the college, and the Hendrix board of trustees began working with outside consultants, “looking at Hendrix’s ‘market position,’” said Fleming, “and what we could do to improve that position.”

At the time, Hendrix was known as a school with a pretty campus, Fleming added, and most of its students were from the surrounding area or elsewhere in Arkansas. But when the consultants looked at Hendrix, they saw other things happening on the campus that were worth capitalizing on. They suggested putting Hendrix’s tradition of ‘engaged learning’ programs front and center, and a task force was formed to see how to make this happen. “It was not just a good idea,” said Fleming. “It was more, ‘we’ve got to do this.’”

So in 2003, Hendrix created a task force of faculty and staff. According to Falls-Corbitt, now associate provost for engaged learning, the “seeds” in place that helped the task force’s work included study abroad and sponsored trips “where students went to a place and did a service project,” she said. Hendrix had also created what is now called the Miller Center for Vocation, Ethics, and Calling, which received a grant from the Lilly Foundation to expand and develop programs.

“We’d put a great deal of funds into [the Miller Center] and put it in the context of vocational explorations,” she said. “It wasn’t just going to a service project, but being thoughtful about what

one was doing, both about what you were discovering about the world's needs, and what you were discovering about yourself.”

A key component of this activity was that students reflected on their experiences, had good verbal discussions, and wrote about their experiences in journals and elsewhere, according to Falls-Corbitt. “The Miller Center had developed this idea of journal writing and reflection,” she said, “where individuals, having this experience, come back and look at themselves and what they took away from it.” Expanding this practice began to make sense to the faculty.

Another seed was the practice of undergraduate research. When chemistry professor Tom Goodwin arrived at Hendrix thirty-four years ago, he knew he wanted to engage in collaborative research with students. “There was not a lot going on at that time,” he remembered. “But the department and the dean said, ‘we need to start doing this.’”

At that time, faculty didn’t get release time or start-up funds. But Goodwin acquired two outside grants and started a summer program. “Many of us here, and places like us, were already involved in engaged learning, hands-on learning, experiential learning,” he noted.

Falls-Corbitt added that “the faculty could grasp undergraduate research as an academic engaged learning experience. They knew what it was, what kind of work was expected, depending on your discipline. Artistic creativity was within a faculty’s grasp. They knew what it was and understood that students might want to be guided in an artistic endeavor and through that process think about aesthetic choices. But the task force also explored other learning outcomes that could be included in a new engaged learning program: global awareness, service to the world, and professional leadership. The questions for a number of faculty were, ‘What is the academic content?’ ‘How is it an educational enterprise?’ ‘We know what study abroad is, but what is it about doing study abroad for the sake of global awareness?’ ‘What are we asking of them?’”

Hendrix also surveyed its students on campus and found that, indeed, a large number of them were engaged in some undergraduate research. Some had leadership positions on campus. And they had an interest in doing these sorts of projects. But it wasn’t organized or publicized. The task force argued, “We can do it better, and we can let people know what we are doing,” said Goodwin. “And whatever we did, we wanted it to arise organically from what we do and what we value here.”

The Details of the Odyssey Program

Building on these seeds, the task force came up with a new initiative with six categories of engaged learning programs: artistic, global, professional and leadership internships, service, undergraduate research, and special projects that don’t fit in the other categories or are interdisciplinary. It presented these to the faculty in spring 2004 and the faculty endorsed the basic outlines of the program. The 2004–05 school year was spent putting together the details of the program before it was launched in fall 2005. “It was remarkable we moved so quickly,” said Fleming. “And the reason was we capitalized on what was already happening.”

The new program was coined the Odyssey Program. Fleming, now the director of the Odyssey Program, noted that at first the program was named the Galileo Project. But during the initial two-year process, the task force requested names from the faculty. All first-year students take a course called Journeys. Then they take a course about Hendrix called Explorations. A program called Odyssey seemed a good fit.

The response among faculty varied. Some professors embraced it as a golden opportunity, but others were skeptical. “It was a little bit scary for a lot of people,” said Goodwin.

Falls-Corbitt added, “A lot of faculty were suspicious about the academic content and this idea of ‘reflection.’ But by that time, the Lilly program had been going long enough that we had a reputation. Faculty had talked to students and knew that it was making a difference. They could see that it wasn’t just that we were sending them off to do service projects, but asking them to think.”

The faculty became convinced and now virtually every department and office on campus is involved in the Odyssey Program. Falls-Corbitt’s role is coordinating the offices and departments that feed into the program, identifying where faculty development is needed, designing workshops, checking standards, and seeing what works and what doesn’t. The faculty, she notes, is the engine behind the courses. Pre-approved activities tend to come from student affairs.

Goodwin further explained that “one of the things we did that, at that time, was apparently novel was to require these experiential learning projects. We made it a condition for graduation, rather than simply making opportunities available to people.” To graduate from Hendrix, students must acquire three different credits in three different categories. In fact, Hendrix produces “an Odyssey transcript” of a student’s experiential learning that describes his or her work in the Odyssey Program. This is attached to the academic transcript.

Students earn the credits in a variety of ways. Classes and activities are coded for Odyssey credit. All music activity, such as choir or band, is coded for Odyssey. Other options include senior seminars; research; classes, such as Ethics in the Face of Poverty; or service work. If students get a “C” or better in these classes, they get credit. Then there are pre-approved activities such as study abroad, leadership activities on campus—for example, the student senate and academic peer mentoring—and internships. The hitch is that if students get involved in previously established activities, they must declare “a statement of intent” about what they will do and, when finished, engage in reflection.

Falls-Corbitt recalled one student who did a service trip to San Francisco to work among the homeless. Coming out of that experience, she decided she had a passion for working with homeless people. She put together an individual service project working at a school for homeless children in Louisiana, her home state. She then became interested in “Intentional Christian Communities” that are devoted to working in poverty areas. She completed an internship in Washington, DC, living in one of the communities. She created her own interdisciplinary major in urban studies and justice, and made her senior project a sociological and theological analysis of three Intentional Christian Communities. She now attends a seminary.

Some projects are self-contained learning projects, but not necessarily connected to classes. Students may design an independent project. To earn credit, they have to find someone in the faculty or administrative staff to work with them as a mentor. They submit written proposals. One recent project, for example, was from a theater major who wanted to do a Special Project Odyssey on Thornton Wilder’s *Our Town*.

A Committee on Engaged Learning

The Odyssey Program grants \$2 million to faculty and students to support their projects, literally around the world. Students may apply for funding three times a year, thus learning how to prepare a budget and grant proposal. A Committee on Engaged Learning, a combination of faculty and

students, oversees the policies of the program and the funding selection process. In fall 2012, nineteen projects were funded. One project was a study of the songs of Appalachia, another explored the genetics of snakes, while a third was an internship at the National Institutes of Health.

Faculty can apply for Odyssey professorships and receive \$75,000 over a three-year period to put together a program. Two professors recently joined forces to work with students in an area of Arkansas called the Big Woods to study the flora and fauna of the area. They discovered no trail maps existed, so students worked with biologists to map out the area and, with a photography teacher, created a trails book. An English professor received funds to look at how technology is shaping education in parts of Africa. With students, the professor then attended a conference on technology in London, and then another meeting in South Africa on technology and literature. Students continued their work as an independent study, wrote about their research, and presented their findings. Goodwin noted that every student is guaranteed up to \$1,000 to attend a professional meeting and present the results of their Odyssey project.

Hendrix publishes an annual guide to all the Odyssey projects. And faculty members attend workshops, “not specifically on crafting engaged learning,” said Fleming. “They are more on parts of the Odyssey Program such as, ‘How do you guide reflection?’ ‘How do you set students up to do research in a field?’ ‘How do you write a good proposal?’”

Hendrix has also enhanced its high-impact practices throughout its general education program. A first-year experience, for example, includes a required course called The Engaged Citizen and a weekly seminar called Explorations. There are thirty majors, as well as opportunities for interdisciplinary studies, and each department or program has a capstone experience for its majors. This Senior Capstone Experience challenges students to integrate and synthesize subject matter within a major. The experience may be an examination, senior seminar, undergraduate research project, or an exhibition, recital, or performance. In environmental sciences, for example, a capstone experience may include both written and oral presentations of independent research. The Senior Capstone Experience for an art major may include participation in a juried senior art show.

But the Odyssey program itself is now embraced by the faculty at Hendrix, although Falls-Corbitt said it is not necessarily what they expected. They hadn’t anticipated “just how much students can use their Odyssey experience to explore who they are and what they want to do in the world,” she said. “We knew that it had this capacity to help them further their understanding of something in the classroom, a theory or a set of ideas, for example. We knew it had that power. But the fact that they can put together three or more experiences, one building off the other in order to find out more about what they want to do in the world has become a major part of the Odyssey program.”

Ultimately, according to Barth, “most every faculty member saw a place for them in the program.” Few faculty members haven’t found their niche. And new faculty members are hired thinking about how they fit into the program. “It shows that we have moved beyond the program to an ethos,” he said. “The spirit was there to start with, but it definitely has been ratcheted up.”

For more information, see www.hendrix.edu.

Queensborough Community College Scales Up a Freshman Academy

When Michele Cuomo became an assistant professor at Queensborough Community College in 2004, her previous experience had been at two different four-year institutions. “I’d never been in an open-access environment before,” she said, “I was very challenged. But I was also very moved by my students and what it took for them to get to our doors, and the conflicting interests they had. More people were working, some had children. They had a lot more challenges to get to our classrooms. And yet, they were inspiring to me. I’d always thought I’d remain a faculty person.”

But in 2007, Cuomo moved into an administrative position. By then, she “was interested in the students in a larger way than just teaching them my discipline. And, fortunately, I came on when a freshman academic initiative was taking shape.” Cuomo was able to take what she’d learned as a teacher about her students and their needs, and expand a program to bring high-impact practices (HIPs) to scale. Freshman Academies were launched at Queensborough in 2009.

Addressing the Needs of a Diverse Population

Queensborough Community College is located on thirty-seven acres of the former historic Oakland Golf Club in Bayside, Queens, New York. It is part of the City University of New York (CUNY). The surrounding area of Bayside hosts 100,000 residents. The campus has one of the most diverse populations of any college in the United States, representing 129 nations and 99 native languages. There is no majority: The student population is evenly divided with 25 percent African American, 25 percent Hispanic, 25 percent Asian, and 25 percent European or Caucasian.

Nearly 15,000 students pursue associate degrees or certificate programs in the liberal arts and sciences as well as career and preprofessional courses. Queensborough employs 346 full-time and 633 part-time faculty. About 63 percent of the students are full time, which school officials note is large for a community college. By and large, it has a traditional-age student body. And enrollment is growing as more students turn to community colleges and live at home, in part because of the economy. At the same time, over 70 percent of the students need some sort of remediation for reading, writing, and/or math.

Over the years, Eduardo Marti, as president of the community college, promoted learning communities and other high-impact practices. In 2008, Anita Cuttita Ferdenzi, an associate professor in social sciences, said she became involved in an education “academy,” a pioneering program that included a group of students with professors teaching basic skills, English 101, and one discipline—education, in this case. This was “the brainchild of President Marti,” said Cuttita Ferdenzi, who had been teaching at the community college since 1998 and has a doctorate in curriculum and instruction. “We also had the model of a freshman coordinator who would be there exclusively to assist the students in the academy.”

From this initial pilot, several other academies evolved and in 2009, Queensborough knew it wanted to expand these practices. Marti, who retired as vice chancellor for community colleges for the CUNY system, was a believer in these practices according to Victor Fichera, then director of testing. “Our president was behind all this, so we were able to get the resources needed from the top. And if you want to make it a large-scale program, you have to have backing from the top.”

Queensborough established what it now calls “Freshman Academies.” Marti also believed that measuring their impact from the start was critical to their success, and in 2009 he appointed Fichera as Principle Investigator for the Academy Assessment Protocol.

Cuomo had been an assistant professor of speech, communications, and theater arts and is now associate dean of academic affairs. She points out that Queensborough employed HIPs for its diverse student body for many years. “But we wanted to direct the high-impact practices toward the early college experience,” she explained. By that she means practices “that engage students in a different way than the traditional faculty member in front lecturing. It usually incorporates active learning, a sense of cohort where students get to know each other and see each other as partners in their learning. The practices often incorporate reflection. Also, there is some kind of taste of the real world. Or when the concepts are being taught, connections are being made integrating what’s happening in the classroom rather than a unique slice of disciplinary knowledge. It’s where students make connections to what they are learning and their prior knowledge is valued as well.”

How the Freshman Academies Support Students

The Freshman Academies were launched as an academic and student support initiative that divides the campus into six academies based on fields of interest. These include business, liberal arts, health-related sciences, education, visual and performing arts, and STEM—science, technology, engineering, and math. It is an alternative division as opposed to a disciplinary one. All full-time first-year students enter one academy for two semesters.

To bring the practices to scale, student affairs professionals were assigned as freshman coordinators, advising students during their first year. Located in offices throughout the campus, they serve as a referral center as well. “They may evaluate students and say, ‘I think you may need tutoring for your anatomy and physiology class,’” Cuomo said, “or, ‘I will walk you over to the financial aid office because you are experiencing difficulties.’ We try to provide as much information for students as possible so they know that the freshman coordinator is their first stop whenever they are unsure where to go.”

If students enroll in Queensborough as part-time students or transfer students, they too receive the same information from the freshman coordinators as full-time students, depending on their field of interest. But all full-time, first-time first-year students also attend a ten-hour course: Introduction to College Life. And since beginning the Freshman Academies, Queensborough enhanced its student orientation by creating small group orientations by academy. This is designed to help students establish an academic identity based on their major fields of interest.

In addition to a freshman coordinator, each first-year student has a faculty coordinator who meets with the student to coordinate activities aligned with courses on campus. These activities relate to the major field of interest. For example, Cuomo pointed out that in the health-related science academies there are many students who hope to be nurses. But a very small number actually get into the nursing program. So the Freshman Academies schedule meetings on alternative health careers. Or, the liberal arts program, a large and diverse group, may schedule a speaker on criminal justice. Various classrooms attend these activities and there may be a class assignment or just a chance for students to gather together. The activities are not required, but designed to create an atmosphere similar to ones created on campuses with residential housing where students can gather.

In addition to the support first-year students receive, the Freshman Academies initiative promises students two HIPs in their classroom experience within the first thirty credits. These might be

service learning, learning communities, cornerstone courses, or writing-intensive courses. Cuomo noted these are based on George Kuh’s argument in *High-Impact Educational Practices* that HIPs are most effective for students who are academically unprepared or historically underserved. “That’s our students,” she said.

At Queensborough, these experiences may include, for example, service learning that enables students to work in the community, learning about a subject they are studying. Learning communities include two courses taught by two different professors based on a theme. The same students attend both classes. Writing-intensive courses are designed to improve writing skills by stressing writing across different academic disciplines.

Cuttita Ferdenzi’s class on Contemporary Education: Principles and Practices uses an e-portfolio, the cornerstone experience, a learning community, service learning, and is writing intensive. She also partners an education student with a student needing basic skills. “Initially, when I inform them they are going to be working in partnership with basic skills students, they assume an automatic, ‘Oh, I am above them...’ But what they realize in the process is that they are truly engaging in pre-service professional behavior.”

The academies also use a rubric for integrative learning developed as part of AAC&U’s VALUE (Valid Assessment of Learning in Undergraduate Education) project. “That is a very important document for us,” Cuomo said. Once a semester, faculty members attend a seminar to reflect on the AAC&U rubric and their assignments. At a recent seminar, faculty addressed the issue of “transfer,” listed on the rubric, and how to adapt theories or methodologies to assignments for their students.

Measuring the Impact Right from the Start

What has been the impact of the Freshman Academies? To begin with, a partnership formed between student affairs and academic affairs. Student support is enhanced with the freshman coordinators. Fichera now has several years of data about the HIPs to see what influence the program has had on students and on graduation and retention rates. Fichera said the protocol is his “research design, a series of procedures used to determine if our Freshman Academy program is effective. This includes hypothesis, variables such as high-impact strategies, expectations, the sampling, subgroups. It is my blueprint for research.”

The protocol has, in fact, affected the evolution of the academies. The research has identified which particular practices are more effective in courses, according to Fichera. “Then we will do more of these. And I found that multiple high-impact strategies are related to a higher pass rate, particularly in English 101.”

Indeed, Cuttita Ferdenzi said that in English 101, the pass rates are 87 percent with one high-impact practice, 89 percent with two practices, and with three practices the pass rate goes to 99 percent. “The more high-impact practices you have, the better the students do,” she said.

Fichera continuously analyzes other different aspects of the academy. He surveys first-year students to get their opinions about the freshman coordinators. Since 2009, he has surveyed 8,570 freshmen. He found, for example, that the freshman coordinators are seen consistently semester after semester, year after year as helpful. “We were worried at first,” he said. “They were new employees. We didn’t know if they would be seen as helpful. Our freshmen may complain about some people, certain departments, or certain areas. But when it came to freshman coordinators, they found them to be helpful or very helpful 88 to 92 percent of the time.”

He also conducts focus groups of freshman coordinators at the beginning and end of each semester “to give me an understanding of the main issues or problems students are experiencing. You see trends over time. For example, if students report problems in a tutoring area, I send that department the information and over time find fewer and fewer complaints. It is a feedback mechanism for the program,” he said.

Faculty members are also surveyed. Fichera said his surveys found that, indeed, they “are engaged with the college in various ways, believe in the academy program, and they believe in the high-impact strategies.”

Cuomo added, “We are finding that certain elements, such as reflection and students partnering as learners, are making a difference.” And, she confirms, “The multiple high-impact practices are making a difference in pass rates, retention, and graduation rates. These have improved above the national average. So we do feel we are doing things correctly here.”

There have been a few surprises. “I am really pleased at how sometimes things take off on their own,” said Cuomo. “For example, one thing that has been a delightful surprise is that a small group of faculty began to look at the e-portfolio. They created a virtual learning community called the Student Wiki Interdisciplinary Group similar to the work of Randy Bass (director of the Center for New Designs in Learning and Scholarship at Georgetown University.) It is this new culture of learning work and that has been wonderful because this was really a grass-roots movement that actually aligns with the Freshman Academies. We’ve nurtured it in the administration.”

Cuttita Ferdenzi was one of those faculty members working on the development of wikis even before the academies started. But with the academies, the first virtual community represented basic educational skills, English, and education. They formed a three-point partnership. Now thirty faculty members are engaged in creating virtual learning communities. The administration is working to expand the e-portfolio initiative and support faculty who are interested in creating other virtual learning communities. “I think it attracts a certain kind of faculty,” said Cuttita Ferdenzi. “But once you try it, you can never go back because you see how the students are so much more enriched. The learning is visible.”

To Cuomo, the wikis represent a way for the faculty to respond to the need to reach their students. “We need to do something different,” she said. “Our students have changed. With this burgeoning technology, the way students get their information has changed. The faculty members are just interested in reaching students and they see this as a way.”

While other schools have started programs similar to Queensborough’s Freshman Academies, Cuomo believes these are on a smaller scale. And while Queensborough has scaled up its use of HIPs, there are still challenges. Freshman coordinators see a large number of students and can only do so much intervention. Thus, she believes that providing HIPs inside the classroom makes the difference. “These are related to student development as much as to academics,” she said. “This is supporting the whole student.

“It is also about engagement,” she added. “In the English class, it is about the personal narrative and about honoring where students are coming from. We have a very large immigrant population, many languages. Everyone has a story on our campus that is very rich and to honor that story is to understand that a student’s prior knowledge is very important. And to connect them to an academic identity is important. In our particular place in Queens, with this particular immigrant population, we immediately have global and diverse learning. If we hear where our students came from and how our students speak, that is where the global and diverse learning occurs. We don’t have to go to study abroad. It’s a wonderful rich place.”

For more information, see www.qcc.cuny.edu.

University of Wisconsin–Oshkosh Builds New University Studies Program

Along the banks of the Fox River sit buildings used for decades for academic classes at the University of Wisconsin–Oshkosh (UW Oshkosh). One building complex is currently preparing to undergo major renovations to convert a number of its traditional classrooms to “active learning” spaces. Rooms originally designed for faculty to stand in front and lecture are being fitted with different configurations of round or connecting tables. Multiple screens are being installed for faculty to use while walking around a room. The students will be engaged in high-impact practices (HIPs), working in teams. “We are quite excited about adding spaces dedicated to active pedagogies and active learning to our traditional lecture-format classrooms,” said Lane Earns, provost and vice chancellor, noting that the new classrooms “will be ready not long after commencement of Oshkosh’s new University Studies Program in fall 2013.”

Form follows function at UW Oshkosh. The newly renovated complex will be a visible testimony to the more than five years of careful and methodical reform of its general education program. One aim is to integrate high-impact practices into its general education curriculum. And it is doing this while also making a renewed commitment to meeting the needs of all its students, including first-generation students, transfer students, and students of color.

Committed to a Region

UW Oshkosh was founded in 1871 as a teacher training school. It became the Wisconsin State College Oshkosh in 1951 and then merged into the University of Wisconsin system in 1971. Today, it is a comprehensive university, the third largest institution of higher education in the state, focused on providing public higher education to the residents of northeastern Wisconsin. Spanning nearly 174 acres from the Fox River to downtown Oshkosh, it now enrolls about 12,270 undergraduates in sixty undergraduate majors taught by 335 faculty members. Its student-to-faculty ratio is 21:1.

It’s no accident that its current building redesigns reflect its educational philosophy and mission. In 2006, as it was about to undertake reform of its general education program, UW Oshkosh developed a campus sustainability plan and has since become a leader in the sustainability movement. When Sage Hall, the campus’s first new academic building in forty years, was completed in 2011, it was lauded for its use of sustainable principles. UW Oshkosh is the nation’s first fair trade university, and was recently named to the Princeton Review’s 2013 Green Honor Roll for its emphasis on sustainability. The Sierra Club and *Sierra Magazine* have also placed it in its “Coolest Schools” rankings for its “greenness,” both in buildings and as a concept woven through its a new curriculum.

The groundbreaking work for the reform of its general education program likewise began over five years ago. The impetus came from a number of fronts. Some pressure came from UW Oshkosh’s accreditation process and the suggestions made by the Higher Learning Commission. “We needed to reform our general education for decades,” said Lori J. Carrell, professor of communications. She noted that the curriculum had been “a vast menu, which is kind of common, and with individual departments putting in courses that they thought would be important for students in the beginning of their academic journeys. But these were not coordinated. There were lots of pockets of excellence, but again no collaboration around best-practice teaching.”

Other administrators explained that UW Oshkosh had been adding a new program here, a new initiative there, including HIPs, to assist its students and increase its retention and graduation rates. But retention and graduation rates “rose only moderately,” Lane Earns told the UW Board of Regents last August, “and this rise was sometimes inconsistent.” What was needed, he said, was a “more intentional and integrated” course of study.

“We had always worked hard at trying to impart knowledge to our students,” said Earns. “But retention remained a problem. We are a public comprehensive institution and we try to allow students every opportunity to come to this campus. But we have to make sure they have the opportunity to succeed once they are here. We have a number of first-generation students and students of color, and our retention rates were not very good.”

In 2000, for example, the first- and second-year retention rate, “which is where you lose most students,” noted Earns, was 72.2 percent. “It’s a waste of human potential and resources to not retain students,” added Carrell, “if 20 to 30 percent are not staying.”

Indeed, according to Carleen Vande Zande, assistant vice chancellor for curricular affairs and student academic achievement, the general education program had not been significantly redesigned in four decades. But she saw the need for change as an opportunity. She has been focused on assessment and curriculum and gathering data on how to assist greater numbers of students. “I am looking at how students succeed,” she said. “I am not only asking the question, are students succeeding, but which students? Are students participating at the high end? And how are all students doing?”

Vande Zande used the data she gathered to see how students of color and transfer students were faring, particularly in HIPs. These included practices embraced at UW Oshkosh such as study abroad, undergraduate research, cornerstone projects, community service, honors classes, and living-learning communities. Who had access to such programs? she wondered. Were first-generation students, students of color, and transfer students included in the programs? She looked at the rate of participation by ethnicity and examined the rate students of color participated compared to others. “Is there something in our policies that prevents students from participating?” she asked. She concluded that students need to start preparing for the HIPs on day one and have a map of integrated coursework to follow as they make progress towards the completion of their programs.

Searching for Solutions

So UW Oshkosh began re-examining its strategic plans and what it had done in the past. It took the results from the National Survey of Student Engagement and compared them with results of the Faculty Survey of Student Engagement. “Clearly, what the faculty thought they were achieving with our students was not what the students thought was happening in the classroom,” Earns said. “The faculty thought they were teaching the ability to think creatively and analyze critically, but the students didn’t necessarily understand that these were the aims of their professors, because we had no intentional mechanism to reach students at the beginning of their academic careers. There was also no integrated curriculum program that plainly articulated these goals of higher education as they moved ahead with their coursework. Because of this gap in perception, we started working with a variety of national initiatives.”

Those programs included AAC&U’s Liberal Education and America’s Promise (LEAP) initiative and a LEAP project called Making Excellence Inclusive: Give Students a Compass. According to Earns,

“We also started looking at Susan Rankin’s Campus Climate Survey and Estela Mara Bensimon’s program out of the University of Southern California (known as the Equity Scorecard) that looks at the roadblocks to success and entry-level classes for students of color. We became active in the LEAP program in particular, as did the University of Wisconsin System itself at the same time. Defining student learning outcomes became important.”

Meanwhile, a growing number of faculty members began adapting the model for the Scholarship of Teaching and Learning, developed by Ernest L. Boyer, the late president of the Carnegie Foundation for the Advancement of Teaching. By 2002, UW Oshkosh offered strong support for teaching and learning research and faculty development, with additional support from the UW System Office of Professional and Instructional Development (OPID). These initiatives evolved into the Center for Excellence in Teaching and Learning. Carrell, who was professor of communications for twenty-two years, became the director. The center served as a resource for the teaching community and provided workshops and web resources on research-based teaching and learning practices. It also funded projects for faculty research. “It reflected the campus community’s commitment to research-based practices,” she said, “but, more often than not, we implemented these in individual courses. What we needed instead was to integrate best practices more intentionally throughout the curriculum.”

Thus, the center became an important foundation for the general education reform effort. As various ideas were discussed, the faculty would ask, “What does the research say about that?” There were meetings, small group discussions, and book clubs. “The center helped with the cultural transformation of the campus,” Carrell said, “and readied the campus for change.”

Carrell also noted the administration’s support of both teaching and research as well as its recognition of the necessity for a comprehensive curricular change of the university’s general education program. In 2007, the university concluded that it needed a team to move this effort forward. Richard Wells, the chancellor, and Earns set up a faculty-led committee called the Liberal Education Reform Team (LERT).

LERT’s charge was to create essential learning outcomes and a general education framework at UW Oshkosh that could “move the campus toward reform,” said Carrell. As it did so, UW Oshkosh’s learning outcomes emphasized “sustainability, civic engagement, as well as inclusive excellence, the diversity piece,” Carrell explained. “Those three areas reflect the priorities of the campus.”

The team collaborative process led to the unanimous approval by the Faculty Senate in spring 2008 of the learning outcomes. “The faculty can be reluctant to adopt change,” added Earns, who has been a professor in the department of history for twenty-five years. “They are often nervous about what particular impact it will have on their department and individual teaching assignments. It took quite a while to talk this through, and to get buy-in from everyone.”

When LERT completed its initial charge in spring 2011, a second group of faculty and staff was formed to take UW Oshkosh’s essential learning outcomes and the framework that the LERT suggested and create a proposal. The group met in small teams throughout the summer of 2011. “Members of the faculty leadership team facilitating those meetings regard the reform process as the highlight of their careers to date,” said Carrell. “It was so energizing to dream what might be. Given the campus, our students, what resources are available, and what research says, we said, ‘What can we do?’ ‘How can we enhance student learning?’”

A number of HIPs that had already been in use were folded into the proposal, including civic engagement programs in the community, residential learning communities, and first-year experiences. These practices had been used increasingly throughout the years to engage students and address issues of retention, and Vande Zande believed they'd played a role in raising the first- and second-year retention to 77.8 percent in 2010.

The team then took the proposal to every department and had campus-wide listening sessions, according to Carrell, asking "What are your concerns?" Changes were made in response to suggestions, "so the real wrangling occurred prior to the vote in the Faculty Senate," she said. By spring 2012, the teams presented the program model to the Faculty Senate. Three different committees passed the plan with but one dissenting vote. The result is the University Studies Program: General Education for the 21st Century, which will begin fall 2013. Carrell is the director.

The New University Studies Program

At the core of the new program is a forty-one-credit sequence of courses beginning with day one for first-year students. In "Quest," students address three "signature questions" based on UW Oshkosh's desired essential learning outcomes. These questions are, "How do people understand and engage in community life?" "How do people understand and create a more sustainable world?" and "How do people understand and bridge cultural differences?" Students will address one question at a time as they move through the three Quest stages, which span multiple semesters. All the courses will include HIPs.

In Quest I, students will work in small learning communities of twenty-five. These communities are formed by Quest students' concurrent enrollment in writing and speaking courses. The students in Quest I will have upperclass peer mentors and instructors trained at meeting the learning needs of first-year students. They will study one of the signature questions as they take courses on various topics. One course, for example, is called *The Geography of Coffee*. It will explore such issues as global connections and sustainability, sometimes meeting in coffee shops to expand the learning experience. Quest I is "focused on the transition to academic life," said Carrell, and "the explicitness of liberal education."

In Quest II, the second semester, students will tackle issues in ethical reasoning and explore ethical issues in a variety of settings as they study a second signature question. In Quest III, students study a third signature question and focus on civic engagement and high-impact engagement practices. Students will participate in projects in the community with alumni mentors. Students will also document what they are doing and talk about their own transformations. "Our alumni association has stepped up to the plate to provide sites for students to go to and also to be mentors," noted Vande Zande. "We will have community people, alumni, or other students participating."

In addition to the courses students will take as they make their Quest, there will be Explore courses aimed at helping students understand the human experience in Nature, Culture, and Society. The final "Connect" course is a culminating experience and an advanced writing course so that students can integrate the knowledge from their Quest and Explore experiences and synthesize all three signature questions.

The reform of the general education curriculum includes significant changes in assessment, too. Students will collect and reflect on their learning in electronic portfolios, documenting their achievements with papers, speeches, videos, and other artifacts. And Vande Zande will be

“disaggregating data” as the university tries new pedagogies, new scheduling, new groupings, and HIPs to see how they affect ethnic minorities and students of color.

Redesigning courses to reflect the HIPs and the signature questions is essential. In 2012, the University Studies Program received a three-year \$400,000 grant from the UW System to assist in the development and implementation of the new program. The grant, which was supplemented by funding from the university’s Faculty Development Fund and support from the provost’s office, will enable UW Oshkosh to provide ongoing faculty development, align support services, and monitor student success. Faculty members receive \$1,000 stipends for designing courses that integrate the signature questions with the content of their courses. The first workshop drew one hundred faculty members who explored how to design the first-year experience courses in relation to the signature questions. Another workshop in October 2012 focused on integrating the ethical reasoning component into courses. That same month, the annual Provost’s Teaching and Learning Summit explored civic engagement and student learning and introduced those who will provide students with community experiences.

As the implementation moves ahead, it is not without challenges. Chief among the concerns is the financing of the new program, given the state of Wisconsin’s budget. But Carrell argues that the administration’s position is that the new program is a campus priority. In an article on the UW Oshkosh website, she concludes, “This reform of general education at UW Oshkosh is the most exciting, complex, and comprehensive teaching and learning transformation in our history.”

For more information, see www.uwosh.edu.



Appendix A



NSSE Deep/Integrative Learning Scale

- Integrating ideas or information from various sources
- Including diverse perspectives in class discussions/writing
- Putting together ideas from different courses
- Discussing ideas with faculty members outside of class
- Discussing ideas with others outside of class
- Analyzing the basic elements of an idea, experience, or theory
- Synthesizing and organizing ideas, information, or experience
- Making judgments about the value of information
- Applying theories to practical problems or in new situations
- Examining the strengths and weaknesses of your own views
- Trying to better understand someone else's views
- Learning something that changed how you understand an issue

Source: Thomas F. Nelson Laird, Rick Shoup, George D. Kuh, and M.J. Schwarz, "The Effects of Discipline on Deep Approaches to Student Learning and College Outcomes," *Research in Higher Education* 49, no. 6 (2008): 469–494.

Appendix B



Table A
**Relationships between Selected High-Impact Activities,
 Deep Learning, and Self-Reported Gains by Student
 Background Characteristics**

MALE

	Deep Learning	Gains: General	Gains: Personal	Gains: Practical
<i>First-Year</i>				
Learning Communities	+++	++	++	+++
Service Learning	+++	++	+++	+++
<i>Senior</i>				
Study Abroad	++	++	+	++
Student-Faculty Research	+++	++	++	++
Internships	++	++	++	++
Service Learning	+++	+++	+++	+++
Senior Culminating Experience	+++	++	++	++

+ p<0.001, ++ p<0.001 & Unstd B > 0.10, +++ p<0.001 & Unstd B > 0.30

FEMALE

	Deep Learning	Gains: General	Gains: Personal	Gains: Practical
<i>First-Year</i>				
Learning Communities	+++	++	++	++
Service Learning	+++	++	+++	+++
<i>Senior</i>				
Study Abroad	++	+		+
Student-Faculty Research	+++	++	++	++
Internships	++	++	++	++
Service Learning	+++	++	+++	+++
Senior Culminating Experience	++	++	++	++

+ p<0.001, ++ p<0.001 & Unstd B > 0.10, +++ p<0.001 & Unstd B > 0.30

FIRST GENERATION

	Deep Learning	Gains: General	Gains: Personal	Gains: Practical
<i>First-Year</i>				
Learning Communities	+++	++	++	++
Service Learning	+++	++	+++	+++
<i>Senior</i>				
Study Abroad	++	+		++
Student-Faculty Research	+++	++	++	++
Internships	++	++	++	++
Service Learning	+++	++	+++	+++
Senior Culminating Experience	+++	++	++	++

+ p<0.001, ++ p<0.001 & Unstd B > 0.10, +++ p<0.001 & Unstd B > 0.30

AFRICAN AMERICAN

	Deep Learning	Gains: General	Gains: Personal	Gains: Practical
<i>First-Year</i>				
Learning Communities	+++	++	+++	+++
Service Learning	+++	++	+++	+++
<i>Senior</i>				
Study Abroad	++			++
Student-Faculty Research	+++	++	++	+++
Internships	++	++	++	++
Service Learning	+++	++	+++	+++
Senior Culminating Experience	+++	++	++	++

+ p<0.001, ++ p<0.001 & Unstd B > 0.10, +++ p<0.001 & Unstd B > 0.30

HISPANIC

	Deep Learning	Gains: General	Gains: Personal	Gains: Practical
<i>First-Year</i>				
Learning Communities	+++	++	++	++
Service Learning	+++	++	+++	+++
<i>Senior</i>				
Study Abroad	++			
Student-Faculty Research	+++	++	++	++
Internships	++	++	++	++
Service Learning	+++	++	+++	+++
Senior Culminating Experience	++	++	++	++

+ p<0.001, ++ p<0.001 & Unstd B > 0.10, +++ p<0.001 & Unstd B > 0.30

WHITE

	Deep Learning	Gains: General	Gains: Personal	Gains: Practical
<i>First-Year</i>				
Learning Communities	+++	++	++	++
Service Learning	+++	++	+++	+++
<i>Senior</i>				
Study Abroad	++	+		++
Student-Faculty Research	+++	++	++	++
Internships	++	++	++	++
Service Learning	+++	++	+++	+++
Senior Culminating Experience	++	++	++	++

+ p<0.001, ++ p<0.001 & Unstd B > 0.10, +++ p<0.001 & Unstd B > 0.30

ASIAN / PACIFIC ISLANDER

	Deep Learning	Gains: General	Gains: Personal	Gains: Practical
<i>First-Year</i>				
Learning Communities	+++	++	++	++
Service Learning	+++	++	+++	+++
<i>Senior</i>				
Study Abroad	++			++
Student-Faculty Research	+++	++	++	++
Internships	+++	++	++	++
Service Learning	+++	++	+++	+++
Senior Culminating Experience	+++	++	++	++

+ p<0.001, ++ p<0.001 & Unstd B > 0.10, +++ p<0.001 & Unstd B > 0.30

Appendix C



A Guide to High-Impact Practices

First-Year Seminars and Experiences

First-year seminars bring small groups of students together with faculty or staff on a regular basis and place a strong emphasis on critical inquiry, frequent writing, information literacy, collaborative learning, and other skills that develop students' intellectual and practical competencies. First-year seminars also involve students with cutting-edge scholarship and with faculty members' own research.

Common Intellectual Experiences

The older "core" curriculum model has evolved into a variety of modern forms, including common courses or vertically organized general education programs that include advanced integrative studies and/or participation in a learning community (see below). These programs combine broad themes—e.g., technology and society, global interdependence—with a variety of curricular and cocurricular options.

Learning Communities

Learning communities often encourage integration of learning across courses and involve students with "big questions" that matter beyond the classroom. Students take two or more linked courses as a group and work closely with one another and with their professors. Many learning communities explore a common topic and/or common readings through the lenses of different disciplines. Some deliberately link liberal arts and professional courses; others feature service learning.

Writing-Intensive Courses

These courses emphasize writing at all levels and across the curriculum, including final-year projects. Students are encouraged to produce and revise various forms of writing for different audiences in different disciplines. The effectiveness of this repeated practice "across the curriculum" has led to parallel efforts in quantitative reasoning, oral communication, information literacy, and ethical inquiry.

Undergraduate Research

Many colleges and universities are now providing research experiences for students in all disciplines. Undergraduate research has been most prominently used in science disciplines. In these programs, scientists are reshaping their courses to connect key concepts and questions with students' early and active involvement in systematic investigation and research. The goal is to involve students with actively contested questions, empirical observation, cutting-edge technologies, and the sense of excitement that comes from working to answer important questions.

Collaborative Assignments and Projects

Collaborative learning combines two key goals: learning to work and solve problems in the company of others, and sharpening one's own understanding by listening seriously to the insights of others, especially those with different backgrounds and life experiences. Approaches range from study groups within a course, to team-based assignments and writing, to cooperative projects and research.

Diversity and Global Learning

Many colleges and universities now emphasize courses that help students explore cultures, life experiences, and worldviews different from their own. These studies—addressing US diversity, world cultures, or both—often explore "difficult differences" related to racial, ethnic, and gender inequality, or human rights, freedom, and power. Frequently, intercultural studies are augmented by experiential learning in the community and/or by study abroad.

Service Learning and Community-Based Learning

In these programs, field-based "experiential learning" with community partners is an instructional strategy. The idea is to give students direct experience with issues they are studying in the curriculum and with ongoing efforts to analyze and solve problems in the community. In these programs, students have to both apply what they are learning in real-world settings and reflect in a classroom setting on their service experiences. These programs model the idea that giving something back to the community is an important college outcome, and that working with community partners is good preparation for citizenship, work, and life.

Internships

Internships are another increasingly common form of experiential learning. The idea is to provide students with direct experience in a work setting—usually related to their career interests—and to give them the benefit of supervision and coaching from professionals in the field. If the internship is taken for course credit, students complete a project or paper that is approved by a faculty member.

Capstone Courses and Projects

Whether they're called "senior capstones" or some other name, these culminating experiences require students nearing the end of college to create a project that integrates and applies what they've learned. The project might be a research paper, a performance, a portfolio, or an exhibit of artwork. Capstones can be offered in departmental programs and in general education as well.

About the Authors



George D. Kuh is adjunct professor of education policy at the University of Illinois and Chancellor's Professor of Higher Education Emeritus at Indiana University Bloomington. He currently directs the National Institute of Learning Outcomes Assessment co-located at Indiana University and the University of Illinois. Founding director of the widely used National Survey of Student Engagement (NSSE) and the Strategic National Arts Alumni Project (SNAAP), Kuh has written extensively about student engagement, assessment, institutional improvement, and college and university cultures, and consulted with more than 350 colleges and universities in the United States and abroad. His most recent books are *Student Success in College: Creating Conditions That Matter* (2005, 2010); *Piecing Together the Student Success Puzzle: Research, Propositions, and Recommendations* (2007); and *High-Impact Educational Practices: What They Are, Who Has Access to Them, and Why They Matter* (2008). In 2001, he received Indiana University's prestigious Tracy Sonneborn Award for a distinguished career of teaching and research. George earned the BA at Luther College, MS at the St. Cloud State University, and PhD at the University of Iowa, and has received seven honorary degrees (Luther College, Midland Lutheran College, Millikin University, Post University, Thompson Rivers University, Washington and Jefferson College, and Winthrop University).

Ken O'Donnell is senior director, student engagement and academic initiatives and partnerships in the Office of the Chancellor of the California State University (CSU)—the world's largest public system of four-year universities. O'Donnell works on statewide curriculum, with a focus on student engagement and success and the state's shared coursework in general education, and transfer curriculum in the state's most popular majors. He also serves as the liaison for the California State University's partnership with AAC&U's LEAP initiative, and for the CSU's participation in the Give Students a Compass project. Prior to joining CSU, O'Donnell was a member of the screenwriting faculty and an assistant dean at the film school at Chapman University.

Sally Reed is a writer and editor specializing in educational publishing and a consultant on public policy and other issues affecting higher education. She was a senior consultant to the late Ernest L. Boyer, president of the Carnegie Foundation for the Advancement of Teaching; an associate vice president of Loyola University Chicago; and author and editor for a range of publications, including *Phi Delta Kappan*, *The New York Times Education Supplement*, and *Focus* for the Lumina Foundation. She was a researcher and writer on *Smart Schools, Smart Kids* (Simon & Schuster) and she's won various awards for her work from organizations such as the Education Writers Association and the Educational Press Association. She also is an editor of *COLLEGE BOUND: Issues & Trends for the College Admissions Advisor* (www.collegeboundnews.com).



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