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This summer I overheard a chat between my son and daughter that gave me pause.

Adam, a high school junior, was standing next to Gillian, a college sophomore, as she looked at Facebook pages of college students from various schools. Facebook is a popular social networking Web site on which students create personalized Web profiles. “That kid goes to a party school,” Gillian told her brother as she stopped to look at one student’s page. “See? You can tell by the photos. Have you ever seen that many empties lined up? Talk about ninety-nine bottles of beer on the wall.”

“I wonder how long it took him to drink all of that beer.”

“I’m sure he didn’t drink them all by himself. With a bunch of friends, it probably only took him a couple of weekends,” she said matter-of-factly as she clicked onto another student’s Facebook page.

Party school reputations for many undergraduate institutions, deserved or not, are alive and thriving. The Princeton Review 2008 Best 366 Colleges rankings list party schools under headings such as “Lots of Beer,” “Reefer Madness,” and “Lots of Hard Liquor.” In the 2006 Student Monitor’s Lifestyle and Media Study, a market research survey of undergraduates, 75 percent of the students polled reported that drinking beer was “in” on their campuses—this activity was surpassed in popularity only by students listening to their iPods.

In the Winter 2007 edition of Liberal Education, Donald W. Harward, director of the Bringing Theory to Practice (BTtoP) project reported that “Over the past decade or so, campuses nationwide have reported dramatic increases in binge drinking.” In response to this and other harmful forms of student disengagement, the Bringing Theory to Practice project, developed by the Charles Engelhard Foundation in partnership with the Association of American Colleges and Universities, promotes engaged learning as an important strategy to reintegrate the multiple purposes of liberal education. BTtoP, now in its fourth year, has involved more than 200 institutions and funded more than 40 campuses to participate in a national effort to advance engaged student learning and determine how it might improve the quality of students’ education, development, health, and commitment to civic engagement.

The goals of BTtoP are

- To explore the connection of forms of engaged learning to the health of students with the objective of increasing the full and healthy development of each learner, and the fostering of productive interrelationships among learning, individual realization, and the forming and sustaining of a civic society.
- To increase the number of campuses that effectively address these issues; to provide resources to help them to do so; and to assist campuses to consider additional ways to prevent or intervene in responding to incidences of student mental-health related problems and abusive behaviors.
- To encourage greater utilization of the fundamental academic strengths of institutions to address the intellectual, emotional, and civic development of students. To encourage cross-campus discussions and the valuing of the interdependency of student affairs and academic affairs.
- To increase the involvement of faculty in changing the practices and culture of the academy to focus on teaching and learning methods that contribute to students’ success as well as their health and civic development.
- To increase the involvement of students in bringing about these changes—on campuses and in the communities that they will form and affect.
- To increase institutional attention and commitment to these effects including the creation of systems of support, reward, and maintenance that value them.

This issue of Peer Review, coedited by Barry Checkoway, features articles from three BTtoP campus demonstration sites. Each campus story tells how that institution uses engaged learning and participation in activities such as service learning to foster student well-being and civic responsibility. Checkoway notes in his Analysis piece in this issue that “the number of colleges and universities that share our cause is growing, and there is enough evidence to cause us to imagine that some combination of engaged learning, mental health, and civic development holds promise to establish this as a field of practice and subject of study.” While there is still much to be learned about the effects and affects of engaged learning on student behavior, the BTtoP project has shown that providing and supporting learning contexts that enable student transformation has shown great promise in developing the whole person—a fundamental goal of a liberal education.

—SHELLEY JOHNSON CAREY
David Tritelli introduced the Bringing Theory to Practice (BTtoP) project to readers of Liberal Education in the Winter 2007 issue with the following narrative (Tritelli 2007):

Developed in 2003, by AAC&U and the Charles Engelhard Foundation, the project is gathering evidence of measurable and replicable outcomes that link specific forms of engaged learning—mainly service-learning and community-based research experiences—to behavioral choices and to student development. [It] explores the key questions about engaged learning through a focus on certain prevalent patterns of student disengagement, including substance abuse and depression.

Through multiple conferences, workshops, publications, commissioned studies, research within and across seven national demonstration sites, and the support and study of nearly forty campus programs, the BTtoP project has moved from the articulation of a hunch to the establishment of a hypothesis that has now gained evidentiary support: There are measurable and replicable outcomes that link specific forms of engaged learning to student mental health and behavior and to students’ civic engagement. In this respect, confirming outcomes reveal not only a meaningful approach to addressing patterns of disengagement by students (depression, substance abuse, academic disengagement, and civic disengagement) but also the complexity and interrelationships among the core purposes of liberal education.

Evaluating BTtoP Work across Campuses

This issue of Peer Review focuses on how several of the campuses engaged in the BTtoP project are working at deeper levels of framing, then describing outcomes: documenting effects, some affects, some dispositional, some “soft,” some “hard.” By doing so, they are beginning the task that is absolutely central to our understanding of the core purposes of liberal education and to whether or not we, and our students, are achieving those core purposes. The articles herein come from those leading the BTtoP demonstration sites and from those evaluating the work on and across campuses. They move the discussion from the general to the particular, from the more abstract to the transferable level. The articles begin to translate outcomes and to show institutions what a deeper level of attending to them might involve.

The grammar of “inputs” and “outcomes” is borrowed from mechanistic or causal models and may not be as applicable to education as one would think, looking at the higher education literature of the last twenty years or more. Many of us can recall the admonition to our campuses that our attempts to determine our quality and that the rankings of our institutions provided by others were based solely on inputs such as student high school credentials, standardized test scores, faculty size, PhD percentages, and salaries paid. How these inputs are related to what we actually do (as we have students under our influence for four years) rarely moved beyond conjecture. Some of our institutions have claimed (without any more than the occasional apocryphal example) to “take students further” than even the most prestigious institution, taking students with lower inputs and carrying them to higher levels. After all, the reasoning goes, how can the prestigious institutions screw up when they start with great students? They say that while the prestigious institutions may move the student somewhat in a
linear progression, the impact of their institutions is categorical.

Measurements, metrics, and qualitative and quantitative indices of what actually happens to students became a common request. We needed to know more than inputs; we needed to know the outcomes. The clamor for such evidence—which would justify the greater expenses of higher education and justify the individual institution’s claim that it does influence what happens to students in ways that are beneficial to the students and to society at large—resulted in much attention being given to measurable outcomes, such as the percentage of graduates, persistence rates, job placements following graduation, and graduate and professional school placements.

Three Distinct Emphases
Currently, there are, in my view, at least three distinct emphases found in the conversation regarding outcomes. Each has its own voice, proponents, and interest group. First, there is the politically charged emphasis regarding why outcome measurements are needed—namely, the judgment that there must be greater accountability in higher education. Typical reasons for demanding outcome measurements include the perception that the undergraduate experience is of low quality (on what this judgment rests remains unclear), that graduates are not prepared for the workplace, and that our higher education institutions have been too long receiving public financial support without real accountability.

For proponents of this judgment, a prescription appears to follow: Universal assessment tools should be used to hold all institutions accountable by comparatively measuring a particular set of quantifiable outcomes.

The second emphasis has sought to justify “surrogate outcomes”—what some would claim as the push to value what we measure rather than measure what we value. Some institutional research offices, data-gathering consortia, and national reporting structures present “evidence” of higher education’s success or failure with the concession that while we are not able to assess student learning or educational gains, we can measure “attainment” or persistence to a credential, and, they say, isn’t that really the goal?

The third emphasis has been to take a much more in-depth look at how undergraduate learning might be assessed, not with current standardized tools, but with much more analytic means of assessing the development of argument, critical skills, and analytic and synthetic thinking and expression. This emphasis on assessing the real learning and development of students has gained recent audience and attention. However, this emphasis asks for significant investment by the institution and presents to the institution the real risk that the results could be unsettling.

Overall, in my judgment, for most of these emphases in the current conversation, we would benefit from a more sophisticated analysis of learning outcomes, such as that being proposed by the College Learning Assessment project, joined with a better understanding of what could be called transformational outcomes and civic outcomes. As the evidence of the BTtoP project attests, attending to these complexities and types of outcomes and recognizing that they are not all causal or direct or linear is to take a huge next step in the advancement of liberal education and in the restoration of what that education promises. The call for outcomes must reflect not only effects of a causal model but also affects, dispositional and attitudinal changes, patterns of behavior and perspective, propensities to act, and so on that lead us to a deeper understanding of what the range and depth of outcomes might actually be. I don’t know if these will be easily quantified or easily ranked. Probably not. But unless we do attempt to gain some deeper understanding and to use more subtle metaphors and models when appraising the educational experience, we are likely to achieve hardly more than superficial and mischief-making generalities—fodder for the marketing of rankings and the continuation of the commodification of higher education.

Reference
Engaged Learning, Student Mental Health, and Civic Development: Can We Demonstrate the Relationship?

By Barry N. Checkoway, professor of social work and urban planning, University of Michigan–Ann Arbor

What happens when colleges and universities build capacity for engaged learning in ways that promote the mental health and well-being of students—specifically by addressing depression and alcohol abuse—and that contribute to their civic development? This question is significant, especially in light of alarming increases in depression and alcohol abuse on the campus. Too many of today’s undergraduates experience depression or abuse alcohol that interferes with their academic work, and also disengage from democracy to the extent that there is concern about its future.

With funding from the Charles Engelhard Foundation of New York in partnership with the Association of American Colleges and Universities (AAC&U), and led by Donald Harward, the Bringing Theory to Practice (BTtoP) project’s demonstration site program was created to address these concerns.

The program assumes that depression is not simply a symptom of students as individuals who have personal problems that require clinical psychological, psychiatric, or medical treatment, but rather of students as group members who are disengaged from learning in their educational institutions and withdrawn from participation in their society. The program thus constructs mental health and well-being as problems of education and democracy and, in the spirit of John Dewey, ascribes instrumental roles to campus and community.

The program does not assume that engaged learning should substitute for clinical care needed for students with severe depression or mental illness. Instead, it assumes that if students were more engaged in their learning, then their mental health and civic development would be affected.

The program is based on the belief that colleges and universities have a level of responsibility for the mental health and well-being and the civic development of the student as a whole person and not just as a consumer of education or a mere recipient of knowledge.

Finally, the program assumes that if institutions formulate strategies for engaged learning through service-learning, community-based research, and other approaches, and that if such efforts truly engage students and increase active involvement in learning on campus and in the community, then the program has the potential to promote the mental health of students and to contribute to their civic development.

Despite the significance of the relationships among engaged learning, mental health, and civic development, there is too little research in this area. Although there are scientific studies of older people that demonstrate how civic engagement can change their psychosocial condition, affect their body chemistry, and even reduce their depression and dependence on medication, there are few such studies of young people.

Launching the Program

BTtoP seeks to develop and assess engaged-learning strategies that promote the mental health and civic development of students. The initiative builds on a
series of national conferences and leadership colloquia with students, faculty members, professional staff, and presidents of institutions who share the notion that addressing these phenomena as a subject of study will contribute to their quality as a field of practice and, when viewed in a systematic fashion, will advance the core academic mission of higher education.

For this purpose, we received a large number of proposals from colleges and universities nationwide and selected seven institutions that were already seeking to increase engaged learning and wanted to take their work to the next level: Barnard College, Emory University, Morgan State University, Dickinson College, St. Lawrence University, Georgetown University, and Syracuse University.

Because this is a pilot program, we placed special emphasis on identifying the initial institutions in what we expect will become a longer-term initiative. Our objective was to start the process and learn from experience, not necessarily to find a representative sample of institutions nationwide.

Evaluation is instrumental to the program as a vehicle for building the knowledge base. Evaluation operates at the institutional, cross-site, and national levels. At the institutional level, evaluators gather empirical data, answer specific questions, and assess outcomes in each college or university. At the cross-site level and national levels, an evaluator assesses the work of each institution and of the overall program. We visit sites and stay in regular communication about our common cause.

Cross-site meetings bring participants together to review our fundamental purpose and gain in-depth knowledge of each campus effort. We discuss operational meanings of key terms, issues that cut across sites, and strategies for implementation. The meetings help us develop our working relationships and build a mutually supportive learning community.

Evaluation includes information about the project’s objectives, activities and outcomes, individual and institutional outcomes, facilitating and limiting factors, and cross-site themes and lessons learned. It includes quantitative and qualitative measures, pre-and post-testing, and comparison-group tracking of differences between students involved in the project and students who are not involved.

All demonstration site campuses participate in the National Survey of Student Engagement, administrated by Indiana University. This allows our program to add to the survey’s core questions assessing student engagement in learning, a common set of questions assessing substance abuse, depression, and civic development.

After two years, the demonstration program has a lengthy list of activities and accomplishments at the national, cross-site, and institutional levels. It is fascinating to observe how each institution, while working toward a common purpose, has employed a distinct strategy, including the following:

- Involving students in academic seminars on campus, living-learning communities in residence halls, and placements in the community
- Establishing a center for civic engagement and leadership that involves students in curricular and cocurricular activities on campus and in the community
- Infusing content on mental health and wellness into courses in disciplines like anthropology, biology, psychology, and philosophy
- Strengthening service-learning to address depression and drug use in a target neighborhood of a large city

Bridging the Divide
As our learning community develops, an analytic framework is emerging from empirically based practice, resulting in two initial questions that presently guide some of our discussion: What have we learned about bridging the divide among engaged learning, student mental health, and civic development? What have we learned about implementing institutional change in higher education?

To help answer the first question, BTtoP commissioned a literature review by Lynn Swaner, which quickly became
the best work of its kind. The Association of American Colleges and Universities then published a special issue of *Liberal Education* (Winter 2007) that enabled participants to provide perspectives on the program.

Now the first empirical findings from the demonstration program are being featured in this special issue of *Peer Review*. The articles draw upon campus visits, cross-site meetings, evaluation findings, and case studies by institutional representatives, who give a strong flavor of what we are trying to accomplish.

Lynn Swaner and Ashley Finley describe the evaluation to date, including initial findings from the data showing that engaged learning leads to deeper learning that is personally transformative and highly satisfying for student participants, and that it generates positive outcomes for measures of mental health and civic development. They observe that the overall BTtoP Project is laying the foundation for a new subject of study and new methodological approaches. Swaner and Finley also express concern about self-selection bias as a challenge for evaluation: Students who are civically inclined and tend to drink less may have self selected to participate in the various projects.

Because of this, the question arises as to the extent to which we can generalize from the data. Out of our concern for the societal problems that motivated the BTtoP initiative, however, our primary purpose was to involve initial institutions and address a real-world problem. Thus we proceeded, with the expectation that a more sophisticated scientific approach would develop.

The project has grown faster than anticipated, raised expectations, and enabled us to see that we faced the classic issue of self-selection bias in research. In retrospect, this allowed us to realize what we might have done differently in retrospect.

The activities and accomplishments of some demonstration sites, and the lessons learned at these sites, are significant. At St. Lawrence University, for example, Ronald Flores, Catherine Crosby-Currie, and Christine Zimmerman describe the creation of the Center for Civic Engagement and Leadership. Through this center, faculty members and student mentors work with college students in a living-learning community whose residents enroll in courses on community and citizenship, and participate in placements on the Akwesasne Mohawk Reservation and with other organizations. The center combines curricular and cocurricular activities through which students work together with community partners to develop and direct community projects that address locally identified needs. The experience enables them to question their assumptions, develop their thinking, and gain self-confidence, which makes them stronger and prepares them for active participation in a diverse democracy.

At Georgetown University, Joan Riley and Mindy McWilliams describe a large-scale curriculum infusion initiative in which faculty members bring mental health issues into courses in biology, English, mathematics, philosophy, theology, and other academic disciplines and professional fields. The courses increase students’ awareness of mental health issues and increase faculty sensitivity to students’ situations. The courses also
improve campus relations among health providers and students by involving the providers in the classroom.

At Dickinson College, entering students enroll in first-year seminars on a wide range of subjects, live in common residence halls, and develop through educational experiences. The initiative has involved more than 180 students who reportedly consumed alcohol less often than control group students, although their levels of depression were more uneven during the experiment.

Institutional Change

In considering our second guiding question, what have we learned about implementing institutional change in higher education? We observe from our institutional, cross-site, and national efforts that no single strategy characterizes all approaches to practice. Indeed, each institution has some measure of support from campus leaders who show commitment to the goals, although leadership varies from one institution to another.

For example, there are institutions whose president, chancellor, or provost has shown especially strong support. There are vice presidents for academic affairs and vice presidents for student affairs who have provided cash and in-kind matching, sustainability plans, evaluation personnel, and campus stakeholder participation in planning and implementation.

Most campuses have at least one champion or change agent who shows exceptional leadership and management. These champions are broadly talented individual leaders who arise from academic affairs or student affairs, who have abilities in project planning and organizational development, and who have formulated a political strategy for engaging stakeholders.

These champions also develop small core groups that are passionate about the issues and instrumental to the work. The project offers opportunities for them to use their expertise at bringing together faculty and staff members with student participants on campus and in the community.

Each team is structuring its efforts differently. Examples include efforts to centralize the BTtoP function in existing offices of executive officers, create entirely new institutional units and bureaucratic structures, and decentralize the function to academic units campuswide. Before the project, schools had no units that combined the constituencies of engaged learning, mental health, and civic development, and in some cases our site visit comprised the first meeting for this purpose. Each campus has its own culture, and the effectiveness of its efforts is affected by the ability to find the right fit.

Faculty members participate in the project, but this is uneven from one institution to another. Faculty participants include senior faculty members with a history of involvement and junior faculty with strong commitment but without tenure. Faculty are strategically situated through their multiple roles in the institution, their responsibilities for fulfilling its core objectives, and their relationships with those that influence implementation. We believe that faculty are instrumental to the success of the program, for without the faculty, nothing lasting is likely to happen.

However, many faculty do not participate in the program, and while a campus might have an exceptional living-learning program in a residence hall, some of its faculty will have never set foot in a residence hall.

But despite the obstacles, the number of colleges and universities that share our cause is growing, and there is enough evidence to cause us to imagine that some combination of engaged learning, mental health, and civic development holds promise to establish this as a field of practice and subject of study.

Unanswered Questions

We also realize that there are many, many unanswered questions or unresolved issues that remain for future work:

- Will the project demonstrate and develop knowledge of the process of bridging the divide over the long haul?
- Will the project build institutional capacity for engaged learning in ways that promote mental health and contribute to civic development?
- Are there best-practice strategies for successfully implementing institutional change?
- What are some ways of increasing the involvement of faculty members in the implementation of institutional change?
- Will the institutions sustain the efforts? If so, how?
- What are some ways of building a learning community and sustaining the work? What institutional, cross-site, or national initiatives are needed to
accomplish the purpose? What is, or should be, the long-term vision of the project?

- What are the lessons learned? What have we learned from empirically based practice? What are the implications for this as a field of practice and subject of study?

These are not the only questions, but they are among the important ones.

**Moving Ahead**

As we ponder these questions, however, we continue to move ahead in taking actions that we think complement our common cause. With all due respect to social science and scientific positivism, we do not need definitive data to know that there is a serious problem and that there are people who want to do something about it.

We have reason to be optimistic and to expect that some of our objectives will be fulfilled and that the evaluation will answer some of the questions it asks.

We believe that higher education is ideally positioned for work of this type. Yet we also know that even exceptional efforts by colleges and universities will remain limited without increasing the involvement of other entities and building an arena around BTtoP issues in the larger society.

We know that colleges and universities are anchor institutions in American society, that they have addressed problems of a magnitude equal to ours, and that we are learning a great deal from these institutions. But there is no reason to expect that they will be able to address these problems without an effort of unprecedented proportions.

Indeed, higher education is only one of numerous institutions in a society whose levels of depression and alcohol abuse and whose rates of civic engagement are affected by forces that originate outside of colleges and universities. We are coming to realize that only part of the solution is to motivate institutions and demonstrate outcomes from this special initiative. But we are coming to realize that while educational institutions move forward, there are other powerful institutions—such as the medical establishment, the pharmaceutical industry, and alcohol producers—that also are strategically situated.

And while we have learned less about civic development than we have learned about engaged learning and mental health, we know enough to know that too many people have withdrawn from participation and disengaged from democracy and that the responsibility for this cannot be understood as only that of higher education.

After all, who has responsibility for the civic development of young people? Is it higher education, or is it also the community, the family, and the individual? If it is everyone’s problem, then it is no one’s problem, and this is unacceptable to us.

We strongly believe in what we are trying to accomplish, and we are acting in the assumption that we can make a difference, and in the final accounting, we expect that we will.

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**Bringing Theory to Practice Campus Demonstration Sites**

- **Barnard College**
  Identity, Community, and Belonging: Engaged Learning for Mental Health: A Demonstration Project

- **Dickinson College**
  Student Impact Assessment of Engaged Learning Initiatives

- **Emory University**
  Sophomore Year at Emory Living and Learning Experience: An Interdisciplinary Seminar Course/Internship in Addiction and Depression

- **Georgetown University**
  Connecting the Safety Net to the Heart of the Academic Environment: Curriculum Infusion of Mental Health Issues into Lower-Division Courses

- **Morgan State University**
  SHARED (Students Helping and Receiving Educational Development) Experiences

- **St. Lawrence University**
  St. Lawrence Center for Civic Engagement and Leadership: Creating Opportunities for Agency and Intentionality in Student Learning Experiences

- **Syracuse University**
  SAGE (Self-Assess, Grow, Educate) Options
Engaged Pedagogies, Civic Development, and Student Well-Being within a Liberal Learning Context

By Ronald J. O. Flores, associate professor and director of community-based learning; Catherine Crosby-Currie, associate professor of psychology; and Christine Zimmerman, director of institutional research, all of St. Lawrence University

Two years ago, St. Lawrence University and six other Bringing Theory to Practice (BTtoP) campus demonstration sites accepted the challenge of the Association of American Colleges and Universities and the Charles Engelhard Foundation to introduce innovative programming designed to engage the whole student in his or her learning experience as a way to understand the complex relationships between pedagogies of engagement, civic development, and student mental health and well-being. With a growing body of scholarship showing student disengagement from the college experience and persistently high levels of alcohol abuse, stress, and depression on college campuses (Harward 2007), the time for integrating programming and research dedicated to solving these problems was long overdue.

The planning for the project was driven by a number of goals that reflected the underlying philosophies of both the liberal arts and engaged learning:

- To increase the opportunities for agency and intentionality in student learning
- To create programming that speaks to the entire student experience through seamless integration across all components of campus life
- To enhance our campus–community partnerships as a way to collaboratively address community needs and provide authentic opportunities for students’ civic engagement
- To expand activities that expose students to different points of view and to perhaps burst the campus “bubble”
- To develop an assessment protocol that would provide insights into the connections between pedagogy and student well-being

With these goals in mind, we created the Center for Civic Engagement and Leadership (CCEL) and designed an assessment model to measure the relationship between the center and student outcomes such as civic engagement and mental health.

Increasing Student Involvement

The mission of the Center for Civic Engagement and Leadership at St. Lawrence University is to increase and enhance opportunities for students to be agents of positive social change both on and off campus. The center combines academic and cocurricular activities within a living–learning community in which students work with community partners to develop and direct projects that address locally identified needs. The emphasis of the programming is to develop citizenship and leadership skills through community-based learning (CBL) including course work, independent studies, participatory action research and dialogue training; volunteerism, through which students, faculty, and staff support and enhance initiatives that address community needs; and leadership training that encompasses both
practice and reflection. Because the center emphasizes student ownership, we instituted the Community Mentors (CM) program, in which students, who are paid members of the center staff, work with community partners to identify needs within their organizations and develop partnership programs to address those needs. The CM program empowers students to identify problems and develop programs in collaboration with community partners, faculty, staff, and fellow students. These initiatives resonated with our university’s aims and objectives, which include the development of citizens who will contribute to the greater good of society on the local and global levels.

Our project focused on a particular first-year living–learning community of thirty students enrolled in a course on community and citizenship in a multicultural society. Each student was assigned to a campus–community partnership program and spent an average of two to three hours per week engaged in that service. The students were exposed to a variety of engaged-learning pedagogies including community-based learning, collaborative problem-solving projects, a community learning journal, and a liberal learning/advising portfolio. The latter two of these pedagogical methods were used because of the emphasis that each places on student intentionality in learning (Zubizarreta 2004). In our assessment model, these students served as our experimental group in a quasi-experimental design, and their behavior over the semester was compared via pre- and post-test instruments to a second group of students matched across relevant demographic and academic interest characteristics who have not been part of this living–learning community.

**Initial Findings**

Our comparison of these two groups after their first semester in college gave preliminary support to our hypothesis that engaged-learning pedagogies have positive effects on student outcomes. For example, we found that during the first semester, the average number of drinks consumed per week had declined among students living in the center and participating in the course on community and citizenship but increased for students in our comparison group.

The average number of drinks consumed per week had *declined* among students living in the center and participating in the course on community and citizenship but increased for students in our comparison group.
engaged-learning pedagogies and that includes a period of self-doubt and perhaps some deep soul-searching.

Mezirow’s (1991) theory of transformative learning identifies an early phase during which experiences lead students to question their prior assumptions and become critical of those assumptions. Although such disorientation might suggest regression or negative effects from engagement with the community, this disequilibrium is the necessary precursor to further development, as Piaget’s general model of cognitive development predicts (Piaget and Inhelder 1969). These models predict, as we expect, that as students continue to be actively engaged and intentional in their learning over time, their self-confidence will become stronger.

**Expanding Opportunities for Engagement**

In addition to these encouraging findings, the CCEL has had noticeable effects on and off campus. For example, on the second and third floors of the CCEL, we now have a new living–learning initiative called the Civic Engagement and Leadership Suites. This year, suitemates integrated civic responsibility into their residential life and reflected on these experiences in CBL courses. The suitemates also coordinate Project Democracy, in which students and community members discuss issues affecting the campus and the community. Project Democracy is also tied to CBL course work that offers the critical reflective component of engaged learning.

Another outgrowth of the CCEL is the Akwesasne Semester, offered in the fall, in which students participate in learn-and-serve programming on the Akwesasne Mohawk Reservation. Students take all their classes on the reservation while interning at local tribal agencies and organizations and then serving as tutors and mentors at the Akwesasne Boys and Girls Club. The program strives to create an engaged-learning environment that enables students to develop an understanding of democratic principles in a multicultural society. The center also sponsors a first-year seminar at the Akwesasne Boys and Girls Club as a community-based learning course that emphasizes an array of engaged-learning pedagogies, including portfolio and journal assignments. All students engage in some form of original research and collaborate with professional staff and fellow students on a grant-writing project designed to locate and secure funding to meet a specific club need. These programs on the reservation have had a visibly positive effect on the children in the club, who have not only received tutoring with their homework and steady supervision during their games and activities but also gained good friends and positive role models.

Through the CCEL, we were able to sponsor a number of new engaged-learning/CBL courses in various disciplines, including psychology, philosophy, global studies, biology, history, sociology, economics, and performance and communication arts. Recently, the sociology department redesigned its major requirements to include a civic-engagement component aligned with CCEL initiatives. All of these courses have been tied to the development and enhancement of a number of campus-community partnerships that have addressed community needs while facilitating the hands-on experiences so vital to the development of future active global citizens. Next year we will introduce the Civic Engagement and Leadership minor, which will further integrate our engaged-learning initiatives both on and off campus and across academics and student affairs.

After two years we have begun to see signs of important transformations at St. Lawrence University. As more engaged-learning programming threads it way across our campus, we are confident that the effects on student development and well-being will manifest themselves in positive ways. Much work needs to be done, however, because of the complexity we quickly discovered of the relationships among our key variables of engaged learning, civic development, and mental health and well-being. The work is needed; the time is now.

**References**


Engaged Learning through Curriculum Infusion

By Joan B. Riley, assistant professor, School of Nursing and Health Studies; and Mindy McWilliams, assistant director for assessment, Center for New Designs in Learning and Scholarship, both of Georgetown University

Georgetown University’s Bringing Theory to Practice (BTtoP) demonstration project, Connecting the Safety Net to the Heart of the Academic Environment, addresses student depression, alcohol and substance abuse, and other student health and wellness issues through various forms of engaged learning, including community-based learning, to reach students on a personal level. Georgetown’s unique focus is on a pedagogy called curriculum infusion, which brings real-life college health issues into the curriculum of academic courses through readings, guest speakers and discussions, and class assignments.

The success of curriculum infusion depends on the intrinsic connections that can be made between a course’s intellectual content and the health issues. When curriculum infusion is successful, students go beyond merely absorbing information by integrating reflections on how these health issues apply to college students, or to groups they work with in community-based learning components of their courses, with the academic content of their courses, across a wide range of disciplines. Our objective is that the engaged pedagogies of curriculum infusion and community-based learning will achieve the following goals:

• To increase Georgetown students’ awareness of and reflection upon issues of college mental health and wellness in ways that enhance and reinforce the intellectual content of their courses

• To strengthen the campus Safety Net by training faculty and teaching assistants to be alert to trouble signs in their students, to approach students effectively, and to know where to direct students for help

• To create relationships among campus health providers and students through guest lectures and discussions so that students will feel comfortable approaching these professionals for their personal needs

After four semesters piloting our project, seventeen Georgetown faculty have implemented curriculum infusion in what we refer to as Engelhard Courses, some in combination with community-based learning (The disciplines represented are anthropology, biology, English, mathematics, nursing and health studies, philosophy, performing arts, psychology, business, foreign service, and theology.) In addition, thirteen graduate student teaching assistants and three undergraduate teaching assistants were trained in campus Safety Net procedures and served as assistants in these Engelhard Courses. Five campus health professionals conducted the Safety Net trainings and collaborated with faculty to implement curriculum infusion in their courses. The leadership team is a cross-campus collaboration of student affairs, curriculum development, assessment, community-based learning staff, and faculty (see sidebar).

Most significant, perhaps, is this project’s broad reach among our student body. In four semesters,
nearly 1,200 Georgetown undergraduates have taken one or more courses infused with mental health components. In addition to completing required readings and engaging in conversation with guest speakers, students have written reflection papers relating the classroom topics of mental health to their lives and have responded to quantitative surveys. Focus groups of students from these Engelhard Courses revealed that they experience a more personal connection with their professors, that they appreciate the time and space in an academic classroom to hear and think about student health issues, and that their thinking and attitudes toward these issues have changed. One student characterized his experience this way: “It made my relationship to my professor more personal. He made it personal. He told us how it affected his family. He cared about us, rather than wanting to indoctrinate us.” Another student said that “this expanded my horizons” about what was healthy, wellness-promoting, and normal.

Selected Engelhard Courses: A Diversity of Disciplines and Approaches

Introduction to Math Modeling

Professor Jim Sandefur of the Mathematics Department has offered this course to nonscience majors for more than twenty years. He has designed the course to delve into the mathematics of the everyday world, such as problems with the elimination of caffeine or alcohol from the body, the sustainable management of renewable resources, and managing lottery winnings. As an Engelhard Faculty Fellow, Sandefur dedicated two course modules to the student health topics of alcohol and weight control. After three semesters teaching this way, with graded assignments and guest speakers for each topic, Sandefur is convinced that he is reaching students, improving their knowledge about the effects of alcohol and food consumption, and providing them the tools for making informed choices.

Reflection papers from his students confirm this view. Students reflect on their eating and drinking habits, reveal how little they know about the effects of alcohol and unhealthy eating, and express changes in their attitudes and behaviors regarding consumption choices.

Responsibility, Resilience, and Self-Respect

Professor Alisa Carse has taught philosophy courses with a community-based learning (CBL) component for a number of years. Her desire to support her students’ work in Washington, DC communities, along with her compassion for her students as flourishing human beings, motivated her to combine curriculum infusion with community-based learning. Her aim was to breathe life into the philosophical content of the course while developing students’ moral reflection about their experiences at their CBL sites and encouraging them to contemplate the moral and psychological challenges they were witnessing in the communities with which they were working. Carse arranged for voluntary weekly debriefing sessions with Patrick Kilcarr, director of the Center for Personal Development at Georgetown, creating a time and place for her students to discuss the personal challenges they were experiencing at their CBL sites. According to Carse, the “infusion effect” was powerful, as evidenced by intense student engage-
ment in the course, “beautiful written work,” and the fact that, while the tenor of the class remained high, at least eight of eighteen students shared with her that they sought mental health support during the semester. Carse will next apply a similar model by extending curriculum infusion into her 250-student Introductory Ethics course.

Benefits to student participants include increased awareness of issues of personal well-being and relevant campus resources [and] positive changes in attitudes and behaviors.

Acting I
In her many years of teaching acting, Professor Karen Berman had noticed that the theater population seemed especially vulnerable when it came to depression and other mental health issues. For this reason, she chose to address mental health concerns in her beginning acting class through an exercise where students create scenes based on typical college pressures. On the day the scenes were performed, Phil Meilman, director of Georgetown’s Counseling and Psychiatric Services, attended class and contributed to the class discussion from his unique professional perspective. He shared statistics about how often mental health issues occur nationally and on the Georgetown campus and provided problem-solving measures and resources to assist students. In their reflection papers, students wrote how the experience “surprisingly raised my awareness about potential college issues that myself or my peers could face,” how the “presentations were very thought provoking and stimulating,” and how important it was to learn about the campus counseling resources available to them.

Existentialism
In his philosophy course on existentialism, Professor William Blattner collaborated with Kilcarr to combine student health and wellness information with concepts central to the study of existentialism. Existentialist writings deal front and center with issues of depression, anxiety, stress, suicidality, alienation, and loneliness, so the curriculum infusion model offered by the Engelhard Project was a natural fit for this course. Early on, students read Dostoyevsky, Sartre, Kierkegaard, and Nietzsche. Professor Blattner created two new course activities for students to engage more deeply with the health and well-being issues uncovered by these readings. In the first assign-

Integrative Nature of Georgetown’s Curriculum Infusion Project
These Engelhard Course stories illustrate successful aspects of the Georgetown University BTtoP project. Preliminary findings based on two hundred written student reflections, eighty end-of-course surveys, and focus groups with student and faculty participants indicate that the classroom integration of theoretical concepts with the real-world experiences facing students on issues of mental health and well-being has yielded positive outcomes for faculty, staff, and most importantly, for our students.

Benefits to student participants include increased awareness of issues of personal well-being and relevant campus
resources; positive changes in attitudes and behaviors; including becoming less judgmental about peers facing mental health issues; improved communication with faculty; and a new appreciation of faculty interest in their lives. There is also strong evidence that the program increases their engagement with the academic material. As Professor Blattner puts it, “After the curriculum infusion module, in addition to all the other benefits, they are just doing better philosophy.”

Engelhard Faculty Fellows benefit through increased awareness of and sensitivity to the complex and challenging issues faced by students in their daily lives. They also experience greater connections to and improved rapport with their students as they develop a common language for discussing these topics. Significantly, faculty report improved student engagement with course materials, as evidenced by class participation and conceptual clarity in students’ written work.

BTtoP expands and strengthens Georgetown’s Safety Net by promoting knowledge about health resources offered by the university, helping to normalize the campus conversation around issues of mental health, and reducing student inhibitions about seeking help. As BTtoP faculty and students share their knowledge and insights with community members outside the project, they create a beneficial and integrative multiplier effect across the Georgetown campus.

To inform faculty about BTtoP and its benefits, our project was included in new faculty orientation and as a course offering in the annual Center for New Designs in Learning and Scholarship's summer institute. It was also featured in Georgetown’s new Apprenticeship in Teaching program for graduate students.

At Georgetown, we have only just begun the process of uncovering the potential that integrating campus resources into academic courses holds. Looking ahead, key questions that we must address include how best to support faculty involved with this pedagogy, how to recruit new faculty, how to balance campus health professionals’ roles inside and outside the classroom, and how BTtoP will change behavior and campus culture over time.

Georgetown is reaping the benefits of this integrative program and curricular approach at the levels of individual student learning and course content and at the university level through the collaboration and integration of academic faculty and professional health staff. Confident in the benefits to the quality of campus life that the BTtoP project has already conferred, we continue our efforts toward goals that are fully consistent with and supportive of Georgetown’s core mission of educating the whole person.
Assessing the Impact of Engaged Learning Initiatives for First-Year Students

Shalom D. Staub, assistant provost for academic affairs, and Ashley P. Finley, assistant professor of sociology, both of Dickinson College

As a demonstration site supported by the Bringing Theory to Practice project, Dickinson College has, for the past two years, implemented an ambitious engaged-learning initiative for first-year students with an accompanying research project to assess what impact these experiences have had on student engagement, well-being, alcohol use, and civic engagement.

All first-year students at Dickinson take a first-year seminar in their first semester. This program, taught by faculty from every department, is designed to engage students in a seminar-style course on varied subjects. Incoming students identify their six top choices for seminar topics and are assigned to one of these choices. No matter the topic, all seminars emphasize writing, information literacy, and research skills. The faculty member, in contact with these students two or three times per week for the first semester, also serves as the students’ academic advisor and remains in this role until the student declares a major.

Four years ago, Dickinson began to experiment with building a learning-community program by linking first-year seminars that share a common theme, housing students in these seminars in a common residential hall, and developing out-of-the-classroom educational experiences for this larger group of students at the intersecting points of the two seminars. Faculty met with students in their residence halls over dinners, shared weekend-long experiential education programs, and incorporated other campus-based and off-campus learning opportunities into the overall learning-community experience. We were interested to see if we could confound the students’ binary thinking about where learning happens and what constitutes social experience by introducing learning and stimulating social interaction among students and faculty across the boundaries of classroom, dorm life, and campus experience.

A Closer Look with BToP

Working with Bringing Theory to Practice became a vehicle for rigorous assessment. We wanted to explicitly study the effects of student participation in our first-year engaged-learning initiatives to examine whether variously structured learning experiences would yield different impacts on student learning and engagement, mental health, alcohol use, and civic engagement over the short and long term.

Our first question was whether students participating in the learning-community programs yielded any difference compared to those enrolled in stand-alone first-year seminars. Our second question was whether variations in the learning-community model—whether principally classroom based or incorporating service-learning pedagogy or experiential learning, and even a noncredit, community-service-focused residential clustering not linked to the seminar—yielded different results.

In terms of the engaged-learning initiatives during the first year of the project, we had eleven
faculty members and approximately 160 students participating in five seminar-based learning communities, and an additional 22 students in the noncredit community-service learning community. (The first year of our project involved a sample of 153 learning-community students and 419 students not in the learning communities. Of students in learning communities, 52 percent were in the classroom-based track, 20 percent in the experiential track, 14 percent in the service-learning track, and 14 percent in the noncredit community track.) Collectively, these students participated in more than forty-five separate out-of-class informal learning experiences, including dinner discussions, film viewings, guest speakers, field trips, service-learning, outdoor physical activities such as caving and rock climbing linked to course content, and community service.

Our evaluation agenda involved both quantitative and qualitative data collection, and supplementary data from institutional sources. To collect baseline, midyear, and end-of-year quantitative data, we administered three surveys during the year. These administrations utilized controlled environments in the fall semester (an auditorium during first-year orientation and first-year seminar classroom), and an uncontrolled web-based administration in the spring semester. To gauge change in student engagement behaviors, pretest and posttest administrations of the College Student Expectations Questionnaire and College Student Experiences Questionnaire were conducted in August and April, respectively. Administrations of wellness and mental health instruments were conducted at all three time periods throughout the year: August (pretest), November (midyear), and April (end-of-year).

Additional information regarding student behaviors and expectations prior to college and experiences at the end of the year were obtained through the Cooperative Institutional Research Program survey in July (before students arrived on campus) and the National Survey of Student Engagement administered in April. Qualitative data were gathered through six focus group sessions held the end of April. In Year 2, we added an instrument by Eyler and Giles (Where’s the Learning in Service Learning?) to better address elements of civic development among students in our experimental and control groups.

**Examining the Data**

Results from the first year of data collection reveal complex trends in the relationships between engaged learning, civic development, and student mental health and well-being. This is to say that while we did find strong indications that positive correlations exist between engaged learning, civic development, and better mental health and lower alcohol consumption, the triangulation of effects is complex.

With regard to wellness behaviors, findings indicated significant divergences between students in engaged-learning initiatives and those who were not. Pretest data showed no significant differences in the amount and frequency of alcohol consumption before the start of the school year between learning-community students and other students. However, though the groups began the school year with indistinct drinking behaviors, by November students in learning communities reported consuming alcohol significantly less often and in lower quantities than their peers in regular first-year seminars. Moreover, these same differences persisted through the spring. Although learning-community students and students not in learning communities did not differ in the degree to which they experienced negative outcomes as a result of drinking (such as feeling sad, feeling bad about oneself, or driving under the influence), differences in the frequency and amount of alcohol consumption suggest a strong positive impact of engagement on drinking behaviors.

Furthermore, these effects became clearer when comparing alcohol-related behaviors across types of learning communities. Specifically, the differences found at the end of the first semester were largely attributable to significantly lower reported rates of the frequency and amount of consumption by students in both the classroom-based and the noncredit community-service tracks. Similarly, effects at the end of the year were again attributable to the classroom-based track but also to the much lower consumption levels of students in the service-learning track. Thus, while engaged learning significantly impacts
alcohol consumption, it also appears that civic engagement specifically plays a critical role in explaining the beneficial effects of engagement.

Differences across groups suggest that the benefits of engagement on alcohol consumption may be attenuated by negative impacts on mental health. As with the pretest findings for alcohol behaviors, learning-community students showed no significant differences from other students at the beginning of the school year with regard to depression levels. However, at the end of the first semester, learning-community students reported significantly higher levels of depression relative to their counterparts in regular first-year seminars. These differences were reduced to non-significance by the end of the school year in April. The emergence and regression of this effect indicates a unique effect of the first semester on learning-community students. A refinement of the analysis to examine tracks of learning communities, suggests the effect found in November is due primarily to a substantial spike in the reported depression levels of students in the service-learning track relative to the other tracks. By the spring, however, these students were not divergent from the other tracks. Nevertheless, these findings indicate that while civic engagement may uniquely discourage drinking, these initiatives may have unique adverse effects on mental health.

Qualitative data from focus groups were particularly helpful for understanding this trend. After talking with students in learning communities, and in particular those in the service-learning and non-credit community-service tracks, we believe the higher depression levels are largely manifestations of stress that developed in response to the additional time commitment of their off-campus community work. Students in the service-learning and the noncredit community-service tracks discussed the strain of doing their community work while managing their course loads. Nevertheless, these students, more than any other learning-community track, also expressed the greatest positive impact from this experience on their identity, their choice of major, and their outside interests.

The focus groups also offered insight into the differences between how learning-community students and other students reflected upon their first semester of college. First, learning-community students were far more apt to speak about the impact of their experiences on how they interacted with friends, their world perspectives, and their future course of study (either their major or their selection of other courses). These statements were almost completely absent from discussions with students not in the learning communities, who talked about engagement conceptually, such as what it should be rather than something they had specifically experienced. Second, though students in both groups did not clearly see the relationship between engagement and wellness, learning-community students spoke more about the degree to which being engaged can lower stress, mainly through the rationale that students are less stressed “if [they] are really interested in [the] classes.” In contrast, students not in the learning communities more often equated mental health with time management and preparation rather than engagement.

Data at Year 2 is less clear than Year 1 on the patterns of triangularity between engaged learning, student mental health and well-being, and civic development among learning community and non-learning community students. Specifically dimensions of these learning initiatives and depression (student mental health) remain inconclusive, in addition to how these programs vary the learning process for these students. Though focus group data, specifically from Year 1, suggested better correlations of learning community experiences with
deeper and more engaging learning experiences than non-learning community experiences, quantitative data has not reflected this trend. Moreover, comments from focus groups with first-year students in Year 2, though quite clear about what the definition of “engaged learning” is, did not suggest this type of learning necessarily happened in or out of a learning community experience.

Nevertheless, trends from Year 1 to Year 2 do suggest some indication that students in learning communities consume less alcohol (one indication of better well-being) than their peers not in learning communities. Moreover, this effect is largely motivated by students in the service-learning track, the group with the closest link to building civic integration and awareness. Second, Year 2 data, at least with our second cohort of first-year students, indicates that the effects of being in the service-learning track indeed may correlate with increased civic development. The strong positive effect of not just being in a learning community, but specifically one that incorporates community involvement with academic learning suggests civic development is motivated by this specific type of learning over other types (i.e. seminars not linked to learning communities, and learning communities that do not incorporate community involvement). Ultimately, we feel the overall pattern of results warrants a continued and systematic investigation of the relationship the impact of learning communities on engaged learning, student mental health and well-being, and civic development. Specifically, our research agenda includes further varying the types of learning communities students participate in, and the exploration of more nuanced dimensions of research foci, in particular student mental health and alcohol use.

Looking Forward
As we continue to explore trends into additional years, we are cognizant of two challenges. First, our design is not immune to selection bias. Students are aware when registering for a first-year seminar if it is part of a learning community, though not the track or type of learning community. Thus, we cannot be certain to what degree students who are already more engaged and/or less prone to drink are opting into the learning-community experience, and similarly to what degree their presumably less-engaged, heavier-drinking counterparts are opting out. We also face the significant challenge of maintaining response rates. As the campus environment has become increasingly inundated with questionnaires, we face a real prospect of students experiencing survey fatigue, which translates into greater attrition across administrations of surveys. Though we have taken steps to address both of these challenges, our approach is ultimately less about eradication than it is to understand the ways in which these issues have and will continue to impact our project design.

Faculty and administration at Dickinson College have responded with interest to these engaged-learning initiatives. We have seen increasing formal and informal campus conversations about appropriate strategies to create more seamless experiences that help students bridge the classroom, the campus, and their broader community involvement. Over the last two years, for instance, Dickinson faculty have initiated joint meetings of key all-college committees (Enrollment and Student Life, with Academic Programs and Standards), and our president created a task force, “Pathways to Engaged Citizenship: The Dickinson Student Experience,” to make recommendations on bridging the divide between a student’s academic life and campus experience in the service of engaged learning and students’ civic development.

Dickinson is poised to move ahead even more substantially, particularly in the context of emerging data on student engagement, alcohol use, depression, and civic engagement. The demonstration site research is enabling Dickinson to evaluate and integrate the research data into campus discussion about the future design of students’ first-year experience and other dimensions of academic and student life.

Reference
The Bringing Theory to Practice (BTtoP) project seeks the advancement of knowledge and the establishment of best practices centered in the BTtoP triangularity of engaged learning, student mental health and well-being, and civic development. Since its inception, BTtoP has established an aggressive research agenda through systematically evaluating funded projects that intentionally address this triangularity. The most substantial research effort in this vein is the BTtoP demonstration project, for which this article discusses the development and design of a research approach, encapsulates findings to date, and describes future research directions.

Conceptual Framework

Extensive review of the literature (Swaner 2007) identified suggestions as to linkages between engaged learning, student mental health and well-being, and civic development. First, at the outcomes level, correlations have been identified between elements of engaged learning (e.g., involvement in group projects and interaction with faculty) and self-report of better emotional health (Astin 1993), and between student participation in pro-social activities (such as community service) and lower rates of heavy drinking (Wechsler et al. 1995, Jessor et al. 1995, Fenzel 2005). On a theoretical level, research on stress in academic environments has demonstrated that while moderate levels of environmental stress can lead to optimal performance, extreme levels of stress can lead to “anger, fatigue, anxiety, fear, depression, or boredom” (Whitman, Spendlove, and Clark 1986). This would suggest that if engaged learning can optimize stress levels for students, better emotional health may result. Additionally, because students’ level of moral development has been negatively correlated with substance abuse and other self-injurious behaviors (Berkowitz 2000), engaged-learning experiences that promote moral development may help reduce these behaviors. Finally, in a developmental view of students’ health behaviors, both depression and substance abuse can result from developmental overchallenge posed by the college environment (Rivinus 1992). Thus, counterbalancing challenges with support may improve students’ health, as might equalizing levels of freedom and responsibility by increasing students’ “social responsibilities through community work” (Schulenberg and Maggs 2001, 33).

Given these potential linkages, the project began to formulate its central research goal to explore and describe the relationships between engaged learning, student mental health and well-being, and civic development. It was understood at the project’s inception that engaged learning would most likely not constitute a silver bullet for either depression or substance abuse, but that there was also enough preliminary evidence to consider
engaged learning as a promising community-level approach worthy of systematic investigation. The central challenge of this effort is to conduct inquiry that is multivariate, contextual, and time sensitive in nature.

**Multivariate Inquiry**

Due to the complexity of BTtoP’s triangularity, project research necessarily extends beyond the traditional focus on one or two research variables to a multiplicity of variables that are psychological (motivation, self-concept, and self-esteem), affective (empathy and caring), values-related (moral and civic), and social, among others. Additionally, there is the largely unanswered question of whether and how these variables actually influence student behavior.

This is particularly true in the case of mental health and well-being, as much is still unknown about the interplay between genetic, psychological, and environmental factors in students’ experiences of depression and substance abuse in college. This includes whether students have any history of problems or previous diagnoses and whether students experience “collateral events” that may impact outcomes. For example, joining a fraternity or sorority has been correlated with higher levels of binge drinking, and the disruption of interpersonal relationships can lead to an increase in depressive symptoms.

Thus, the multivariate nature of the research necessitates an equally complex research strategy, one that can determine whether observed changes or lack of changes “in educational performance, or psychological functioning, or other outcomes are due to the program under study or to confounding life events” (Waterman 2003, 80). And that moves beyond one or two univariate instruments that “are not designed to capture the full range of potential impacts of a complex, individual program” (Furco 2003, 15).

To account for these issues, BTtoP research involves a two-pronged approach: first, to develop multivariate instrumentation that allows for the identification of broad correlations between variables; and second, to employ a diverse range of data-collection methods and instruments, thereby creating a composite picture of students’ experiences that enables a deeper understanding of the relationships between variables, and, ideally, to advance research into the realm of causality. This approach is in keeping with what Johnson and Onwuegbuzie (2004) describe as “mixed methods” research, which seeks to integrate both quantitative and qualitative paradigms into a single study of complex problems. As the authors explain, “Today’s research world is becoming increasingly interdisciplinary, complex, and dynamic…. [A] mixed position allows researchers to mix and match design components that offer the best chance of answering their specific research questions” (15).

**Contextual Inquiry**

BTtoP research must take into account the convergence and variance of at least two specific contexts that affect research phenomena: the forms of engaged learning in which students participate and institutional culture. As Hecht (2003) describes, service learning is not “a specific program with identifiable characteristics... [but] an approach to teaching and learning that is given meaning by the school or organization where it is based... Studies [should] account for the tremendous variability across and even within programs” (107).

In a developmental view of students’ health behaviors, both depression and substance abuse can result from developmental overchallenge posed by the college environment.
Thus, BTtoP research goes beyond mixed methods to describe across contexts the nature of the programs under study and the campus cultures in which they are situated.

The grand-design approach (Furco 2003) is one specific methodology that is promising for multisite studies of engaged learning, and service learning in particular. First, a set of both quantitative and qualitative measurements are selected and used across all participating sites to measure various outcomes. Then, in addition to this common group of instruments, a “second set of protocols that allows the researcher to investigate each unique program site in fuller detail” (26) is also developed. According to Furco, this approach “strives for comprehensiveness as well as for universality” and is therefore “applicable and relevant” across diverse programs (25). The use of this approach has been documented at the secondary school level in the use of the Evaluation System for Experiential Education, a package of ten qualitative and quantitative instruments assessing outcomes (academic, social, personal, career, ethical, and civic) of service-learning participation. The BTtoP research design adapts and extends the grand-design approach to assess engaged learning at the postsecondary level.

**Time-Sensitive Inquiry**

Finally, BTtoP research is necessarily time sensitive. First, the effects of specific forms of engaged learning may not become evident either during or immediately following student exposure. The impact of an engaged learning experience may extend beyond the actual experience (see Astin, Sax, and Avalos 1999), or it is also possible students may not recognize the value of an intense learning experience until after its conclusion and they have had time to reflect on it. Secondly, maturational effects during college are important to consider, as a significant number of students “mature out” of binge drinking over the course of four years (Rivinus 1992).

BTtoP research uses two methods to address this issue. First, it monitors student change using longitudinal data collection at multiple points of students’ program participation and then analyzes data from each point as well as aggregate data. Second, it employs a quasi-experimental design that uses a comparison group comprised of adequately similar students not participating in the engaged-learning experience, with the assumption that changes observed in the program groups above and beyond normal maturation (as witnessed in the comparison groups) are attributable to the engaged-learning experience.

**Research Design**

To address the question of what relationships exist between engaged learning, student mental health and well-being, and civic development, the BTtoP Demonstration project involves a two-tiered, simultaneous approach to research using quantitative and qualitative methods at the campus level and cross-site level:

- **Campus level:** All seven campuses submitted local research protocols and designated a local evaluator prior to project commencement. Campus research plans were required to involve longitudinal evaluation, formative and summative data collection, and adequate comparison groups. The range of quantitative instruments employed among the seven sites includes campus-developed pretest and posttest measures; mental health measures (i.e., Brief Symptoms Inventory), engagement measures (i.e., College Student Expectations Questionnaire), civic engagement scales (i.e., Scale of Service Learning Involvement), and existing institutional data sets from national surveys (i.e., Cooperative Institutional Research Program Freshman Survey). Qualitative methods include clinical interviews, focus groups, and analysis of reflection journals and course evaluation feedback.

- **Cross-site level:** A national, cross-site evaluator worked with each demonstration site to implement a set of qualitative and quantitative measures administered uniformly across all seven institutions. Quantitative instruments consist of the National Survey of Student Engagement (NSSE), administered in spring 2006, and the College
Student Experiences Questionnaire, also administered by sites with populations not sampled by NSSE (e.g., sophomores and juniors). The 2006 NSSE administration appended eleven supplemental consortium questions to the NSSE Core Survey to assess student mental health, well-being, and civic development at the seven demonstration sites only. (The BTtoP consortium questions are available at nsse.iub.edu/html/consortialist_2006.cfm.) Qualitative methods at the cross-site level include student and cross-constituency focus groups (comprised of faculty and staff) using a collaboratively developed set of uniform focus-group questions, and cross-site conferences held in September 2005, June 2006, and June 2007 that concentrated on the central themes of the demonstration sites.

Project Findings
The following preliminary report of findings from the BTtoP demonstration project’s first year is drawn from two data sets: cross-site data from institutional reports, site visits, and cross-site conferences; and the NSSE consortium administration. In keeping with the grand-design approach, which “organiz[es] information from all the data sources into recurring themes” (Furco 2003, 30), a thematic analysis of cross-site data follows, proceeded by an analysis of NSSE data on the initial correlations between engaged learning, student mental health and well-being, and civic development.

Thematic Analysis
Campuses reported the effectiveness of engaged learning programs on several levels. First, in confirmation of previous research, participation in these programs leads to deeper learning: Both students and their faculty reported better content mastery, level of engagement with material, and application of concepts to real-life settings. Student experiences in these programs were also described as personally transformative: Civic-development programs in particular were found to foster a more realistic understanding of the effort and commitment needed to effect community change. And a majority of involved constituencies, from students to faculty to administrators, reported high levels of satisfaction with engaged-learning and civic-development initiatives.

While the learning and civic-engagement outcomes of these programs were clearer than those related to student mental health and well-being, several sites found that student involvement correlated with lower alcohol usage. At the same time, however, involvement often correlated with higher levels of stress. Paradoxically, while students reported that the extra commitments of engaged-learning experiences produced added stress, they also claimed, often effusively, that these programs positively impacted their lives. Thus, higher levels of engagement may increase stress levels but at the same time produce the kind of deep, transformative learning sought by engaged-learning programs. Campus findings regarding effects on depression levels were mixed, with most sites reporting the need to further analyze data in light of gender differences in depression symptoms.

Regarding the research process itself, campuses highlighted the multidimensional nature of the research variables and described their ongoing struggle to accurately define and measure concepts of engagement, mental health and well-being, and civic development. Demonstration sites likewise confirmed the insufficiency of instrumentation to this task, as well as the challenges to evaluation, including survey fatigue and maintaining response rates. Along these lines, campuses underscored the importance of time as a necessary condition for conducting this research, as longitudinal data are necessary to delineate further the relationships between the variables under study.

Cross-Site Results from the National Survey of Student Engagement
The following analysis uses NSSE data gathered across demonstration sites to quantitatively analyze relationships between engaged learning, student mental health and well-being, and civic development. Benchmarks from the NSSE Core Survey were utilized as
indicators of engaged learning. The consortium questions measured civic development at the campus, community, and national levels using scales ranging from zero to three, with zero indicating low engagement; health behaviors by the frequency and amount of alcohol consumption and the frequency of drug use (marijuana, other illegal drugs, and prescription drugs used for a purpose other than which they were prescribed); and mental health according to scales of both depression and stress. (A selected number of health-related items were used with permission from the Core Alcohol and Drug Survey and the American College Health Association-National College Health Assessment).

Sample Characteristics and Descriptive Results

A total sample of 2,545 students was drawn from a random sample of first-year and senior students at the seven demonstration sites. Only students who reported they had ever used alcohol or drugs were included in the sample—notably, this variable eliminated only five students. The sample consisted of 1,562 first-year students and 983 seniors, the majority of whom were women (65.9 percent) and white (73.3 percent); 7.6 percent of respondents identified themselves as Asian, 4.4 percent as Hispanic/Latino, 4 percent as black, 2.6 percent as multiracial, and 6.4 percent preferred not to indicate their race.

On the NSSE benchmarks, students reported experiencing the highest levels of “academic challenge” and “supportive campus environments,” and the lowest levels of “student/faculty interaction” and “enriching education experiences.” A descriptive analysis of civic-engagement scales showed students report slightly higher levels of campus involvement than national involvement and the lowest levels of local community involvement (see fig. 1).

In terms of substance use, the majority of students reported that they have never used marijuana, other illegal drugs, or prescription medications for recreational use, a finding that supports indications that alcohol is the drug of choice on college campuses. Regarding alcohol use, the average number of drinks reported per sitting was 4.32, a mean strikingly close to the five-drinks-per-sitting designation commonly used to define binge drinking. Students also reported drinking, on average, 2.74 times per week. Results did indicate a maturational effect of binge drinking: First-year students consumed more alcohol per sitting than seniors; however, seniors drank significantly more times per week than first-year students. In terms of mental health, students were found to have moderate stress levels (1.2 on a 0 to 3 scale) and relatively low depression levels (1.06 on a 0 to 4 scale).

Correlations with Alcohol and Drug Use

In terms of the relationships between the NSSE benchmarks and student alcohol use, higher levels of “active and collaborative learning,” “student/faculty interaction,” and “enriching educational experiences”—all closely tied with engaged-learning

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**Table 1.**

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<thead>
<tr>
<th>NSSE Benchmarks</th>
<th>Mean Scores (0–100)</th>
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<tbody>
<tr>
<td>Academic Challenge</td>
<td>59.37 (12.27)</td>
</tr>
<tr>
<td>Active and Collaborative</td>
<td>44.72 (15.14)</td>
</tr>
<tr>
<td>Learning</td>
<td></td>
</tr>
<tr>
<td>Student/Faculty Interaction</td>
<td>37.52 (19.74)</td>
</tr>
<tr>
<td>Enriching Educational</td>
<td>41.61 (17.35)</td>
</tr>
<tr>
<td>Experiences</td>
<td></td>
</tr>
<tr>
<td>Supportive Campus Environment</td>
<td>59.76 (16.71)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of Civic Engagement</th>
<th>Mean Score (0–3)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus</td>
<td>1.31 (0.72)</td>
</tr>
<tr>
<td>Community</td>
<td>0.847 (0.69)</td>
</tr>
<tr>
<td>National</td>
<td>1.30 (0.74)</td>
</tr>
</tbody>
</table>

* Standard deviations in parentheses
experiences—correlated with students consuming fewer drinks per sitting. However, students indicating they experienced high levels of “active and collaborative learning” also correlated with drinking more times per week. Similarly, scales of civic engagement indicate that students engaged at the community level consume less alcohol in a sitting; however, those with higher degrees of involvement at the campus and national levels are drinking more often (see fig. 2).

Thus, the pattern of relationships between engagement and substance use is not entirely linear. It may be that although engaged-learning and civic-development programs may discourage binge drinking, these same initiatives may also provide, through increased social contact and interaction, the opportunity for students to drink more often. This seems to suggest that while it is unrealistic to believe college students will abstain from alcohol, engaged-learning programs may promote more responsible drinking behaviors.

**Correlations with Mental Health**

In contrast to alcohol and drug use, civic-engagement scales and NSSE benchmarks reflected a clearer pattern of association with mental health indices. Specifically, correlations indicate, almost universally, that higher levels of engaged learning and civic development are associated with lower levels of depression. However, more-engaged students were also consistently found to have higher levels of stress (fig. 3). Thus, while engaged students may not be as depressed as their counterparts, they also report feeling greater stress. This supports both the thematic findings at the cross-site level and research in the literature regarding optimal stress levels. It is possible that programs that engage students civically and in their learning may be stressful in a way that is actually beneficial to students. And given that some NSSE benchmarks and civic-engagement scales correlated with lower amounts of alcohol consumption, it is possible that students are not necessarily responding to this stress with negative behaviors. Ultimately, greater analysis of “collateral events,” such as student participation in campus organizations, will be

---

**Figure 2.**
Correlations: NSSE benchmarks, civic engagement, and alcohol and drug use

<table>
<thead>
<tr>
<th>NSSE Benchmarks</th>
<th># of Drinks Per Sitting</th>
<th># of Days Drink Per Week</th>
<th>Marijuana Use</th>
<th>Other Illegal Drug Use</th>
<th>Prescription Drugs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Challenge</td>
<td>-.036</td>
<td>.015</td>
<td>-.051*</td>
<td>.008</td>
<td>.018</td>
</tr>
<tr>
<td>Active and Collaborative Learning</td>
<td>-.054***</td>
<td>.060**</td>
<td>-.070***</td>
<td>.013</td>
<td>.012</td>
</tr>
<tr>
<td>Student/Faculty Interaction</td>
<td>-.082***</td>
<td>.030</td>
<td>-.048*</td>
<td>.012</td>
<td>.022</td>
</tr>
<tr>
<td>Enriching Educational Experiences</td>
<td>-.125***</td>
<td>.098***</td>
<td>-.051**</td>
<td>.018</td>
<td>.003</td>
</tr>
<tr>
<td>Supportive Campus Environment</td>
<td>.019</td>
<td>.038</td>
<td>-.058**</td>
<td>-.067***</td>
<td>-.046*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Civic Engagement Scales</th>
<th># of Drinks Per Sitting</th>
<th># of Days Drink Per Week</th>
<th>Marijuana Use</th>
<th>Other Illegal Drug Use</th>
<th>Prescription Drugs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus Involvement</td>
<td>.027</td>
<td>.110***</td>
<td>-.051**</td>
<td>-.034</td>
<td>-.014</td>
</tr>
<tr>
<td>Community Involvement</td>
<td>-.069***</td>
<td>.000</td>
<td>-.075***</td>
<td>-.026</td>
<td>-.032</td>
</tr>
<tr>
<td>National Involvement</td>
<td>.007</td>
<td>.079***</td>
<td>-.039*</td>
<td>-.005</td>
<td>.022</td>
</tr>
</tbody>
</table>

*= p<.05, **= p<.01, ***= p<.001
critical in further understanding these relationships.

**Considerations and Future Directions**

The BTtoP demonstration project continues to face a number of issues, chief among them self-selection bias. For the majority of demonstration sites, students who are civically inclined have self-selected to participate in the various initiatives. Thus, any findings may be due the fact that students who are more drawn toward engaged-learning experiences simply tend to drink less or have better mental health or both. The use of comparison groups is helpful in addressing this to a degree, but the larger issue is finding a way to systematically target students who have lower patterns of engagement and who therefore may be more prone to heavier drinking and mental health concerns.

One approach is to implement a research design that involves close to 100 percent of the target population (for example, all first-year students enrolled in service-learning courses) to examine the impact of engaged learning on students with various (pre)dispositions. Such a strategy would also address engaged learning’s peripheral status in most college curricula, reflected by the small percentage of students nationwide that are involved in service-learning and other engaged-learning experiences. To this end, BTtoP has launched a new initiative with the creation of “intensive site” grants, which enable colleges to conduct programming and research on this scale.

Another persistent concern is that of instrumentation. Evaluators have reported frustration with the univariate nature of existing instruments and the limited ability of these instruments to accurately gauge program impacts. In light of project findings, BTtoP research must continue to ask whether an “additive” approach to instrumentation, by which several of these instruments are used and analyzed simultaneously, or the development of new, multivariate instrumentation constitutes a more promising approach to yielding accurate data.

Finally, regardless of the persuasiveness of any BTtoP findings, mixed-methods research is not yet widely accepted through the educational research community, largely due to its nature as an “inclusive, pluralistic, and complementary” methodology (Johnson and Onwuegbuzie 2004, 17). As a mixed-methods approach, BTtoP research stresses the criteria of applicability and adaptability rather than the traditional and largely quantitative concern over the degree to which one can generalize from research findings. In other words, the robust solutions generated from the design and implementation challenges of BTtoP research may yield adaptable blueprints for institutions of higher education to follow as they consider ways to address the triangularity of engaged learning, student

---

**Figure 3.**
Correlations: NSSE benchmarks, civic engagement, depression, and stress scales

<table>
<thead>
<tr>
<th>NSSE Benchmarks</th>
<th>Depression Scale</th>
<th>Stress Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Challenge</td>
<td>.053**</td>
<td>.153***</td>
</tr>
<tr>
<td>Active and Collaborative Learning</td>
<td>−.044*</td>
<td>.115***</td>
</tr>
<tr>
<td>Student/Faculty Interaction</td>
<td>−.047*</td>
<td>.134***</td>
</tr>
<tr>
<td>Enriching Education Environment</td>
<td>−.035</td>
<td>.148***</td>
</tr>
<tr>
<td>Supportive Campus Environment</td>
<td>−.260***</td>
<td>−.118***</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Civic Engagement Scales</th>
<th>Depression Scale</th>
<th>Stress Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus Involvement</td>
<td>−.144***</td>
<td>.121***</td>
</tr>
<tr>
<td>Community Involvement</td>
<td>−.093***</td>
<td>.117***</td>
</tr>
<tr>
<td>National Involvement</td>
<td>−.094***</td>
<td>.090***</td>
</tr>
</tbody>
</table>

**= p<.05, ***= p<.01, +++= p<.001**
mental health and well-being, and civic development.

Along these lines, one of the most promising contributions of BTtoP research is the exploration of a new field of study and the development of new approaches to conducting inquiry in this field. Ultimately, project research may yield not only a good example of mixed-methods and grand-design approach, but also a valuable new methodology for examining complex and largely unanswered questions in higher education research.

References


In addition to its annual meeting, AAC&U offers a series of working conferences and institutes each year. Additional information about the upcoming meetings listed below is available online at www.aacu.org/meetings.

Network for Academic Renewal Meetings
October 18–20, 2007
Civic Learning at the Intersections: U.S. Diversity, Global Education, and Democracy’s Unfinished Work
Denver, Colorado

November 1–3 2007
Sharing Responsibility for Essential Learning Outcomes: New Partnerships across Departments, Academic Affairs, and Student Affairs
Savannah, Georgia

February 21–23 2008
Integrative Designs for General Education and Assessment
Boston, Massachusetts

Annual Meeting
January 23–26, 2008
Intentional Learning, Unscripted Challenges
Knowledge and Imagination for an Interdependent World
Washington, DC
The Bringing Theory to Practice (BTtoP) project came into being out of concern for the camouflaged but significant and increasing prevalence of students abusing alcohol and other drugs, experiencing too much stress, suffering from depression, and attempting suicide, and the corrosive effects of these problems on the purposes and outcomes of what is supposed to be a liberating education. The project’s purpose is to make sure these issues are no longer relegated to the margins of campus life, hidden in counseling offices, and segregated from the traditionally but narrowly understood intellectual life associated with “higher” education.

This issue has been referred to by student development professionals metaphorically as a time bomb and has taken on a new, grim reality. The tragedy at Virginia Tech was a horrific way for the country to learn that emotional and mental health are and should be central educational concerns on college and university campuses. It is all the more reason that BTtoP’s work to date needs to be taken seriously and understood as context for the much-needed expansion of dialogue and research required if undergraduate education is to be successful.

Through conferences, papers, and small research projects, the BTtoP initiative has been inordinately successful in raising campus consciousness nationwide about the inextricable links between emotional and intellectual health and the means and ends of higher education. The ubiquitous phrase life of the mind must now encompass a far wider sense of meaning-making if we are to help students develop a strong sense of self, a resiliency that enables them to face the ups and downs of modern life, and a yearning for and capacity to learn from different people, cultures, and ideas.

The Right Kind of Engagement

BTtoP’s starting hypothesis that student engagement is a key variable in promoting stronger and healthier learning was a logical beginning, but the situation has turned out to be more complex. Further research suggested that while engagement worked well for many students, some of the most stressed and depressed students were also heavily engaged. For students who were lonely, disengaged, alienated, or feeling lost in their own meaning-making quandary, the amount and quality of engagement, normally understood to mean some combination of active participation in classes, social life, and community service, is best understood by absence of engagement.

As the articles in this issue of Peer Review attest, campuses are employing a variety of strategies to engage students meaningfully. To date, little effect has been shown from these interventions for at least two reasons. First, because the research has—until recently—had to rely on student volunteers, positive effects, if found, may be a function of self-selection—students who volunteer for enriched engagement activities are often those who are least in need of them. Unless much larger research projects on single campuses and across many similar campuses can control for this self-selection bias, we will learn little. Second, the concept of engagement usually refers to a well-defined intervention over a relatively short time, such as a community-service project linked to one’s

Terms of Engagement

By Richard H. Hersh, codirector of the Collegiate Learning Assessment Project and former president of William and Hobart Colleges and Trinity College (Hartford, Connecticut)
first-year seminar or residential-living situation. In short, the notion of engagement is often narrowly bounded. Developmental psychology tells us that the BTtoP’s desired outcomes require far more time, as much as if not more than four or five college years, and a far more extensive and intensive set of experiences, including appropriately linked reflective components, for there to be a significant educational effect. What we are talking about here is a quality of change we refer to as transformational.

The terms of engagement need to be expanded not only to encompass the broader ends BTtoP has so nicely elaborated as central but also to understand that the means for reaching such ends through pedagogy and curricula (in and out of class) are both collective and cumulative. By this I mean that the campus culture itself is a teacher in that its collective and cumulative effects, by chance or design, are what make the ultimate difference in the kinds of outcomes we most value, such as critical thinking, good writing, ethical development, ego strength, and perspective taking. Students do not fully learn any of these things in one or a few classes dedicated to such outcomes, just as they cannot master a college major in one or a few courses. Positive outcomes are developed over time through hundreds or thousands of engagements far more purposefully planned than is the case now.

In this sense, the terms of engagement are multiple; they require the involvement of all the faculty as well as administrators, staff, and students. They require pedagogy and curriculum over four or more years that are far more coherent horizontally and vertically and that span departments and disciplines. In short, the kinds of learning we all espouse as liberating require an immersion in a culture far more publicly demanding of such learning and far more shared by those who recruit for and run the institution. This requires a campus culture radically different from the naive, freedom-of-choice academic rhetoric used now to rationalize a system of higher education that ultimately victimizes students by allowing them extraordinary freedom of choice, as if the students alone know best what is educationally good for them. Meaning-making is somewhat akin to learning how to swim—one learns best by not being pushed into the deep end.

**Dangerous Freedom**

Students come to college today having been poorly served by immersion in what I have labeled a national culture of neglect that has asked them more than ever before to rely on themselves and their peers for nurturing and wisdom. They have been informed more by television and the Internet than by the wisdom of parents, teachers, and other caring, mentoring adults. Cell phoning and e-mailing are not the equivalent of face-to-face interaction.

Students coming to campuses are given even greater freedom in the name of learning from failure and an increasingly reified notion of consumer choice: They can choose from empty-calorie fast-food restaurants in glorious student centers or select from a seemingly infinite menu of courses, connected or not. As for advising, students can solicit advice from an adviser, if available, while they seek class schedule signatures or visit a counselor if and when they can get an appointment. Moreover, with the freedom students are given, they need only devote relatively little time to complete thin academic assignments in return for which they receive inflated grades.

BTtoP’s goals are to be lauded, and the project’s ability to raise consciousness nationally for its ends is its strength. But if we are to take the BTtoP agenda seriously, as we must, if we really value the kind of learning for which the academy has made monopolistic claim, our terms of engagement have to change.
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