Frontiers of Faculty Work: Embracing Innovation and High-Impact Practices
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Educators have long known how important deep student engagement is to academic success. At an AAC&U annual meeting a few years ago, Lee S. Shulman, then president of The Carnegie Foundation for the Advancement of Teaching, spoke about the need for student engagement in terms that I still remember clearly. He observed that, for students, a lack of engagement leads to invisibility. “Invisibility breeds disinterest,” he said, “[which] leads to zoning out.”

Research about student engagement is also at the core of George Kuh’s work as the founding director of the Center for Postsecondary Research and the National Survey of Student Engagement (NSSE) and director of the National Institute for Learning Outcomes Assessment. In his role as a member of the Liberal Education and America’s Promise (LEAP) National Leadership Council, Kuh worked with AAC&U staff to identify and disseminate research about a set of high-impact practices (HIPs) that are strongly correlated with positive educational outcomes for students. The list of HIPs is now familiar to most AAC&U members. They include first-year seminars, common intellectual experiences, learning communities, writing-intensive courses, collaborative assignments and projects, undergraduate research, diversity/global learning, service learning and community-based learning, internships, and capstone courses and projects. In his 2008 AAC&U publication, High-Impact Educational Practices, Kuh notes that HIPs are so effective because they increase the frequency of meaningful interactions with faculty and peers, induce students to spend more time and effort on research, writing, and analytic thinking, and involve students in more hands-on and collaborative forms of learning.

While researching HIPs, Kuh identified six elements (see chart below) that are key to why these educational practices actually work to improve learning outcomes. “It is the combination of these [elements],” he notes, “that makes these practices so powerful.” To demonstrate how this issue’s authors have made use of one or more of these elements while teaching with HIPs, we embedded boxes titled “Key Elements that Make HIPs Work” in each of the Practice articles.

Although faculty I’ve spoken with report that using HIPs in the classroom takes planning, they also note that the beneficial outcomes for students make all of their efforts worthwhile. These voices from the field underscore the point that Carol Geary Schneider makes in her introduction to High-Impact Educational Practices: “If these high-impact practices support both student persistence and heightened achievement of Essential Learning Outcomes, then wise leaders will make them a top priority. With so much at stake, how can we not?”

—SHELLEY JOHNSON CAREY

### Why Do High-Impact Practices Improve Learning Outcomes and Student Success?

#### Key Elements

**TIME ON TASK**
HIPs demand that students devote considerable time and effort to purposeful tasks.

**MEANINGFUL INTERACTION WITH FACULTY AND PEERS**
HIPs put students in circumstances that demand they interact with faculty and peers about substantive matters over extended periods of time.

**ENGAGEMENT WITH DIVERSITY**
HIPs increase the likelihood that students will have meaningful and constructive experiences interacting with people who are different from themselves.

**FREQUENT FEEDBACK**
In most HIPs, students get frequent feedback about their performance from faculty and/or their peers.

**WRITING AND RESEARCH**
Many HIPs require students to do more writing and independent research.

**INTEGRATION AND APPLICATION**
HIPs are designed to require students to integrate, synthesize, and apply what they are learning in new settings.

Seeking High-Quality, High-Impact Learning: The Imperative of Faculty Development and Curricular Intentionality

In 2008, the Association of American Colleges and Universities (AAC&U) published *High-Impact Educational Practices: What They Are, Who Has Access to Them, and Why They Matter* by George D. Kuh. This publication prompted dialogue across the country on the use of certain educational practices that research demonstrates have an impact on student learning outcomes and progress toward graduation. These practices—now commonly known as “high-impact practices” or HIPs (see chart on page 5)—include such things as first-year seminars, service-learning, writing-intensive courses, learning communities, undergraduate research, and capstone experiences. Increased attention to these practices also has sparked new interest in faculty and staff professional development to prepare faculty to implement the practices. An array of evidence points to the value and utility of HIPs in providing an improved learning experience for all students. In fact, HIPs can provide students exactly the kinds of active and engaged learning experiences that help them develop the skills and knowledge essential for success in work, life, and citizenship.

To truly take advantage of the promise of HIPs, however, we must invest in developing all faculty members’ capacity to implement HIPs in effective ways and for more students. Through its Liberal Education and America’s Promise (LEAP) initiative, AAC&U has sought to work with faculty in a variety of institutions and disciplines to bring HIPs more broadly and intentionally into the undergraduate experience.

As Kuh observes, the use of HIPs is not new. Learning communities, for example, were first developed in the late 1970s. For decades, many colleges and universities have been engaging undergraduates in research. What changed after 2008 was the collective effort to document the impact of these practices and the effort to see them as part of a larger “sea change” in undergraduate education. Institutions and systems involved in AAC&U’s LEAP initiative have, indeed, made much collective progress in advancing HIPs, but there is still much work to be done—and developing more faculty capacity is key to future success. Our campus colleagues tell us that we no longer have to convince them of the value of HIPs. They are asking us to focus instead on practical means and methods to engage faculty with implementing HIPs in appropriate ways. The stories in this issue all illustrate a variety of ways through which faculty are implementing the HIPs and/or pedagogical foundations that lie behind why these practices actually produce the outcomes they do. There is nothing magical about the HIPs, but, as Kuh’s research suggests, they all share certain common characteristics that seem to be key to producing better results (see chart on page 3). Quality in implementation of HIPs is paramount and these common elements all contribute to increasing the quality of HIPs results.

**FREQUENCY, EQUITY, AND HIGH QUALITY**

While Kuh has documented widespread positive impact of HIPs, he reminds practitioners that, “to engage students at high levels, these practices must be done well” (2008). Further, for greatest impact, students must also experience these practices more than once. Many institutions are working to enable students to experience HIPs and HIP-like practices frequently throughout the curriculum. While calling for high-impact learning experiences for all students, Kuh also emphasizes the heightened benefits received from these practices by students from underserved populations. AAC&U continues to recommend multiple high-impact learning experiences for all students and to stress the importance of equitable access. Our society can no longer afford to reserve “islands of innovation” for a select group of students while others, often students traditionally underserved, receive an education more suited to the industrial age.

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**Susan Albertine**, vice president, Office of Engagement, Inclusion, and Success, AAC&U
INTENTIONALITY
Institutions need to be intentional in the design, implementation, and scaling of HIPs. One size does not fit all, nor will a sprinkling of HIPs or a suite of boutique programs make a durable impact on campus-wide outcomes. The design of high-quality HIPs must begin with attention to the learning outcomes sought and with recognition of the academic and developmental needs of particular student cohorts as well as the particularity of institutional context and culture. Before campus leaders or individual faculty members or departments select a high-impact practice and discuss how it should be implemented, they should first ask who is or is not succeeding in the existing educational environment and why or why not. Through institutional assessment and analysis of data on student subgroups, campuses can intentionally target high-impact practices to the neediest students. The second question should address why a particular high-impact practice is the right choice based on the academic and developmental needs of these students. As a colleague at the 2012 Institute on High-Impact Practices and Student Success concluded, high-impact practices should not be “a solution in search of a problem.” Developing a purposeful implementation plan is key. As such, identifying which HIPs should be put in place and for whom will increase the chances of HIPs having significant impact.

INNOVATION
For HIPs to spread, faculty members need development and encouragement to innovate in the classroom. They need the right tools and a conducive environment to develop high-quality high-impact practices. Where the majority of faculty are teaching part-time or on contingent contracts, there are particular challenges for institutions to foster innovation and adoption of HIPs by more faculty. However, we see faculty innovators at work across all institutional types, including broad-access public institutions. From their experiences, as highlighted in this issue of Peer Review, we can identify the following practices that support innovation and productive faculty development:
- Professional development opportunities for all faculty (full-time and part-time) to introduce them to high-impact practices, assessment, and course design
- Individual faculty mentoring for collaborative teaching
- Faculty reward structures that support innovation in the classroom, including the use of technology to facilitate collaboration
- Partnerships between staff and faculty across disciplines to promote curricular and cocurricular learning throughout a student’s educational experience

A crucial element beyond these recommendations is each faculty member’s personal motivation to provide an educational experience for all students that will inspire creativity, stimulate problem solving, and foster a level of engagement that transcends the classroom and fosters lifelong learning. The development and delivery of high-quality high-impact practices depends on both institutional support and faculty dedication.

One of the driving principles behind the LEAP initiative is the need to challenge the traditional practice of providing liberal education only to some students while providing narrow training to others. In 2012, institutions are making far-reaching educational changes to help all their students achieve a set of Essential Learning Outcomes fostered through a liberal education. The use of HIPs is a centerpiece of this educational reform effort, and wide-scale implementation has the potential to foster significant change and improve student success. At AAC&U, we call that Making Excellence Inclusive.

REFERENCES

High-Impact Educational Practices: A Brief Overview
The following teaching and learning practices have been widely tested and have been shown to be beneficial for college students from many backgrounds. These practices take many different forms, depending on learner characteristics and on institutional priorities and contexts. On many campuses, assessment of student involvement in active learning practices such as these has made it possible to assess the practices’ contribution to students’ cumulative learning. However, on almost all campuses, utilization of active learning practices is unsystematic, to the detriment of student learning. These practices are:

- First-year seminars and experiences
- Common intellectual experiences
- Learning communities
- Writing-intensive courses
- Collaborative assignments and projects
- Undergraduate research
- Diversity/global learning
- Service learning, community-based learning
- Internships
- Capstone courses and projects

These practices were first described as a family of “effective educational practices” in AAC&U’s 2007 publication, College Learning for the New Global Century. George D. Kuh’s High-Impact Educational Practices: What They Are, Who Has Access to Them, and Why They Matter, also published by AAC&U, presents research on why these practices are effective, which students have access to them, and, finally, what effect they might have on different cohorts of students.

In the 2010 publication, Five High-Impact Practices: Research on Learning Outcomes, Completion, and Quality, authors Jayne E. Brownell and Lynn E. Swaner examine what educational research reveals about five of these practices. For more information about these publications, see http://www.aacu.org/publications.
no longer sigh when students intimate that Richard Nixon is as ancient as the Peloponnesian wars. But I remain deeply concerned that students understand the history they are studying as a lived past. For many of my students, the moving image is the primary vantage from which they look back on other times, so they often observe the past as they would a movie. To the extent that they appreciate both history and cinema as texts built on narrative coherence, research, informed selection, and judicious editing, I’m right with them. But it is unsettling to realize that they imagine past lives as the lives of actors who performed roles, not as real people who lived them.

The desire to make history real led me to develop a project in which students could locate themselves in the past. Unlike role-playing experiences where students re-enact moments in history by “becoming” historical figures, the project I designed required that students create avatars who would live forty years of the history we were studying. The project took both students and myself beyond traditional (“chalk and talk”) approaches to history learning, and beyond the limitations of history role playing (where the tendency to see figures of the past as actors is often accentuated), and resulted in some of the most significant student learning I have experienced in thirty years of teaching. Students not only learned the specific history we explored more deeply than in a lecture-based class, but they also absorbed some fundamental concepts of liberal education: empathetic imagining, the ability to appreciate the role of contingent knowledge and relative values, and the need for ethically grounded decision making. In short, by becoming real participants in a self-constructed but historically accurate past, my students not only took ownership over their learning, but came to understand the reality of the past.

I have been teaching Dirty Wars and Democracy, an upper-level Latin American history course, for fifteen years. In it we examine the history of Chile, Argentina, Brazil, and Uruguay from the late 1960s to the present. Over that period, each country fell into military dictatorship (from Brazil in 1964 to Argentina in 1976), endured long years under exceptionally brutal regimes, and has struggled with the memory of those events since returning to civilian rule. The class has always been challenging to teach because it introduces a number of profound, often unanswerable questions: Why do democracies become dictatorships? How do we explain human cruelty? What does justice mean for torture victims who encounter their torturers sipping coffee at a corner cafe? Is national reconciliation possible in light of starkly opposing historical memories?

THE AVATAR PROJECT
For me, the challenges are also deeply personal. I lived in Chile during Salvador Allende’s Popular Unity government, bore witness to the 1973 military coup, saw friends murdered by the new regime, and engaged in a seventeen-year struggle to return democracy to that country. I have never kept my own history outside of my classes; indeed, I consider it imperative to include it. But when I teach this class, I am adamant that my students understand the reality of the past they are studying and be prepared to grapple with it intellectually and emotionally. So, when I read a brief description of an avatar project that Edith Sheffer used for a twentieth-century Germany history class at Stanford, I felt I had found the key to unlock this door (Sheffer 2009).

I introduced the “Avatar Project” to the forty-three students enrolled in Dirty Wars the second week of the fall 2010 semester. Reaching into a box, each student drew out a slip of paper with demographic indicators: a country (either Chile or Argentina), gender, birth year (from 1930 to 1965), birthplace, parents’ birth location if different, parents’ occupations, and religion if other...
than Catholic. For example: “Chile; female; Valparaíso; 1950; Father: reporter for El Mercurio (Valparaíso edition); Mother: nurse; both born in Santiago.”

Students had a few days to give me a pseudonym for their avatar, using traditional naming conventions for Spanish ancestry countries. Only I could connect students to their avatars. Colleagues in Oberlin’s Cooper International Learning Center (CILC) helped create a central blog structure for the project. On it, each student, identified only by their pseudonym, had a separate presence. The class had agreed to make all blogs publicly available, so we employed a locally hosted version of WordPress rather than using our content management system. After a short training session at the CILC, the students were ready to begin.

For the remainder of the semester, the students wrote weekly posts that corresponded to specific dates I selected, beginning in the late 1960s or early 1970s and mapped onto important events in the history we were studying. Students were encouraged to write in the language (English or Spanish) in which they could be most colloquial. The students’ final post occurred in the last week of class; in it they could reflect on their avatar’s life while still occupying that character or on the project as a whole using their own voice. All quotes in this article from student blogs are referenced by their pseudonyms and, where pertinent, the date on which the avatar wrote it.

Most students introduced themselves (i.e., their avatars) in a two- to three-paragraph posting, but all soon became more expansive. All entries were available online, and I read and wrote brief comments on each entry (which, with forty-three students posting weekly, nearly undid me). Because the class was so large, it was unrealistic to expect students to read all the other entries. (Following a student’s suggestion, when I repeat the project, I will divide students into groups of six, with three students from each country, to make cross-commenting easier.) I wrote my own comments from the perspective of that avatar, supporting his/her approach, but also scaffolding questions to help the students provide different kinds of information (“So, what are the workers talking about in your factory?”). If needed, I corrected factual mistakes in my own voice in a separate part of the comment.

I felt it was essential for the success of the project for students to identify themselves only by their avatars’ names. I had written the avatars’ characteristics in an attempt to produce individuals who could represent many different subject positions in these countries: they were children of wealth and power, of military officers, of workers, peasants, and public sector employees. Yet I knew that many of my students would feel uncomfortable representing supporters of dictatorial regimes. My decision to have them post pseudonymously, I felt, would encourage the broadly empathetic perspective taking that the project was designed to enhance. As one student reflected, “I’m so glad it was anonymous. I think I would have felt completely paralyzed if I knew my name was attached” to the post.

The project produced striking results which I can only touch on here. Among the most important were the ways in which students began to understand what it meant to affirm their own commitments in a world of contingency and relative values; the critical importance of teaching empathy as historical perspective taking; and a deeper appreciation for the reality of the past which, concomitantly, allowed them to understand the importance of historical knowledge to the way we live in the present.

**CONTINGENCY AND UNCERTAINTY**

**KEY ELEMENTS THAT MAKE HIPS WORK**

- Engagement within Diversity
- Meaningful Interaction with Faculty and Peers

The educational psychologist William Perry argues that students should learn to “accommodate uncertainty, paradox, and the demands of greater complexity” as they move past an absolutist, “right-wrong” view
Empathy is not the same as sympathy; it is rather the capacity to understand actions and choices made from another’s perspective.

from buses and forced into the white Ford Falcons used by Argentina’s secret police, or as they confronted the reality of their lives as air force officers who were also family breadwinners, they often realized they were surprisingly uncertain as to what they would do in such circumstances. For “Amacio Torres Rodriguez,” the process of writing his avatar’s life had left him with greater insights but also “with a series of unanswerable questions,” that he now “felt compelled” to investigate further.

EMPATHY AND MORAL CHOICE
One of the Avatar Project’s paramount goals was to develop approaches that could scaffold empathy, or informed perspective taking. Empathy is not the same as sympathy; it is rather the capacity to understand actions and choices made from another’s perspective. Psychologists have long considered the capacity for imaginative attribution to be a critical foundation for promoting cooperative, pro-social relationships (Hoffman 2000). Within the context of the project, I was interested to see how those avatars that supported the military regimes understood their choices. “Juan Hoffman Morales,” a Chilean naval officer, felt Pinochet had “the best interests of the country in mind” andusted those who turned him out of office in a 1988 plebiscite as “impatient, spoiled children.” Reflecting on the project, the student who created “Hoffman Morales” admitted that she struggled writing from his perspective. Ultimately, she decided “to bring out his internal conflict over government actions, even as he remained a [regime] supporter.” The student concluded in her final reflection that “I think this project … brought out the important point that those who commit violence may in fact be conflicted about their actions. They’re real people. They’re faced with situations and they have to make a decision.” Still in the voice of her avatar, a student who had spent the previous semester in Chile and was writing in Spanish reflected, “What is bad is that people think that their view of the past is a fact, something absolute, when in reality it’s completely subjective. Until the Chilean people realize that the truth is different for each person, we can’t get ourselves together as a unified nation, cachai [you know]?”

If the project helped students amplify their ability to occupy multiple viewpoints (“It made me think about things from a perspective that I would not have tried out or understood as well without my avatar,” one concluded), I worried that students could displace their moral bearings when representing the position of those who supported regimes founded on violence. What I found was that while students came to understand why others could partake in, or turn a blind eye toward, morally reprehensible acts, they also understood the circumstances that could foster such outcomes.

One student, who wrote from the perspective of an Argentine Air Force officer (“Nahuel Mella Casares”) who admitted taking part in flights which dumped prisoners into the Atlantic, later reflected that “writing from the perspective of a conservative-leaning individual helped me understand how he might have thought about that crazy world he saw around him…When examining things from another’s point of view, the black and white fade to shades of gray.”

HISTORICAL AND REAL LIVES
That many students initially located their avatars’ lives squarely within the thicket of the political past that they were studying did not surprise me. Their avatars reported on rallies attended and slogans chanted, watched with dismay (or enthusiasm) when civilian governments collapsed, agonized over the disappearance of a father, or their own actions while in military service. At some point around mid-semester, however, many avatars began to live “real” lives: they married, had children, struggled with unemployment, and voiced their hopes for the next generation. (Two avatars even moved in with each other!) “I want my grandchildren to be strong and fight for their beliefs,” “Enrique Armando Jiménez Valazquez” wrote on Sept. 11, 2010, “but I know that I can never let it happen. I want them safe. I want them alive. I know that we make mistakes to learn from them. This is history. But what mistakes have I made to learn from.” By merging the politics we discussed in class with their avatars’ lives, the students produced
what I most desired: a sense that people living through difficult times remain real people with lives that are lived on many levels and in many modalities. “History” (those upper-case events recorded in monographs) happens but will be lived differently by an eighteen-year old, the parent of young children, or, as was the case for many of the avatars by the end of the project, grandparents looking back over tumultuous lives. “I may be a lawyer,” “Francisco Rossi Costa,” reflected, “but I don’t know what justice is or if this country will ever get it. But I know that the best way to honor my [disappeared] parents’ memory is through love.”

“...[T]here was a sort of settling in with the material we discussed in class, a sort of aging in my heart that accompanied (and oddly mirrored) what my avatar was feeling at the time,” one student wrote at the end of the project.

Big questions about memory, pain, loss, repression, and history which confound me, confuse me, make me struggle, stretch my heart, make me think things I don’t understand—all of these conflicts remain just below the surface in my avatar’s mind. However, my avatar takes a different approach because she must live in Argentina, she cannot exist ‘ex tempore,’ and so I have explored, through her, trying to be present and attentive to life experiences in history that would be much more comfortable to keep at arm’s length. My avatar is much more objective, much more calm, much more level-headed than I am: that is because she had to be, for her own survival (“Frederica Rojas Fuentes” final reflection).

“History books tell you the facts,” another concluded, “and historical analysis tells you what those facts mean, and suggests what a specific event’s effects were on the people living at the time. But this assignment forces you to really think about how those people feel, and what is going through their heads, and how they must try to go through everyday life, even when they are confronted with traumatic experiences...” By literally placing yourself in the shoes of someone like [Isabel Carrasco-Vera, her avatar], it is possible to feel a part of that history. And in doing so, you come to feel for the people who actually went through that.”

CONCLUSION

It is far from easy to construct alternative approaches to teaching and learning history. The Avatar Project took me far outside my comfort zone and involved considerably more time than traditional assignments. I don’t think I understood its full significance until I read one student’s reflection. “Writing a ‘primary account,’” “Martina Rodriguez Aguilar” wrote, “feels like a much larger responsibility than reading one.” Placing students in this context was, for me, more a responsibility than an assignment. But when I read over the responses, I know I will eagerly repeat the assignment this fall. As one student concluded, “Now I am done—the questions that this course raises are still with me, but my avatar is now at rest. Will she pop up again someday? Will the lessons that she taught me bring me forward? I hope so.” So do I.

REFERENCES


For adjunct professors like me, it is all too easy to experience institutions of higher learning from the outside looking in. The ability to develop deep collegial relationships and establish a presence on any campus is limited. In my experience, students respond to professors who are steeped in the culture of their institutions, knowledgeable about its history, and connected enough to embody its culture. George Kuh suggests that fostering a close relationship with faculty “committed to seeing that students succeed” enhances students’ first-year college experience (Kuh 15). Adjuncts who don’t have these deep institutional connections have to find other ways of demonstrating this commitment to our students’ success. That is why, when the opportunity came my way to teach with one of the high-impact practices (HIPs) at Queensborough Community College, Queens, New York, I accepted it without hesitation.

Queens, one of the five New York City boroughs, is the most diverse county in the US, with the highest number of foreign born residents. With both of the city’s airports (Kennedy and LaGuardia) located in the borough, Queens is truly a gateway to America. Queensborough Community College is a two-year college of the City University of New York (CUNY), serving a diverse student population of nearly 15,000. Our student population is roughly a third black, another third Hispanic, and nearly 40 percent of students come from homes where English is not the first language. At Queensborough, a veteran of the Afghan War may find him- or herself sitting next to an Afghan refugee, and a North Korean and South Korean may study in the same workgroup. Traditional classes may not always provide the support and opportunity for engagement that these students need. Traditional pedagogy may also not take full advantage of the rich experience these students bring to our academic community.

With a track record of innovative pedagogy, Queensborough is committed to the implementation of HIPs considered to increase student engagement and active learning, and appeal to and meet the needs of its diverse and often underserved population (Kuh, 13-17). Current HIPs at Queensborough include learning communities, writing-intensive courses, undergraduate research, diversity/global learning, service learning/community-based learning, and capstone courses and projects. We also consider our Students Wiki Interdisciplinary Group (SWIG), which partners English and basic educational skills courses with an additional content course (currently in the following disciplines: education, nursing, social sciences, and speech/theatre), to be a high-impact student learning experience. Accelerated Study in Associate Programs (ASAP), another focused practice, is a CUNY-wide program funded by the mayor’s office and dedicated to increasing graduation rates for nonremedial students. At Queensborough, we routinely seek ways to integrate and retain our students. In this article, I will reflect on my experience teaching in two of Queensborough’s learning communities.

In Five High-Impact Practices, Brownell and Swaner state that, “In their simplest form, learning communities are a collection of courses that a small group of students complete together” (2009). While the Queensborough learning communities meet this definition, the following learning community description by Scrivener et al. (2008) better captures the spirit of our aspirations for these programs: “Any one of a variety of curricular structures that link together several existing courses—or actually restructure the material entirely—so that students have opportunities for deeper understanding and integration of the material they are learning, and more interaction with one another and their teachers as fellow participants in the learning enterprise.”
In this SWIG learning community, students in English 101 were asked to create a pop culture autobiography. In speech, they were to use popular culture to characterize the ten decades of the twentieth century. The classes didn’t have students in common and students from each class met in person only twice during the semester. Students from both classes were put into small groups that met on the Epsilen WIKI. Students offered comments and multimedia gifts (images, videos, songs, articles, etc.) designed to help the students from the other class improve their disciplinary knowledge and their final presentations.

Although I had been interested in SWIG for some time, I found working with e-portfolios and the technology surrounding them a bit overwhelming. However, since I was dropped into this learning community in the middle of the semester, I thought it essential to continue the class with a minimum of disruption to the students. This provided a strong incentive for me to learn the technology quickly.

My experience in this situation, which was akin to a mentor/mentee relationship with Lynch, made taking on a learning community far less daunting. Lynch’s long experience enabled her to have an appreciation for what I would need to know in order to teach this class effectively. “You can give a speech about anything,” she said, “[but] this project and the collaboration gives students a reason to learn.”

Dupre, who returned to her full-time position after her recovery, put it this way: “Learning communities gave me the opportunity to think in ways I haven’t thought before. It got our students thinking in ways they hadn’t thought before, especially about connections between the disciplines.”

However, Dupre notes, getting students to collaborate can be difficult. When it works, it works really well—they get to see the value of teamwork and participate in creating something original with others. Working with another discipline, they can see their own stories in different ways. “They develop a growing awareness of the value of collaboration and audience. Specifically in our SWIG learning community, they see their own stories in a different way because the other class offers them online ‘gifts’ such as photos, songs, and quotations that are direct responses to and comments on those stories. The gifts enhance and deepen the students’ understanding of themselves and of their audience.” Dupre also found logistics and coordinating meetings with Lynch to be a challenge. She also noted that with SWIG virtual learning communities it can be hard to oversee the collaboration online. “When assignments are due, it’s hard to keep on top of them and evaluate the quality of the online collaboration. It can be easier when one witnesses this collaboration in a ‘live’ classroom. It can be very disappointing when students don’t do it, or make excuses.”

Lynch showed me the ropes and helped me avoid some of the pitfalls of this type of teaching. For the workgroups, she suggested I have students name each
other’s role in the group—for example, one might be the relationship builder, another might be the researcher, another the person who writes up the group’s work. This way group members can appreciate the different competencies each bring to the whole. With the opportunity to teach an already established learning community, I was able to see the material presented from an English perspective through the eyes of a speech teacher. This was very useful because it allowed me to expand the possible approaches to interpreting and analyzing disciplinary material.

ASAP LEARNING COMMUNITIES

KEY ELEMENTS THAT MAKE HIPS WORK

- Integration and Application
- Meaningful Interaction with Faculty and Peers

Implementing learning communities and other engaged forms of learning, however, brings with it numerous challenges and as well as opportunities for students, faculty, and the institution. In fall 2011, I participated in an Accelerated Study in Associate Programs (ASAP) interdisciplinary learning community at Queensborough. In this learning community, my freshman English course was matched with basic speech, taught by adjunct lecturer Jolene Collins.

ASAP is funded by the Center for Economic Opportunity, which is located in the New York City Mayor’s Office. Its overall goal is to improve graduation rates for those students who test into regular, nonremedial college classes. More specifically, the program aims to ensure a three-year graduation rate of 50 percent or more of participating students. The program is open to any New York residents who are enrolled full time, have no more than fifteen college credits, and who qualify for financial assistance. Key ASAP program features include small class size and a consolidated block schedule for students who have been sorted by major.

The ASAP learning community program is very well funded. With several full-time employees, its human resource infrastructure provides support to faculty and students and compensates them for attending monthly ASAP faculty meetings throughout the semester. ASAP students also are required to meet regularly with their ASAP advisors. Those who fall out of compliance risk being dropped from the program. Financial incentives offered to students included the free use of textbooks and monthly Metrocards for all students in the program. In addition, there are several organized social gatherings where food is served. These elements ensure that each ASAP cohort becomes a close-knit community where students spend ample time together outside class. This is particularly important at QCC, which has no dorms and is a 100 percent commuter school.

There is a built-in early alert system for students. Faculty are encouraged to reach out to advisors if students miss just one class, and, in my experience, advisors follow up immediately and discreetly attempt to find out why a student is missing classes. Collins and I were paid to meet one hour per week to discuss any issues regarding the functioning of the learning community, assignments, issues with students, and to plan the remaining classes in the semester.

The spring prior to the semester that our learning community took place, Collins and I were paired up by our respective departmental chairs. We meet once with our faculty coordinator and then alone a few times to discuss our ideas for the learning community. Over the summer we developed and shared our syllabi, discussed a joint assignment, and chose and prepared for a class trip. Each of our syllabi was built around common themes and contained a version of this statement: “This section of Speech 211 is part of a learning community and will focus on music, family, culture, and food. Because this is a learning community, I expect that the work you do in English 101 with Professor Abbott will inform the topic selection, research and overall academic conversation of this course and vice versa.”

Throughout the semester, the two courses mirrored one another. Not only was the thematic course material reinforced in each class, the skills needed to complete tasks were repeated. For example, in English 101 students worked on an informative essay, while simultaneously working on their informative speech for SP211. The structural elements of each class complimented the other and this contributed to the success of this learning community.

The EN101 class culminated in the production of a digital narrative that drew heavily on the skills of speech writing to develop their story board and script. In addition to grading course work, at the end of the course we had students undertake a reflective survey on their experience in the learning community, which we assessed together using the AAC&U VALUE (Valid Assessment of Learning in Undergraduate Education) rubric for integrative learning.

The bedrock of our learning community was our relationship. We both had similar ideas for the learning community and were accommodating of the needs of the learning community. In our weekly meetings, we felt able to talk freely about the workings of the learning community and were both very disappointed when scheduling difficulties prevented us from teaching another ASAP learning community together in fall 2012.

Collins and I appreciated the ability to be in close communication with a colleague who grappled with the same
challenges. She loved the synthesis of using the same material twice, which “lightened our students’ workload, but deepened their understanding of disciplinary material and allowed them to make connections.”

Our learning community was well planned, organized, and executed, and we drew heavily on ASAP’s ample resources. For example, when I realized that our students were struggling with the reflective nature of my assignment questions, I held an event at QCC’s Writing Center on that topic. The presentation included tips on “following directions,” “understanding the assignment,” and “unpacking a question.” We witnessed considerable growth in our students over the semester, with students taking increased responsibility for their own learning. Reflecting on this teaching experience, Collins noted that, “Because the group bonded thoroughly the cohort became a cohesive self-regulating group. When people were slipping, or when personal stuff happened, they’d know and reach out to each other, to ensure the student stayed in class.”

Some of the challenges we encountered included scheduling time to co-plan. As adjuncts both working other jobs, coordinating face time was difficult. We also had to deal with an initial resistance on students’ part to working with a considerable amount of technology in the two courses. For example, I used Epsilen’s Wiki function and encouraged students to post their digital narratives in their e-portfolios. Collins had students use PowerPoint.

A class trip at the end of the semester to Nuyorican Poets Café in Manhattan functioned as a culminating experience for the extra meetings needed to ensure the learning community functions well. At Queensborough, faculty are provided with the resources and the faculty development they need to undertake the work of creating a first-rate learning community.

REFERENCES


I watch Rubi Garcia, a rising sophomore at the University of Southern California (USC), expertly negotiate a conversation with three Japanese students at a reception in Nagoya, Japan, even though she speaks only a few words of Japanese and these students speak little English. Rubi is nearing the end of her first trip outside of the United States, part of a class I teach on America culture in Japan and Japanese culture in the United States. At the beginning of this study abroad intensive course, I didn’t imagine that Rubi or her peers could successfully engage in this international dialogue, given their limited language skills. Rubi is a first-generation college student from the Watts area of Los Angeles, and she has travelled with twelve other students, freshmen to seniors, who are all the first in their families to attend college. These students are Norman Topping Scholars at USC, a fellowship program that identifies low-income students who have overcome major obstacles to attend college. These thirteen undergraduates have travelled to Japan with the student service professionals that run the program, along with a team of two PhD students and a working professional I have assembled to provide them a first-rate educational experience.

DEVELOPING AN INTENSIVE STUDY ABROAD COURSE

As a faculty member dedicated to working with underrepresented minority and low-income students, and a dean whose responsibilities include ensuring that diverse students take full advantage of their college educations, I have been overjoyed by the chance to develop this intensive study abroad course. It is currently a three-and-one-half week “Maymester” course that takes place immediately after commencement and before our regular summer sessions. This allows our students to enroll in this four-unit course as part of their regular spring curriculum, taking advantage of their respective financial aid packages, while also being supported in their travel by the exceptional funding of the Norman Topping Program and research support from the USC Dornsife College of Letters, Arts, and Sciences.

This is the second Topping student group that has gone to Japan under the auspices of this course. I initially developed the course with Christina Yokoyama, director of the Norman Topping Program, in academic year 2009–10, after we realized that first-generation college students were among the least likely USC students to participate in traditional study abroad programs. Although the university was proud of producing “global leaders and citizens” among its undergraduates, very few students from our first-generation college population—which accounts for 16 percent of our student body—pursue traditional study abroad opportunities. The Topping Scholars were perfect partners to create a new cohort of global leaders, since the scholarship program consisted almost exclusively of first-generation college students, many of whom were already campus leaders committed to community involvement. What was needed was a course dedicated to their particular needs and interests.

We chose Japan as a site to study because it was a relatively safe environment for a first trip abroad, as well as a non-Western culture that had deep connections to our region of southern California. I wanted to make sure that students could see Japan in our local culture, while also experiencing how features of US society and history made their way across the Pacific to Japan. Unlike study abroad programs made for students familiar with international travel and cosmopolitan culture, this program would make global culture itself part of the investigation, trying to show how Japan and the United States were interrelated societies that had made connections despite differences in race,
class, and culture over time. Those transnational connections included a history of war and violence, corporate relationships, and the movement of people and culture back and forth for over a hundred years.

Topping Scholars for the class were selected through a competitive interview process at the end of the fall semester. During the spring semester, we met as a group once a month to have beginning conversations and introductory presentations about Japanese culture and society. Students were introduced to select faculty members and graduate students whose academic work concentrates on Japan; they also had a chance to meet and interact with current USC undergraduates who grew up in Japan. Just one month before getting on the plane, we held a joint class over Skype with students in an American Studies class at Doshisha University in Kyoto, individuals we would meet in person on the trip. Each class was asked to view one motion picture about the other culture and prepare questions for each other from those viewings. While we watched “Shall We Dance?” about ballroom dancing in Japan, the Doshisha students viewed “Freedom Writers,” a documentary about an urban high school classroom in southern California. This early experience in learning about each other was critical for future exchanges in person.

We also made provisions for our students’ entire families to find out about the travel, including a workshop for parents and families to explain the entire trip. In addition, we had learned the importance of maintaining a college-sponsored blog while we were travelling so that student reflections and photographs could be posted regularly and families had a low-cost way of keeping tabs on the group as we travelled. This blog led many younger siblings in the student families to express interest in college, study abroad, Japan, and attending USC in their own academic futures. Not only did this provide extra outreach to these families to share in this experience along with their students, it also helped to provide additional encouragement to our undergraduates from their own families to fully participate in the intellectual activities that this study abroad experience could generate.

**PRE-TRAVEL STUDIES**

When we gathered on Monday after commencement for our first class meeting, the excitement of the students was palpable. We spent that week preparing the students to travel abroad by learning about Japan in Los Angeles, then got on the plane at the end of the week for the two-week intensive part of the class in Japan. The students had mini-lessons that week in Japanese history, language, and etiquette, which was reinforced with course readings. But our major activity was to explore aspects of Japanese culture and economy in Los Angeles. We started with a session by staff from the Toyota Corporation, who introduced us to their assembly plant where they receive automobiles from Japan at the Long Beach port to prepare them for the US market. Toyota corporate headquarters is located nearby in Torrance, and we visited there to hear about Japanese corporate culture in the United States, as well as internship possibilities for our students upon their return. Truck and train traffic through south Los Angeles, where many of our students reside, was chock full of international trade from the busiest ports in the United States, moving through their neighborhoods on the way to communities throughout the nation.

The American company we explored in Japan was the Disney Corporation, a Southern California institution, and in this pre-travel week, we had presentations from the vice presidents in charge of international operations and park relationships with Japan before visiting Disneyland in Anaheim. Each of these corporate visits was intended to give our students a background that makes their engagement in Japan more meaningful. In addition, we spent a day learning about Japanese American history in Little Tokyo and through the Japanese American National Museum. Besides learning the tragic story of Japanese internment in US concentration camps during World War II, we also experienced a lecture on Shinto religion in a Little Tokyo temple, as well as learning about a lost village of Japanese fisherman on Terminal Island. These days were also our first encounters with Japanese cuisine, with many of our students using chopsticks to feed themselves for the very first time. Another highlight of these days was the send-off provided by the Consul General from Japan in his offices in downtown Los Angeles.

Early on Saturday morning, the travelling group of nineteen—thirteen undergraduates and six advisors—gathered anxiously at Los Angeles International Airport for their air travel across the Pacific. Many parents and family members were there to say goodbye to their children, as this trip
was the first ever flight of any kind for several of the young scholars. Once on the plane for the eleven-hour flight to Tokyo, I took advantage of the time to have office hours with the students individually to discuss their class research projects. Each young scholar had crafted a research project that they would work on in Japan.

We did not expect these students to become experts in Japan; rather, we helped them develop a research project that extends their primary intellectual interest in their majors with a comparative focus on that subject in Japan. Consequently, Jasmine Torres, who was interested in reforming the American foster care system, planned to explore how orphans from the recent tsunami in Japan are being reincorporated into Japanese society. And An’Quinette Jackson, whose academic work was focused in a pre-health career major, would be exploring how Japanese diet and exercise affects overall health results in comparison to US populations. For several first- and second-year students, this would be the first research paper they complete at USC, and the academic team leaders have already helped them craft their questions and find preliminary readings on their subjects. Even more importantly, none of the students had ever spent every day for three weeks with a faculty member, so this intensive experience of exchange made them more comfortable interacting with faculty overall in the future.

**LEARNING THROUGH IMMERSION**

We arrived in Tokyo exhausted but excited about the learning opportunities ahead. We spent our first full day exploring the vastness and diversity of the Tokyo metropolitan area. The students were initially amazed at the efficiency of the train and subway system and the commitment to parks and green space amidst the skyscrapers and elevated highways. We followed up on our Los Angeles activities by visiting Tokyo’s Disney Sea theme park and hearing from park operations and management about how they incorporate Japanese culture, including manga and anime, into their imagery and design. A day trip to rural Mishima allowed us to meet with Japanese college students at Nihon University, where the students there had prepared presentations for our students on their individual research areas. We were treated to an inside look at Google Japan, to understand how high tech companies take advantage of the creative impulse and talent in East Asia. By the end of this first week, we had explored Japanese imperial society, Shinto religious practice, and contemporary department store culture, all while taking in the sights and sounds of modern Japan. We even dedicated several hours for the students to explore Tokyo for their specific research interests, taking photographs of relevant sites and having conversations with local informants. By the end of that week, the only undergraduate who had already participated in a study abroad experience before this trip, Debbie Rumbo, told us that, upon reflection, she had learned more about this culture in a few days than she had in an entire semester in Spain in a traditional program.

As we boarded the Shinkansen—the bullet train—at the end of this first week, students and advisors had their first collective time to reflect on their journey so far on the six-hour trip to the other side of Japan in Hiroshima. We spent the second week of the trip visiting three different cities in Japan—Hiroshima, Kyoto, and Nagoya—to understand the diversity of Japanese life before returning to metropolitan Tokyo and our departure to the United States. It was this part of the class that had the largest cultural impact on our students, as they began to understand the long and complicated history of the nation, the strength of Japanese culture, and the power of interaction with Japanese people of all ages. That night, we were warmly hosted to dinner by the USC Alumni Club in Hiroshima and were able to meet fellow Trojans and hear their fascinating stories of combining American and Japanese lives. Several of our students learned about Japanese internment first-hand from eighty-two-year-old Marie Tsuruda, who was incarcerated with her family in Arkansas and Tule Lake and deported after the war. Since that time, she has lived in Japan teaching English. She earned her degree in teaching English as a second language at USC.

The impact of the Atomic Bomb Museum and Park in Hiroshima stayed with our students throughout the trip. The reality of the destruction of an entire city by American forces—and days later the second city of Nagasaki—is much more complex to assimilate when you are physically in the revived city itself. For many, this was the first time that they struggled with their American identities, having lived their lives in the United States mostly as racial minorities to this point. They were able to reflect on this experience in Miyajima Island, after a lunch cruise to one of the most beautiful spots in the Japanese nation. After a powerful evening of discussion and sharing, we traveled the next day to Kyoto, where we had the privilege of hearing from Professor Fanon Wilkins, an African American historian who has taught at Doshisha University for the past five years. Contrasting the comfortable heterogeneity of the United States with the homogeneity of Japan was a rev-
elation for our diverse students, and we linger in discussions about the meaning of blackness and immigrant status in Japan. The beauty and the simplicity of Japanese temples and gardens in Kyoto positively overwhelmed our students, and we shared these experiences openly and honestly with newfound friends among the students we interact with in the classroom at Doshisha.

Nagoya, sister city with Los Angeles, was our last stop before returning to Tokyo. Here we fully understood our connection to automobile culture by experiencing the automation of the Tokyo Corolla plant that produces many of the cars we will see on the streets of Los Angeles. The Aishi-American Friendship Society hosted our reception in this city, and the students had the chance to interact not only with another group of Japanese students, but also business and education leaders and US Consulate officials in Nagoya. Upon our return to Tokyo, we had another day to focus on individual research projects before concluding the trip with a final Karaoke celebration and exchange of gifts. After the long trip back to the United States, we met for two days at USC to go over final plans for research papers, as well as prepare for public presentations each student will make to the entire Topping scholarly community schedules. First-year student Eric Ochoa decided to concentrate his academic major in industrial engineering, after meeting working engineers at Disney, Toyota, and Google, while sophomore Johanna Becerra plans to participate in a summer overseas program for engineers before she graduates. South Los Angeles native Jessica Guevara began contemplating the possibility of working abroad after graduation, while four students decide to enroll in a course on Japanese religions in the fall, despite never previously having an interest in that topic of study. The fact that all the students on this trip come from low-income families and are the first in their families to experience college means that these transformations ripple across various communities, including racial minority organizations and diverse student outposts in residential life. What makes the success of this experience possible is the partnership between academic life and student services, specifically the USC Dornsife College of Letters, Arts, and Sciences and the Norman Topping Student Aid Fund. The trust and camaraderie of leaders in these two entities make for powerful intellectual experiences for the most vulnerable of our undergraduates.

PROMOTING GLOBAL LEADERSHIP
As a faculty member committed to diversity through excellence in programming, classroom work, and student achievement, my role in organizing and teaching this intensive course to Japan has been among the most satisfying experiences in my academic career. I see the difference the course makes in students’ confidence, scholarly performance, and ability to conceptualize new places for themselves in global society. We need to promote global leadership among all students in American higher education, not only students born to money and privilege. Given the diversity of youth in the United States and the undergraduate population in our colleges and university, we must find new ways to introduce the world to all students and make comfortable the international exchange of ideas and experiences. I see my own personal contribution to this effort to be only possible by working with other education professionals, both academics and those in student services, who are committed to the success of students of color and those who come to college from modest backgrounds. In this way, I can make my own small contribution to an equitable global society of the future, one in which every student from every background can feel that they can make a positive impact on the world.
North Carolina Central University (NCCU) has been a constituent member of the University of North Carolina System since 1972. Chartered in 1909 as the nation’s first public liberal arts institution for African Americans, NCCU is now classified as a Comprehensive Level 1 Institution with an approximate enrollment of 8,300. NCCU has well-established STEM programs and is increasing emphasis on research as a corollary to a liberal arts education. However, the increase in college access has resulted in many first-generation students and concurrent with this has been a decrease in retention and graduation rates.

During the 2010-2011 academic year, NCCU participated in the first cohort of the Preparing Critical Future Faculty (PCFF) Program, a professional and leadership development program for women of color faculty in STEM disciplines focused on improving STEM education at HBCUs and beyond. NCCU developed an action plan focused on broadening engagement experiences for all STEM undergraduate majors through embedded project-based and inquiry-based activities throughout the curriculum. Non-STEM majors seeking to fulfill their general education science requirement will also benefit from these revisions. This article features individual reflections from the authors, who are both NCCU-PCFF faculty representatives. One section is on the implementation of high-impact practices in General Biology, the other in General Chemistry.

HIGH-IMPACT PRACTICES IN GENERAL BIOLOGY COURSES

Over the past few years I wanted to do something different with the General Biology course. After learning about the Preparing Critical Faculty for the Future (PCFF), I knew I wanted to be a part of this community of scholars to network about my General Biology laboratory experiences, expectations, and frustrations. I also wanted to learn more about how to secure grant funds to improve NCCU’s undergraduate science curriculum through innovative teaching and inquiry-based laboratories. Since implementing this year-long inquiry-based project in the General Biology laboratory, the weekly exercises are more meaningful. When I think about interdisciplinary learning, this innovative laboratory course forces the students to integrate their math and chemistry knowledge to set up their experiments. This course also requires that students apply their written and oral communication skills to write lab reports in their notebooks on a regular basis and finally, the students must use good oral communication skills to present a scientific poster at the end of the year-long course.

Recently, I have seen more student enthusiasm in the laboratory coupled with better student attendance. Since much of this innovative laboratory is student driven, it has been rewarding to see the traditionally underrepresented students in STEM emulate research scientists during their first year of college.
innovative laboratory is student driven, it has been rewarding to see the traditionally underrepresented students in STEM emulate research scientists during their first year of college.

The General Biology course at NCCU is the first core course for science majors and those students who will be taking upper-level courses in biology. This four-credit hour class meets for three lecture hours and two laboratory hours each week. Class enrollment is typically twenty-four students per section, and faculty teach multiple sections. For most tenure-track faculty who teach the course, a guiding question has been, “how does one manage teaching and research with the large enrollment in these introductory courses?” This introductory course requires several hours of preparatory time for both lecture and laboratory, and grading papers can consume an entire day. The notion has been that the traditional laboratory exercises were designed to reinforce the lecture material covered in class, but over the past five years, in-class exams and final exam grades revealed that our students were still not grasping the concepts. So those of us teaching the introductory biology course decided to try something new. Instead of using the traditional cook book laboratory exercises for one section of General Biology I, we integrated a research-based project on bacteriophage genomics in the laboratory course.

**Authentic Research Experience**

Students need scientific knowledge, quantitative and communication skills, and hands-on experience to be prepared for science careers. According to the National Research Council (2003), students need to appreciate that science is a process and not a set of memorized facts. Science experiments should enable a student to think independently while at the same time exposing them to scientific protocols and research methods (Hunter 2007; Kuh et al. 1997). As scientists construct experiments to answer questions, too few students are given this type of opportunity because of the resource-intensive nature of fundamental research.

Howard Hughes Medical Institute (HHMI) supports the idea that undergraduate students should be exposed to an authentic research experience as early as possible. Phage Hunters Advancing Genomics and Evolutionary Science (PHAGES), supported by HHMI, introduces undergraduate students to an authentic research experience via a bacteriophage genomics course. This course builds on themes and techniques across biology. At the same time, this research experience connects students, teaching assistants, and faculty via a common experiment to share results, resources, and expertise.

NCCU applied to participate in the PHAGES program, which we felt would help to improve first-year retention rates in the General Biology course, help students better apply concepts, and provide students with early exposure to research. Although we anticipated that this experience would motivate students to strive for better class participation and better course grades, we had no idea how excited and how engaged the students would become with this research project.

In our General Biology I—a genomics-based laboratory course—the first few weeks of the fall semester are used to orient the students with basic science skills, which include familiarizing the students with scientific equipment, using aseptic techniques, maintaining bacterial cultures, and performing serial dilutions. Mini-experiments have been designed to ensure that they have mastered these basic science skills and understand basic scientific concepts.

**“Doing Science”**

This course was team-taught by two biology instructors and two biology graduate students. Instructors were present to show the students proper techniques and answer any questions that the students may have had, while the graduate students were available in case additional assistance was needed during class. Working with first-semester freshmen, the notion of good record keeping in one’s laboratory notebook, reading the protocol prior to class, and thinking ahead about the next experiment needed to be reiterated during every laboratory session. The expectation was that by the end of the semester, the students would be able to write a reflective paper about their experience, and by the end of the academic year, be able to prepare and present a scientific poster.

At the end of the spring semester, three small student groups from our genomics class presented posters based on their genomics research at the NCCU College of Science and Technology Annual Research Symposium. Out of forty-five undergraduate posters, two of our student groups tied for third place in the Undergraduate Poster Presentations, a testament emphasizing their effective communication skills and comprehension of the subject matter. After the first year of this course implementation, we observed several things that worked to our benefit. For example, there was increased student retention (80 percent pass rate of C or better) from the fall semester genomics course to the spring semester genomics course, and the laboratory component did not need to necessarily reinforce the lecture material. Our short-term outcomes showed that participation in this laboratory-based genomics research course motivated our students to have better class participation and strive
for better lecture and laboratory grades when compared to students enrolled in a traditional introductory biology laboratory course.

Students that participated in this designated laboratory section of introductory biology were “doing science” by investigating a real-world problem, interpreting data, and making conclusions about their results based on bacteriophage genomics. Just having completed our second year of this laboratory genomics-based course, we have exposed at least forty science majors to this innovative research experience.

Looking Forward

As the biology department thinks about expanding this course, we plan to have group leaders in every laboratory section that will be paired with a ‘research team’ comprising a two former undergraduate students from the genomics class, a biology graduate student, and a science faculty member. In addition to this research team, we plan to also have a laboratory coordinator that will serve as a liaison with the group leaders to ensure that adequate supplies are available once the students start conducting the actual experiments. We also plan to have all of the students involved in the course blog about their laboratory experience, which can be written and read on a more frequent basis.

Interdisciplinary faculty and faculty expertise from the various science departments will be used to educate the students on how biology, computational science, and environmental science are all interrelated. There will also be a genomics recitation to answer specific questions that students might have about their research project and the practical applications that this research has in the scientific world. As one of our long-term goals, we hope that by improving the students’ overall educational experience, we will encourage them to seek out summer research programs after their freshman and sophomore year and subsequently pursue graduate degrees and careers in a science field.

HIGH-IMPACT PRACTICES IN THE GENERAL CHEMISTRY CURRICULUM

In fall 2011, I returned to full-time teaching after seven years in various leadership roles in the Divisions of Academic Affairs and Graduate Education and Research (now the Division of Research and Economic Development) at North Carolina Central University. In addition to my teaching duties, I am the campus Principal Investigator for the Louis Stokes Alliance for Minority Participation (LSAMP) Program—part of the Division of Human Resources Development’s (HRD) portfolio at the National Science Foundation focused on broadening participation of underrepresented minorities in STEM.

For several years, the Alliance’s focus had been primarily focused on institutionalization of best practices such as peer mentoring and peer-led learning and undergraduate research among others (Williams and DeLauder 2008; Williams and DeLauder 2009). I was interested in implementing some of these high-impact strategies into the general chemistry curriculum to foster student engagement and student learning.

General Chemistry I and II is a two-semester course sequence for science majors. General Chemistry II is considered a gatekeeper course as it is a prerequisite for all students who take upper-level courses in chemistry. In contrast to biology, however, non-science majors are allowed to enroll in these courses to fulfill their general education science requirement as well. In General Chemistry II, we build upon the content mastered during the first semester.

Both courses are four credit hours with classes meeting for three lecture hours, one recitation hour, and three laboratory hours each week. Average student enrollment per section is twenty-four. The majority of students enrolled were biology, physical education, and food science majors.

All students were required to spend one hour outside of class per week with a peer mentor to keep them on task. Peer mentors were selected based upon their success in General Chemistry (a grade of B or above), their interpersonal skills, availability, and interest with engaging students. A first-semester graduate student was selected to coordinate the activities of the mentors. Study guides were developed for each chapter outlining the content goals and objectives along with examples and assigned problems. Biweekly quizzes, posted to the course website, assessed information discussed in the Study Guides; as an additional assessment, each student was required to submit a notebook periodically during the semester for review. The added incentive for students completing these study guides was that they were allowed to use their notebooks on quizzes and tests. This allowed for the assessment of critical thinking and problem-solving skills rather than memorization.

Project-Based Activities

During fall 2011, General Chemistry I students demonstrated their understanding of the scientific method through development of a hypothesis-driven project on a topic of their choice. Elements in the presentation included the hypothesis and specific aims, project design, a discussion of the type of data that should be gathered in order to address their specific aims, and the type
of results expected from the gathered data. The purpose of this exercise was for students to not only understand the elements of the scientific method but also how the method could be utilized within their specific majors and as an introduction to the design of research projects. Students across several majors worked together to address their chosen topic with the expectation that all topics would somehow link to chemistry. All groups gave a ten-minute presentation to the class and were peer reviewed by the class.

During spring 2012, we changed the presentation assignment to further engage students. That semester, General Chemistry I students developed projects on the periodic table where each group was assigned a chemical family (group) to present to the class as a PowerPoint presentation on unique information regarding elements within the group or family. As a final project, students selected a molecule of their choice and wrote a research paper to reinforce some of the topics that were discussed during the semester. From that paper, students developed a presentation to deliver to the class. General Chemistry II students performed several interactive activities made available through a teaching and learning website. These activities reinforced topics discussed during lecture and enhanced critical thinking and problem-solving skills because students were required to interpret results. General Chemistry II students also wrote research papers on a molecule or their choice. Students were expected to draw linkages between the intermolecular forces of the molecule and how they relate to the molecular structure. They were also expected to explain where the molecule would most likely be stored in the body based upon exposure or ingestion and how acid or base properties, as well as solubility of the molecule, affect this phenomena. Students were expected to provide data and any analytical procedures used to gather this type of data in their discussion, and to discuss any environmental impacts or concerns for the molecule selected.

**Improving the Passage Rate**

For fall 2011, the passage rate (grade C or above) for General Chemistry I averaged 66 percent. In spring 2012, the passage rate improved to 83 percent. I attribute this improvement in the passage rate to including more interactive activities, allowing opportunities to retake quizzes, and having peer mentors available during lecture and recitation. The passage rate for General Chemistry II averaged 86 percent. More activities focused on interactive learning versus rote memory may explain the passage rate. As with General Chemistry I, students had the opportunity to retake quizzes and peer mentors were available during lecture and recitation to assist with questions.

I found that assigning open-ended projects for General Chemistry I and II students is a more comprehensive way of gauging comprehension. More importantly, if students are able to make linkages between seemingly disparate concepts then they should better retain the important aspects of the course. Providing opportunities for students to actively engage in applying concepts that they understand to address new topics also helps to build skills that are useful along their career paths.

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Having already accepted that high-impact practices (HIPs) have been shown to deepen student learning, especially for at-risk groups of students, I ask then—how and why? If we can better describe the functionality of these practices, with the outcomes in view, then the facilitation of these practices can be improved upon. My view is that these practices empower students with the freedom to give an account of themselves within the public discourse. The practices connect with students, and give space for students to connect with each other. Empowerment comes as they find their voices and communicate more critically with others—enabling a collaborative life.

Empowerment comes as they find their voices and communicate more critically with others—enabling a collaborative life.

However, without a better understanding of the dynamics of the social formation that develops by way of these teaching practices, our outcomes and the quality of our connections with students will not be fully maximized. The high impact will eventually diminish.

**SPLINTERING**

My reflection begins with the splintering of higher education and American society generally. By splintering I mean the diverse ways the social infrastructure, in both higher education and society, is ever stressed and fragmenting. As the broader culture is splintering, every part of the classroom is affected by these same dynamics. This splintering can be traced from outside the classroom—into student life, each professor, each institution.

Several books detail facets of this splintering and I need only mention a few recent studies to point out how these levels all come into play within HIPs. For example, one book, *Education and the Crisis of Public Values*, discusses the way national political debates seldom rise above rhetorical affect to a level of deliberative debate or even reasoned compromise for the common good. Henry Giroux, without taking sides or electioneering, finds deficiencies on both neo-conservative and neo-liberal camps. He provocatively considers how the rift created by the politicization of public education has limited the reasoned flexibilities that professional and practiced educators have claimed for the sake of public education available for all. Giroux makes helpful observations about how we lack the critical language, civic courage, and public values to address political rhetoric that coarsens education discourse by drawing lines, closing ranks, and making education a less deliberative process. There are too few places where the focus is upon imagining a culture of learning that is inclusive—one where the marginalized and less wealthy are empowered.

Another analysis of the splintering of higher education is provided in the book *Academically Adrift*. Richard Arum and Josipa Roksa underline a lack of purpose in higher education as a key factor that limits learning by students on American campuses. This drifting compounds the disparities in K–12 education. Economically disadvantaged students, those in poorer districts or less educated families, are more likely to be less enculturated into higher learning. The authors’ data shows that college widens this gap for most who fall even further behind as they make their way through college. Arum and Roksa make plain that student time and resources are less and less used for learning and that the meaning of higher education needs further attention by
all involved. This amplifies what Mark Edmundson observed fifteen years ago in Harper’s magazine in his essay, “On the Uses of Liberal Education.” He called this trend toward less academic *rigo eduction lite* (1997). What Edmundson saw as the product of student consumerism and superficiality may be more difficult to address today when it is also the outcome of a family and work life that does not value education. From Arum and Roksa’s perspective, this same drift and purposelessness is a bigger problem for students who are already behind upon entering college.

Another brilliant book, *Not for Profit* by Martha Nussbaum, asks about the effectiveness of liberal education around the globe. Nussbaum observes that market forces are diminishing the number of programs and graduates from the humanities around the world, while professional education is increasing. This, she says, is a threat to democracy—as a less humanistic society results. She recommends that teaching needs small classes, “or at least sections, where students discuss ideas with one another, get copious feedback on frequent writing assignments and have lots of time to discuss their work with instructors” (2010, 125). She contrasts these practices by American professors as better than those of their counterparts in Europe or other places like India that have reorganized higher education with a growth agenda. Her argument is that democracy needs the humanities to keep it alive and functioning—with an egalitarian spirit strong enough to stand up to the vicissitudes of the market. Rather than focusing on the inefficiency of the classical form of education, Nussbaum suggests the price of deepening inequality may be the survival of democracy itself.

Each of these books or essays lament the loss of the traditional “small classroom.” The push by economic forces that demand ever increasing efficiencies is certainly felt inside the classroom of our public universities that often operate *en masse*.

So when I enter a classroom, the students and I stand together within all of this. As authors of our lives, but also characters within a larger narrative, the splintering of society is as much a reality as anything else that we experience together. There are multiple levels of “things falling apart” within the class. If I can sometimes perceive the “tip of the iceberg” of human suffering in the classroom, it should be a reminder that a much larger part of the iceberg is below the surface, invisible and not discussed. How can we use HIPs to address this fracturing? My hope is that the practices and questions of the course can be posed in solidarity—exemplifying a faith in each other.

All of us are products of the intersection of hyphenated groups that are fluid and often in competition.

**AMERICAN MULTICULTURALISM**

All of these issues also are caught up in the dynamic issues of American multiculturalism. Students can feel uneasy about coming “out” too far with their respective identities, because they experience everyday what Jeffrey Alexander calls the instability of hyphenated identities. Alexander’s *The Civil Sphere* makes a convincing argument that there is a moral preference or a preferred choice to be made for a self-conscious form of multiculturalism.

All of us are products of the intersection of hyphenated groups that are fluid and often in competition. “Yet just as hyphenation can be pushed backward to assimilation and even exclusion, it can also be pushed forward to more even-handed, more reciprocal understandings of incorporation.” (2006, 461) If pushed forward enough, then a society can be organized around difference and diversity rather than around conformity. This presents a wise teacher with the opportunity, even on the first day of class, to strategize assignments and practices as a way to push forward reciprocity and fairness to all. Here one can begin to develop benchmarks on the journey toward an authentic multiculturalism that includes the right to mutual expression, reasonable disagreement, and eventual acceptance of the position of others even beyond the pursuit of consensus.

A working knowledge of all these sources of splintering, the rifts that are present in any classroom, helps inform a facilitation of HIPs. I propose that the ongoing work of memory studies has benefits in our classroom pedagogies. This begins with an awareness of the complexities involved, but also gives us a valuable clue about the function of HIPs as narrative splints for the splintering souls that compose our culture of learning.
By asking students to relate this text to their lives or to larger society, students not only learn to critique but also they learn to identify their own convictions.

of faculty developed it with a pilot study. Today, it seems many universities are catching up to the innovation of a capstone general education humanities course for all students.

The course, imaginatively named World of Ideas, is designed to foster integrative learning. Students are able in their junior or senior year to reflect upon their studies and bring them into a more cohesive and at the same time a more pragmatic perspective. Students are exposed to a variety of perspectives as the faculty are given freedom to choose their primary texts but are asked to include something ancient and modern, something religious and philosophical, something Eastern and Western, topics and texts that are literary, and something from the daily news. Even as an academic, I show examples of presentations at conferences that include a self-produced short film that complements the research paper.

Regardless of the chosen format, my simple instruction to students is the same: “Relate the inside of the classroom to the outside life.” Students can begin in either direction, but the boundary between academic learning and worldly living must be crossed, transgressed. They can start inside the class, perhaps with an analysis of a text like Hamlet or Antigone that leads them to raise their issue. Then they must relate this to society today. Or, they can reverse the order from outside to inside, beginning with a description of an issue that they face in the world today. Students find their approach to the issue by learning to contrast competing ideas and theories of ethics that we discuss throughout the semester. By asking students to relate this text to their lives or to larger society, students not only learn to critique but also they learn to identify their own convictions. The discovery is made that the greatest texts from all cultures narrate the splintered life in ways that reconnect with the present culture.

This integrative writing assignment has one central goal—to give freedom to the student for development in unpredictable directions. This is not a linear development, moving from point A to point B, but growth more like a starfish that moves out from its own center. My point is that HIPs function at their best to provide space for the intellectual and moral development of the student first. This purpose is more likely achievable when there is a deeper cognizance of the many levels of social splintering today—from the political, to the economic, to the juridical, to the changing media of today, to the plethora of competing social and moral paradigms. All of these are interrelated in the college classroom. Great writers of the past give us texts that creatively draw in an audience to engage their damaged life by adding their own interpretations and responses to a splintered culture. These narratives come from all cultures and inform the educator’s composition of assignments where students are likewise welcomed to join in the life of the mind that is capable of response when provided a similar space.

REFERENCES
Faculty Perceptions of General Education and the Use of High-Impact Practices

Karen Paulson, senior associate, National Center for Higher Education Management Systems

The Association of American Colleges and Universities’ Give Students a Compass project, part of AAC&U’s ongoing Liberal Education and America’s Promise (LEAP) initiative, focuses on systems change to advance the use of high-impact practices (HIPs), especially in general education courses and programs. Through the Compass project, campus faculty and other academic leaders at nine institutions in three state systems—Wisconsin, Oregon, and the California State University—have worked to map expected student learning outcomes, deployed high-impact practices that help students achieve the intended outcomes, and adopted educationally meaningful assessment strategies for general education reform and implementation. As part of the national project, staff at AAC&U and the National Center for Higher Education Management Systems (NCHEMS) created a faculty survey to garner input about the underlying assumptions of the Compass project, as well as the intended outcomes of the project.

System-level administrators at Compass institutions provided feedback and supplied questions they hoped to have addressed on the faculty survey. After multiple rounds of review, a final list of common questions was agreed upon. Allowing for some individual modification, seven Compass institutions administered surveys between November 2010 and December 2011.

RESPONDENT CHARACTERISTICS
The majority of those who responded to the survey (87 percent) were primarily faculty or instructional staff with 56 percent of the respondents being full-time, tenure-track faculty members. Respondents came from humanities and the arts (28 percent), professions and applied sciences (26 percent), social sciences (21 percent), and natural sciences (12 percent). The largest group of respondents teaches both lower and upper-division undergraduates (45 percent). An additional 27 percent teach primarily upper-division undergraduates, 14 percent lower-division undergraduates, and 11 percent primarily to graduate students. Because the survey was about general education, respondents were asked to characterize their home departments based on how many general education courses were offered. Nearly 40 percent came from departments that offer many general education courses, with 35 percent in departments that offered a few general education courses and 21 percent in departments that did not offer any general education courses.

LIMITATIONS
One major limitation of the survey is the low response rate of 12.2 percent. People who respond to surveys can usually be categorized as either extremely positive or extremely negative about the subject matter. In results from surveys with low response rates the likelihood is that responses gathered came from these two ends of the spectrum with the silent majority in the middle. On this survey, the difference is clearly seen in responses about whether there was a strong desire to improve general education for them as individuals, and in their departments, institutions and systems. Nearly 70 percent of respondents agreed that they had a strong desire to improve general education, but their perceptions were considerably lower for their departments (43 percent), institutions (44 percent), and systems (32 percent). Clearly respondents perceive themselves to be more engaged on the topic of general education than typical for their institutions.

Another limitation of the survey is the balance that had to be struck in order to ask the questions that needed to be asked but to keep the survey a manageable length. Even after cutting multiple questions, the survey was still long (twenty-four questions, many with multiple items), which would also contribute to a lower response rate. In addition, some questions were double barreled,
meaning that they asked about two similar but perhaps not completely distinct ideas such as “teamwork and problem-solving skills,” which technically are two different activities but in the survey are treated as a single topic.

**ANALYSES**

These data gathered, while limited by the low response rate, give a good baseline snapshot of perceptions of engaged faculty at seven participating institutions with regard to general education.

Most questions were closed-ended on a six-point scale from “strongly disagree” to “strongly agree.” These six response categories were further combined to represent agreement (“strongly agree” and “agree”), neutrality (“slightly agree” and “slightly disagree”), and disagreement (“disagree” and “strongly disagree”). Four open-ended questions were included on the survey. Three researchers independently analyzed the collected written responses to open-ended questions to identify and code themes or trends among the answers. After coding was completed, the three researchers discussed their individual findings.

**FINDINGS**

The Compass Faculty Survey asks respondents questions about overarching assumptions about higher education in the country, HIPs in the delivery of general education, and the perceived influence of those educational practices on student learning.

**The Relationship of the System to Institutions in Terms of General Education**

The majority of respondents (80 percent) agreed that more students need a higher education these days and that the increased level of participation challenges the entire higher education community to learn how to educate all students effectively (82 percent). Similarly, most faculty respondents (72 percent) agreed that students who attend multiple institutions would need additional advice or guidance in order to navigate their studies. Oddly enough, more faculty were neutral (59 percent) when asked for their assessment of whether the majority of students in public institutions construct their education from programs at multiple institutions, with only 27 percent agreeing. In the light of established (Adelman 1999) and more recent research (NSC 2011; NSC 2012) showing students do construct their educations across multiple institutions, this finding may indicate that faculty continue to believe that students at their institutions or in their programs are different than those in the rest of the country.

**High-Impact Practices and General Education**

With respect to general education, faculty wholeheartedly agreed (85 percent when “slightly agree,” “agree,” and “strongly agree” are totaled) that the foundation for addressing broad goals for student learning in public higher education is the general education curriculum. However, faculty respondents were split on whether general education based on completion of distribution requirements, rather than learning outcomes, effectively demonstrates student learning. Most answered neutrally (55 percent); with an additional 25 percent giving a negative response, but still one-fifth of faculty respondents agreed that general education distribution requirements were effective. This finding would seem to indicate that even with the many initiatives focused on learning outcomes, a healthy minority of faculty hold on to established ways of structuring general education. In related questions, when asked whether making the purpose of learning outcomes in general education clear to students at their institutions would improve student learning, 61 percent agreed, but only 48 percent agreed that general education should be designed intentionally to facilitate success for transfer students. Even when neutral responses are included with those agreeing, the difference diminishes but still remains: 94 percent compared to 88 percent. It is unclear why respondents acknowledge the need to provide clarity to students, but not for the purposes of transfer. This area requires additional research.

In terms of the relationship of general education with majors, 52 percent of faculty respondents agreed that the most important features of general education in the future will foster integration of general education and departmental majors and programs. Nearly 68 percent agreed that helping students make the connection between general education learning outcomes and their major learning was central in teaching and program design.

**Underserved Students and System-Wide Change**

When asked about three key concepts for the Compass project, 51 percent of respondents agreed that increasing the use of HIPs at institutions in their systems would improve underserved students’ learning. Over half agreed that information and data about student success, sorted by race, ethnicity, age, first-generation status, and transfer status, is useful for faculty on general education planning committees. But only 36 percent felt that changes to general education that should be made by campuses were best developed in concert, aligning the curriculum among campuses in systems. Additional items asked faculty to choose from a list of actions their systems should take to stimulate greater attention to general education at their institutions. Nearly two-thirds believed that systems should articulate clearly to campuses and within broader state communities the purpose and value of general education. Fewer respondents said that
systems should facilitate opportunities for leaders of general education commit-tees at institutions in the system to work together (37 percent) and advocate for acknowledgement (awards, written letters for the personal file, etc.) of faculty work that demonstrates students’ achievement of learning outcomes (36 percent). Only 8 percent of respondents believed that the best action by their systems would be to do nothing. These findings suggest that faculty believe that systems should be champions for general education, explaining its importance to the general population while faculty are allowed to work on the day-to-day implementation of general education programs.

Faculty Perceptions of Teaching General Education
We drilled further into faculty members’ perceptions about the teaching of general education. Faculty were asked their level of agreement with action statements based on AAC&U’s Essential Learning Outcomes (see Kuh 2008, 4). The largest percent (87 percent) agreed that students are best able to develop skills, both intellectual and practical, across the curriculum by working on progressively more challenging problems and projects. Eighty percent of respondents felt that students are best able to integrate their learning through the application of knowledge, skills, and responsibilities to new settings and complex problems. About 70 percent believed that students are best able to develop skills related to personal and social responsibility through active involvement with diverse communities and real-world challenges. More than fifty percent (52 percent) agreed that students are best able to gain knowledge of the physical and natural world by engaging contemporary and enduring “big” questions. Additional study would be useful to determine why this particular action statement garners less agreement from faculty than the other statements.

Experience Teaching with Five High-Impact Practices
Survey items also asked faculty about their perspectives on HIPs, including first-year experiences, service learning, learning community experiences, undergraduate research, and capstone experiences. Two distinct questions were posed, one which used the short name for the high-impact practice in question and one which described the high-impact practice without using the short name. For instance, “first-year experiences,” the short name used in the first question, was described in the second question as “seminars and other types of experiences specifically designed to enhance the learning and enrichment of students in their first year of college.”

Fifty-six percent of faculty respondents agreed that they were personally aware of research about the effectiveness of HIPs. Additional questions probed for faculty members’ perceptions of whether these five HIPs improved student learning overall and specifically for underserved students (i.e., underrepresented minority students, students from low-income families, transfer and first-generation students). See tables 1 and 2 for a side-by-side comparison of responses to these questions.

In all cases, a higher percentage of respondents chose each practice when the practice was described in detail rather than simply by short name. This result may be because respondents do not yet associate the name of the high-impact practice with what they already actually do in their classes. Another factor that could influence these results is that a vocal minority of respondents took issue with the “jargon” used on the survey and they may have not answered simply because of the use of jargon (short name).

QUALITATIVE FINDINGS
Comments on open-ended questions show that a few respondents felt that they had to lower their standards in order to be
inclusive. One participant noted, “I have mostly lowered my expectation in terms of the amount of reading that students at [my institution] can handle compared to other institutions where I taught before.” Another respondent stated, “I have lowered my level of my classes for these students.”

Several open-ended questions solicited input from respondents about how they have incorporated HIPs into their own teaching. Answers revealed that much additional work is involved in learning about the practices as well as knowing how best to use those practices in courses. Furthermore, adjunct faculty members are not empowered and are frequently frustrated that they cannot change their courses, suggesting the need to provide professional development on high-impact practices to adjuncts to better utilize people who teach more students.

Written responses also documented that service learning is a high-impact practice often used by respondents; however, there was little qualitative information provided on how developed those practices were or how much fidelity faculty have to proven good practices for implementing student learning. In addition, while respondents agreed that HIPs were being used at the lower division at their institutions (55 percent) as well as at the upper division (77 percent), few specifics were provided in written comments about which faculty members were actually doing this or how it was happening. This finding is curious given that respondents taught in institutions participating in the Compass project, which focused on these activities. Follow up research using focus groups of both highly Compass-involved faculty and faculty highly detached from Compass might help discern the difference.

Another area of focus for the Compass project was the use of student success data to make decisions on how best to integrate and use HIPs in general education for all students. Sixty percent of respondents agreed that access to data and information on student success, high-impact practices, and demographics for new courses that I am teaching would be useful, but only 49 percent agreed that they had used student success information from previous courses to improve new courses that they taught. An open-ended question about data garnered many comments. The majority of faculty had not seen these data, or perhaps did not remember that data were made available to them. Others said that any data that they had seen were not helpful and did not relate to their courses or to the students that they taught. Several responses mentioned that these data did not apply to graduate students, or to certain types of majors/programs, and still others related that underserved students were rare and therefore change was unnecessary. A few comments indicated that the faculty members were already aware of these issues and did not need to change their behavior.

**CONCLUSION**

The Compass Faculty Survey about general education is a first step in learning about faculty perceptions from across multiple institutions. From it, we learn that HIPs are being used in general education, but availability of data is clearly an issue, as many faculty at these Compass institutions report they had not seen any data on the impact of HIPs. Unfortunately, there also seemed to be an insidious undertone to several comments that refer to underserved students as “these students,” as opposed to “my” or “our” students. Future research might want to investigate the role of institutional support encouraging faculty to use data, make pedagogical changes, and whether such activities are rewarded by the promotion and tenure structure.

**ACKNOWLEDGMENTS**

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**REFERENCES**


Highlights of AAC&U’s Work on High-Impact Practices, Student Learning, and Engagement

**High-Impact Educational Practices: What They Are, Who Has Access to Them, and Why They Matter**

*By George D. Kuh*

This publication defines educational practices that research has demonstrated have a significant impact on student success. Author George Kuh presents NSSE data about these practices and explains why they benefit all students, but also benefit underserved students even more than their more advantaged peers. The report also presents data that show definitively that underserved students are the least likely students, on average, to have access to these practices. (2008)

**Five High-Impact Practices: Research on Learning Outcomes, Completion, and Quality**

*By Jayne E. Brownell and Lynn E. Swaner*

This monograph examines what educational research reveals about five educational practices: first-year seminars, learning communities, service learning, undergraduate research, and capstone experiences. The authors explore questions such as: What is the impact on students who participate in these practices? Is the impact the same for both traditional students and those who come from historically underserved student populations? The monograph includes a foreword by George D. Kuh, “High-Impact Practices: Retrospective and Prospective” and recommendations for how to improve the quality of high-impact practices. (2010)

**Making Progress?: What We Know about the Achievement of Liberal Education Outcomes**

*By Ashley Finley*

This new report provides an up-to-date overview of national data from a variety of studies of student learning, including the NSSE, Wabash National Study, CIRP, PSRI, and others. It presents comparative data on achievement over time across an array of liberal education outcomes—such as critical thinking, writing, civic engagement, global competence, and social responsibility. It contrasts the very positive evidence drawn from what students think they have learned with the much more sobering evidence from national tests about what students actually can do in such areas as critical thinking, writing, and quantitative reasoning. It also reflects the growing evidence that how we construct the learning environment, e.g., by emphasizing high-impact practices, is a crucial component both in assessing learning and in raising students’ level of achievement. (2012)

**College Learning and the New Global Century**

This signature national report from the National Leadership Council guiding the Liberal Education and America’s Promise (LEAP) initiative clarifies the aims and outcomes of a twenty-first-century college education. It is also a report about the promises we need to make—and keep—to all students who aspire to a college education, especially to those for whom college is a route, perhaps the only possible route, to a better future. This report, based on extensive input both from educators and employers, responds to the new global challenges today’s students face. It describes the learning contemporary students need from college, and what it will take to help them achieve it. (2007)

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AAC&U Meetings and Institutes on High-Impact Education and Student Success

The Institute on High-Impact Practices and Student Success
June 11–14, 2013
University of Wisconsin–Madison

This institute is designed to help campus, system, or regional collaborative teams (faculty, student affairs professionals, academic administrators, students). The institute curriculum addresses the challenge of leading for change in an era of austerity. It offers innovative models for program implementation and assessment. The program will be of particular interest to campus- or system-wide cross-functional teams working on programmatic curricular and cocurricular change, assessment of new or existing programs or practices, or development of effective institutional collaborations. The institute is also ideal for teams working on accreditation.

General Education and Assessment: A Sea Change in Student Learning
Network for Academic Renewal Conference
February 28–March 2, 2013
Boston, Massachusetts

No less than a sea change—a radical transformation in the design and assessment of general education—is needed to ensure that all students achieve the kind of education that provides them with twenty-first-century knowledge and skills and that helps them connect their interests and talents with success in careers and responsibility for their communities and the global commons. This meeting will explore how campuses are contributing to this sea change and will engage participants with new meanings of quality in general education, help them explore ways to integrate and scaffold learning opportunities and connect general education and the major, and feature new developments in high-impact assessments using students’ best work as evidence of achievement.

Student Success and the Quality Agenda
Network for Academic Renewal Conference
April 4–6, 2013
Miami, Florida

This meeting will examine the most important but least discussed component of the completion agenda—quality in student learning—and will engage the new contexts for student learning, given the diversity of today’s students, including their differing backgrounds, learning styles, and pathways to and through college. Participants will investigate the latest research on high-impact practices and teaching, student service, and assessment strategies that strengthen the quality of student learning and close student achievement gaps. Conference sessions will provide an opportunity to examine different approaches to faculty and student services leadership development and to campus and cross-institutional collaborations linked to a quality agenda.

The Quality of US Degrees: Innovations, Efficiencies, and Disruptions—To What Ends?
AAC&U Annual Meeting
January 23–26, 2013
Atlanta, Georgia

AAC&U’s 2013 annual meeting will address comprehensive efforts to ensure the integrity of college degrees. Participants will shape new frameworks for degrees that offer pathways along which all students will creatively engage complex, real-world challenges, using high-impact practices. Calls for innovation are pervasive—but are we losing our focus? Where are questions of quality being addressed in the higher education landscape? The Annual Meeting will also feature an E-Portfolio Forum, “Foundational Knowledge, Student Voices, and Best Practices,” all day on Wednesday, January 23—exploring an emerging practice that shows great promise in becoming a proven high-impact practice.

To learn more about these meetings and institute, go to www.aacu.org/meetings.
Now that 70 percent of the faculty are off the tenure track (both full- and part-time), higher education leaders need to pay close attention to how their institutions support or hinder this growing set of employees. Not recognizing and supporting non-tenure track faculty (NTTF) negatively affects our ability to engage students in high-impact practices (HIPs) proven to affect retention, success, and deep learning in positive ways.

One of the major barriers to NTTF using new teaching practices is that they are often excluded from professional development opportunities where these practices are introduced and encouraged. In the rare case where NTTF are invited, professional development sessions are offered at times that are difficult for NTTF to attend. Providing evening and even weekend professional development opportunities is important for NTTF. Many NTTF (particularly part-time) describe the hardship of attending professional development because they are not paid for their time to learn about HIPs.

NTTF also are leery to try new pedagogical practices because using them could impact their student evaluations. This hesitation for NTTF to experiment for fear of poor student evaluations was also noted in a recent research study by Rutz et al. (2012). Unless we are willing to re-examine the evaluation processes and heavy emphasis placed on student evaluations, it is unlikely that NTTF will risk participating in HIPs.

Ideally, an NTTF orientation could describe expectations around using HIPs and then be followed up with professional development opportunities. But faculty need real-time guidance on new pedagogical practices, which can be provided through mentoring. On many campuses, experienced tenure-track faculty will serve in this role. However, NTTF can also serve as mentors after they have gone through the experience of teaching with HIPs. Bringing NTTF up to this level can be achieved by pairing experienced faculty members with several NTTF, while providing a course release for the mentoring faculty member.

Campuses often have offices to support service learning, study abroad, or collaborative learning but may not make this information widely known to faculty, particularly part-time faculty who spend little time on campus. It is important that administrative leaders make these resources and support centers known and available to NTTF so they can use them to support their efforts to integrate HIPs into their teaching. Also, sometimes NTTF do not have access to resources (e.g., library privileges or access to listervs where information is disseminated). And even if NTTF have access, sometimes tenure-track faculty are served more quickly than NTTF, making NTTF hesitant to use the office. NTTFs need the same knowledge about, access to, and quality of service from campus offices as tenure-track faculty have.

Finally, one of the steps most needed to enable NTTF to support HIPs is an increased awareness by all about the experience and working conditions of NTTF. And because the barriers that exist for NTTF may vary from campus to campus (or even between departments), it is important to better understand their day-to-day experience in order to create the appropriate policies and practices to support high impact practices. Campuses that support NTTF regularly collect data, particularly about campus climate, understanding what barriers may exist for them to engage in high-impact practices. While other practices can support NTTF, these recommendations provide a good starting point for campuses to direct their efforts.

**REFERENCE**

AAC&U is the leading national association concerned with the quality, vitality, and public standing of undergraduate liberal education. Its members are committed to extending the advantages of a liberal education to all students, regardless of academic specialization or intended career. Founded in 1915, AAC&U now comprises more than 1,250 member institutions—including accredited public and private colleges, community colleges, and universities of every type and size.

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