BTtoP Case Study: Georgetown University

Infusing Academic Subjects with Health Education Educates the Whole Student

A math professor worked with a college counselor to teach students about the dangers of too much alcohol consumption. A biology professor invited a health practitioner to class to talk about depression. In a section of an introduction to sociology course in which deviant behavior was addressed, a psychologist invited the students to describe what it feels like to be different.

These are but a few of the examples of how faculty members at Georgetown University have integrated information about health and well-being into traditional academic college subjects. The project started as part of a Bringing Theory to Practice (BTtoP) initiative nearly a decade ago, and it is now an endowed signature project of the school.

"We were recognizing that our students are very talented, very competitive, very high achievers," said Carol R.T. Day, Director of Health Education Services. "But when we look at our National College Health Assessment data, we know that like other colleges and universities, they are struggling with mental health, anxiety, and depression, feeling overwhelmed and stressed. They are used to that. We felt there was room for us to be talking with them to see if we could improve some of those trends." The BTtoP initiative was that vehicle.

Background

Georgetown University was founded by Jesuits in 1789 and is the nation's oldest Catholic university. Its mission is fulfillment of the Jesuit commitment to *cura personalis* – the care of the whole person. Georgetown operates eight schools and an affiliated hospital. About 12,000 undergraduate and graduate students take classes at five locations: Main Campus, Medical Center, Law Center, GU-Northern Virginia, and the School of Foreign Service-Qatar. Georgetown's male/female student ratio is 45/55.

Georgetown was one of the schools initially selected as a demonstration site for the BTtoP project, and grants ran consecutively there from 2005-09. It subsequently received an intensive site grant through 2012 and was then endowed by the Engelhard Foundation to continue the program into the future.

The Precursor to Georgetown's BTtoP Project

Joan B. Riley is an associate professor in Georgetown's human science department, a senior scholar in the Center for New Designs and Learning (known as CNDLS), and an assistant dean for educational innovation at the School of Nursing and Health studies.

In 2002, she was part of a campus group called *Friends*, which was started by a faculty member and an administrator who were alarmed by the harm caused to students by alcohol consumption and who wanted to change the alcohol culture. Faculty, administrators, student leaders, and students, including

those who consumed alcohol, formed task groups. Riley co-chaired one group on harm reduction, the point of which was to foster discussion.

Friends also started initiatives such as a shuttle service for students. "Little things," noted Riley, "that would add up to showing the university cared about students and keeping students out of harm's way."

But one day in 2004, she was asked, "What can you, as a faculty member, do in your realm?" She thought the only place she really had any control was in her classroom, and she asked herself, "What can I do there to address the issue?" This question fit with a class she was teaching, Health Promotion and Disease Prevention, and she thought that perhaps her students could devise strategies to reduce harm. Students would still study the core content and at the same time design campus strategies to reduce the harm alcohol was causing.

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The students performed a needs assessment survey, interviewed key individuals at the university, looked at a theoretical framework for an intervention, and created health promotion programs. But they didn't implement their strategies as this was an academic exercise. However, the next semester, some students wanted to put their ideas into action so they established web sites.

It was then that Riley attended a BTtoP meeting in Chicago and met Alisa Carse, another faculty member from Georgetown who was teaching philosophy and inviting guests to her class to talk about ethical issues. "It made me realize that on the academic side we could play a role," she said. "When you do something in the academic part of the institution, students take it seriously."

The two Georgetown professors were immediately drawn to the work of BTtoP and felt what they were already doing was a precursor to what BTtoP was undertaking. They thought their university could benefit from

the initiative. The question was how. They decided to meet with Todd Olson and Randy Bass.

Olson was Vice President of Student Affairs. He assumed his position at Georgetown about the time that Riley was exploring new health issues in her class. Randy Bass was head of CNDLS, which offers faculty development programs as well as grants for faculty so they can pursue ideas for teaching in new ways.

Olson expressed an interest in student well-being and improving the existing safety net at Georgetown through which individuals respond to student needs. He was interested in the idea of bringing health professionals into classrooms to connect directly to academic content. "In those years, there were problems with high-risk drinking," he said. "There was a high-profile student death that was alcohol related. There was an occasional suicide. Aspects of the National College Health Assessment made clear the scope of the problems."

Bass remembered that Riley and Carse were "doing something that we later started to call curriculum

infusion. We wanted to see if we could build this out. We wanted to focus on this and see if others might be interested in it. The BTtoP project gave people a structure to do that."

"What we called *infusion* was bringing in matters of well-being or health," Bass added, "issues of student well-being, student health, or mental health. In the philosophy model, for example, the professor taught an essay by Aristotle about friendship and

flourishing. She then brought in someone from student health services. Students would write an anonymous reflection on the challenges of flourishing in college and then discuss it. That became the prototype model."

The group decided that a BTtoP Project had to touch various departments within the university. Student Affairs is separate from academics," said Riley. "In order to cross student affairs and academic boundaries and not put the project in any one school, we had to go somewhere that was cross cutting."

CNDLS seemed to be the answer and agreed to house the BTtoP Project. The first grant lasted two years.

CNDLS Became the Project's Home

According to Mindy McWillams, Associate Director for Assessment at CNDLS, the mission of the BTtoP Project at Georgetown centered on forming the new curricular infusion program. In certain academic classes, a faculty member and a visiting health professional would

teach a section together. The focus was about health issues students faced within the context of the academic course content. The health professional stayed for one entire course period – sixty or ninety minutes depending on the class.

According to Day, curriculum infusion is "a way of matching up classes that faculty are teaching and a unit or more that uses a health professional. It is in collaboration with the faculty member teaching the course, where you can find a spot in the course to try to make health or well-being relevant to student's lives." Day noted that Georgetown does not have a first-year seminar course for all freshman students. "We have different versions of that in different academic departments depending on the school," she said. Curriculum infusion seemed to be the way to go.

Yet McWilliams noted that Georgetown did not want to restrict the BTtoP program to just freshmen. "We've tried to put a focus on first and second courses, on some of the core courses that they take," she said, "but we have not restricted it to those. In the beginning, we just wanted to get faculty involved and we wanted to put as few restrictions on it as possible." To get started, CNDLS formed a steering committee that involved faculty and the staff from student affairs, health professionals, and members of the CNDLS teaching center. They in turn "put out a call to all faculty," explaining the program and asking them to participate. "Because we had BTtoP money, we could offer a stipend," said Riley.

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But it was more than the stipend. Riley said, "The project resonated with the Georgetown faculty because of the university's mission. They saw it as a way to enact something they deeply believe in to this day." The steering committee wanted anyone who came forward to address well-being to be able to do it. "We wanted to be as inclusive as possible," Riley said. "Our thought was, isn't it better to start to address well-being in some way and meet with them regularly to figure out how to make it more applicable? We started with lots of different models."

But there were core requirements for any course that connected to a well-being issue, including an academic component (readings or other materials), a guest speaker from campus to talk about the well-being issue, and some kind of follow-up reflection on the part of the students.

Once the faculty signed on to what they started calling the Engelhard Project, named after the foundation that funds the BTtoP initiative, faculty and teaching assistants attended safety net trainings in which they were introduced to health issues on campus. They learned to recognize signs of distress and how to respond to student needs. At the training, campus health professionals provided faculty and teaching assistants with classroom resources, ideas for presentations, and resources on campus.

The CNDLS staff brokered the relationship between the faculty member and student health services. "First, we sat down with someone who wanted to be an Engelhard Fellow and asked what were they interested in. 'What is your topic?'" said Bass. "The staff would find someone in health services who would be a match. They would then broker the conversation between the faculty member and health services member. They would negotiate what they were going to do, what they would read. Then they started developing different models. Most faculty had some sort of idea of what they wanted to do. The idea was always to find the organic connection between the academic topic and well-being. It was about educating faculty about well-being. It was teasing out the natural connection in the class."

Joselyn Schultz Lewis, Assistant Director for Strategic Initiatives and outreach at CNDLS, was one of those brokers. She started working with the project in 2006. "I started out contacting faculty and health professionals each semester," she said. Now she leads the project and "does faculty development, conversations with faculty about what an Engelhard course does, what it looks like, and all the various versions across the different disciplines."

The involved faculty became known as Engelhard Faculty Fellows; they met during the semester to talk about how the project was going. The courses were designated Engelhard Courses and were marked in the school roster with an EC. The curriculum infusion model "quickly escalated," added Bass.

Modeling Math and Talking About Health

James Sandefur, a professor of mathematics, signed up to teach an Engelhard course. "I was doing things in my math class that I knew were appropriate," he said. Sandefur has been at Georgetown since 1974 and is an applied mathematician. Early on in his career he thought of models that would engage students and combine mathematical theory with application. He once had a National Science Foundation grant to develop materials that could be used in remedial college math courses. At Georgetown, he teaches a math-modeling course at two levels: one is for junior and senior math students, and one is a math modeling general education course for students to satisfy their math science requirements.

"One of things we set up is a model of how alcohol is eliminated from the body," he said. "What you can do is find out that the rate at which alcohol is eliminated depends on the amount of alcohol that is in your body. As you get more alcohol in your body, the rate at which it is being eliminated decreases. That is because alcohol is primarily eliminated by the liver."

"We set up an equation that describes the average person and how alcohol would be eliminated so that you can then do different models. Drinking at a certain rate, how much alcohol would you have in your body over some time period? For alcohol, essentially the body eliminates about two-thirds of the drink per hour. If you are drinking more than a drink an hour, the alcohol is going to start building up. Then you would describe the levels at which you would be considered DUI, at risk of death, or in a stupor. It is different for different people because it depends on how much you weigh," Sandefur noted. "The result is that students develop a better understanding about how alcohol interacts with their bodies. So instead of giving them a scare tactic, I try to give them the information so they deal with it intelligently."

For the Engelhard Course, Sandefur invited a staff member from Georgetown's counseling service for students to give the class statistics on drinking problems at the college level and information on how much Georgetown students drink and how this compares to national averages. The health professional described the signs of alcohol dependence and what students should do if they have problems or if they think a friend has a problem with alcohol.

"I felt uncomfortable talking about how you deal with it or what you do because that is not my training," Sandefur said. "I do my part, then we talk together, so that what is math and what he did in talking about drinking problems complement each other. All of the students are learning information. In learning mathematics, they are learning information about alcohol."

Sandefur also had his math class look at weight gain and loss, including body metabolism and how what is consumed is determined by body weight and the proportion of lean to fat tissue (because lean tissues burns more calories than fat tissues.) Then Day, who is also an adjunct assistant professor of nursing, visited Sandefur's class to talk about eating disorders. She described warning signs and stayed after class to talk with students.

"I know having this combined day has a positive effect," said Sandefur. "It gives all students a better understanding of things related to their bodies and also gives a chance, especially for the freshman course, to reach some students who may have some type of emotional issues, such as drinking dependence or depression."

Other Infused Classes

In another course and department, Engelhard Fellow Sarah C. Stiles teaches an introductory sociology class that includes a section on deviant behavior. She invited a psychologist to her class who spent an hour talking about stigma and deviant behavior. He described people who felt different, who felt as if they didn't belong, or who thought someone insulted them. Students also learned about aggressive people who hurt others but don't realize they do so.

Stiles said she has used this model every year since 2008, and "we have had excellent results. Students become aware of what they take for granted. Other students become aware that they can make an

injury public. There is a conversation in class. Some students would say, 'People are too sensitive.' Another would say, 'You don't know unless you've been there.' It makes the reading real and relevant to the students," she added. "It also lets them know that if they are suffering, they are not alone. They realize they should reach out."

Stiles also integrated discussions about stress and wellness into her classes. "I will keep this in my curriculum no matter what. Students are very appreciative that the university cares. They feel loved. It is heightened because of the Jesuit identity, *cura personalis*, care of whole person. We emphasize this. It is not just sociology."

Riley likewise went on to participate in the BTtoP Project with her own health promotion class. She asked the head of Health Education Services to visit the class to provide the students with Georgetown's data regarding student behaviors, national data, and emergency response data. Students then designed programs and identified

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needed resources based on gaps they saw. Riley also invited someone from the counseling center to visit her class of sophomores to talk about mental health promotion and how to maintain positive mental health. "The School of Nursing is a very natural alliance," said Riley.

In Riley's class on sexual health issues for seniors, multiple speakers have talked about relationships and positive relationship communication. Another speaker addressed sexual violence on campus and the notion of consent. A third speaker talked about lesbian/gay/bisexual/transgender issues and identity. Students were asked to design and teach sexual health education programs for other Georgetown students throughout the community. Riley co-teaches the class with a physician, and they attended these sessions.

Bass said that during the first two years, "we had a tremendous response. A lot of people said, 'I've always been concerned about the interior life of students. I didn't want to go there. I am not a psychologist. But I care and want to make these connections." McWilliams added, "The impact of the first grant was starting this conversation on campus with different groups of people, getting our student affairs and campus health professionals talking with faculty. At the teaching center, we talk with faculty all the time. But the health professionals are set up to provide for students. They have meetings with students. They might do orientations for students. And they might go to a dorm to do a presentation, and they meet with students as individual appointments. But they didn't have a lot of contact with our faculty. We had enough feedback from everyone involved that this was fulfilling a need on our campus. We wanted to continue being involved in the project."

Bass explained that the success of the first two years, "absolutely emboldened us to say we can take this to 100 percent; we participated at cross-demonstration site meetings for several years, and it was clear to us we were the only people who were not working with a self-selected, compartmentalized group of people. Everyone else was starting a living learning community focused on community engagement or some service learning. Our approach was totally different and it was a low bar of entry

and wide implementation."

Georgetown then received a second BTtoP grant to continue the project for another two years. It received a final intensive site grant to focus on scaling up and sustaining the project.

Curriculum Infusion Expanded

To reach more students, the Engelhard Project then targeted required courses such as philosophy and history. The aim was to reach 100 percent of students with at least one Engelhard course.

The staff reached out to specific departments, such as theater, women's studies, government, and economics to find courses that connected to student living. As the Engelhard Project continued, potential faculty were also targeted. "It is not necessarily for everybody," said McWilliams. "Teaching this ways takes extra time and effort and a willingness to place an importance on this in your course."

"We had a lot of success in the biology department," she added, "because the faculty there really care

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about these issues or because it also seems like a natural fit with their content when teaching with a genetics class, or an introduction to biology class when students are talking about what goes on inside the brain or what goes on inside the body. What affect does what's happening outside the body, such as stress level, have on what is going on inside the body?"

For example, Heidi Elmendorf taught an introductory biology class and asked Phil Meilman, Director of Counseling and Psychiatric Service, to visit her class and focus on genetic predispositions to mental health issues. Students researched and wrote papers on the topic.

The Engelhard Project developed a web site that touted some examples of curriculum infusion, and other schools became involved. For example, in the business school, Robert Bies taught Management and Organizational Behavior. In this class, students viewed a film called *The Great Debaters*. John Wright, a staff psychologist at Georgetown, attended the post-film discussion. Students focused on the Civil Rights era in the United States to see what lessons might apply to creating healthy organizations and companies. On the Engelhard Project web site, Bies said the point was to help students "understand their moral purposes as global

business leaders and make a difference in the lives of others."

In Natsu Onoda Power's performing arts class, Theatre as Social Change, students were paired with Ballou Senior High School students in southeast Washington, DC, to develop, write, and perform plays. The goal was to see how a performance could lead to discussions about social issues. The plays focused on depression, suicide, substance abuse, homophobia, and peer pressure. Day visited the class and talked with students about the roles of mentors, co-collaborators, and peer instructors.

More recently, Day said she taught in a sociology class, Food, Farms and Society. Her role was to talk about nutrition.

In a report of the first seven years of the project called, "The Engelhard Project for Connecting Life and Learning," it was observed that faculty members and graduate students taught such courses in four undergraduate schools. The participating disciplines included the following: Accounting, Anthropology, Art, Biology, Business, English, Family Medicine, Foreign Service, German, Government, Health Studies, Health Systems Administration, History, Human Science, Interdisciplinary Studies, International Affairs, Justice and Peace Studies, Management, Mathematics, Nursing, Operations Information Management, Performing Arts, Philosophy, Physics, Psychology, Sociology, Spanish, and Theology.

The seven-year report also indicated that 219 campus health professionals had been involved with sixty-six fellows and forty-five teaching assistants in 225 courses. The number of faculty has since increased to more than 100.

"It definitely expanded my community and my network of people I work with on campus," said McWilliams, "but also nationally because of my involvement with BTtoP. It has also made me realize how important our work is to the students. My center works almost exclusively with faculty. They are our clients. We often lose track with what is happening with students because we are not in the classrooms. This project has really brought back to me a lot of data from students about how the work is affecting them. It is really very satisfying in that sense. You can see what the impact is."

As the final grant was ending, the Engelhard Project was endowed by the Engelhard Foundation as an endowed fund to continue this work in perpetuity. "It is a project we talk about at every twist and turn," said McWilliams. "It has been a project for CNDLS that we consider one of our signature projects."

Impact on Students

Bass estimates that to date, 70 percent of students at Georgetown have participated in Engelhard courses. Indeed, according to McWilliams, 9,871 unique students have participated in Engelhard courses during the ten years from fall 2005 to spring 2015. Of these students, 65 percent have taken one course, 30 percent have taken two or three courses and 5 percent have taken between four and nine courses. Two students have taken nine courses.

Almost 50 percent of students encounter their first Engelhard courses in their first years at Georgetown. Twenty-five percent enroll in their first Engelhard courses in their second years. And 25 percent are in their first Engelhard courses as juniors and seniors. Overall, 40 percent of students in Engelhard courses are male and 60 percent are female, which reflects the gender ratio in enrollment overall at Georgetown.

The Georgetown project has used a variety of instruments to measure its impact, including regular student focus groups, for example. These tapered off when the student comments became repetitive, according to Lewis, although they are still used occasionally.

The assessment also includes individual course reflection papers. Sandefur gave assessments at the end of each term, and students wrote papers about one particular model. He noted that one student said that he "found the course interesting, but it hasn't changed my drinking habits. But I now count how many drinks I have." Sandefur quipped, "If they are counting how many drinks they have, it is changing their drinking habits. They are paying attention."

There are also end-of-course surveys. Day said that students in the courses report, anecdotally, that they are engaged. "They would do more work for the class," she said. "They liked it better. They felt regarded and respected as human beings. It is hard to flush that out. But they tend to feel it's a more personal touch, and the professors care about their real lives and not just the content they are teaching."

Lewis said that the instruments are really used to improve the program. If a student felt that the conversation in a course seemed "out of the blue," or "disconnected from the course," the project worked that feedback into faculty development to make the connections clearer. Or if a student took two Engelhard courses the same semester and felt the material was similar, the staff looked at where students might likely double up, in biology or nursing, for example. Then the project worked with faculty to ensure greater diversity of courses in a given schedule.

Lewis also added that for about six years, the project used its own survey instruments. "But then we decided we weren't getting quite enough information for some things we wanted to try out," she said, and they started to include other measurement scales, such as the Corey Keyes Flourishing Scale, the Engaged Student Learning Index, and a general self-efficacy scale.

Some of these tools were used to measure a number of factors, not just those related to the BTtoP project. And while Riley stated that much of the information gathered is not for

distribution, "I think we have nudged the needle," she said. "But we clearly still have a pool of students who are heavy drinkers. We still have about 20 percent of our students who don't drink at all, and we have about 60 percent who drink moderately. I do believe those students are aware of more protective activities and how to do so safely."

Other faculty, she said, who administered end-of-course surveys found that students changed their behavior or changed their attitudes about their behavior. "Even that very small number of changing behavior makes me happy," said Riley.

Olson noted though that there are other effects. He said that students report that the project "creates enhanced readiness to intervene when a friend has health issues or to reach out to a health professional on behalf of a friend. That is the sort of adaptive behavior we were hoping for. The faculty

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reports that the experience is both energizing and enhances the material. The health professionals report that this is an energizing expansion of their roles, and they report positive outcomes in terms of their getting to know faculty and have students see them in more expansive ways."

Lewis added that health professionals report that they believe that more students come to the counseling center as a result of the courses. Sometimes students will say they heard about the service in one of the courses.

Faculty Impact

The Engelhard courses seem to stick with the faculty once they've experienced them. Sandefur, for example, went on to become the department chair for six years, which reduced his teaching load. But he plans to return to the Engelhard Project next year. As before, he will have someone come into his class for a one-day lecture.

"It was good for the students and it is has raised the awareness of faculty members," said Sandefur. "It made me more alert to students with depression. When in another course a student was not coming to class, I brought him in to talk with him and discovered he was suffering from depression. I got him over

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to Counseling and Psychiatric Services (CAPS). The parents got involved, and through hard work, the student graduated. Without this contact, that may not have happened."

The Engelhard Project also surveys faculty at the end of courses. Lewis said that faculty report "a sense of community. It is a place where a lot more faculty have found a second home or a place where they find like-minded people. Some report feeling liberated, free to teach in a way that matters to them." According to Bass, "What has made this a huge success is that it really was the first truly integrative partnership between academics and student affairs."

Riley added, "To this day, one of the things I am most proud of is the community of faculty and student affairs staff this has created. I really have the privilege of talking to colleagues in so many disciplines, hearing that they care

about students, and they care deeply about improving students' outcomes and lives. They want to improve their learning, but they also want to improve the adults they become. I have a sense of a community around me that cares about the same things I do. It is a community of like-minded people. I can talk to people about comments made in my class. It is an impressive group of people, and we share classroom ideas, assignments, reading, and our experiences. It is supportive."

Olson said that the project likewise affected him in several ways. "It exposed me to a national network of thoughtful leaders and practitioners," he noted. "It sharpens our practice when it comes to student learning and health and well-being. It also strengthened the set of relationships I have on campus, faculty, my own staff, and administrators. We have shared goals for student well-being that we put

into practice. We all have felt we have a close-knit network, a common reference point."

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Spreading the Word

Word of the Engelhard Project at Georgetown has spread through its web site, reports, and a brochure. Faculty have made presentations at national conferences, and some have participated in BTtoP meetings of other colleges and universities involved in the initiative.

A number of faculty members who teach Engelhard classes have written about their experiences with curriculum infusion. For example, in June 2010, Joan Riley and Edilma Yearwood, another professor in the School of Nursing and Health Studies, published an article entitled "Curriculum Infusion to Promote Nursing Student Well-Being" in the *Journal of Advanced Nursing*. The professors conducted a study of Georgetown nursing students enrolled in Engelhard courses. Among other findings, they reported that "curriculum infusion exploring common college health issues fosters relationships between nursing students and educators and promotes student well-being." They also presented their work at a meeting of the International Society of Psychiatric-Mental Health Nurses at which they argued that curriculum infusion improves nursing students' ability to deliver quality patient care.

In June 2013, John J. DeGioia, the President of Georgetown, attended President Obama's National Conference on Mental Health at the White House to describe the Engelhard Project and Georgetown's focus on health and wellness

Currently, three faculty inquiry groups are examining the following topics: the effects of the Engelhard courses on student learning, the effects of Engelhard courses on student well-being, and specifically the Engelhard Fellows title and how participation influences faculty and their experiences at the university. According to Lewis, the project asked these questions along the way, but now a new structure is in place, and faculty are conducting the research.

Riley observed, "The national agenda has really turned to well-being. I feel like we are ahead of the trend, paying attention to flourishing in new ways." As The Engelhard Project approaches its 10th anniversary, those involved are planning reports and events to celebrate the achievements. Riley said the question for those involved is how to continue the project and stay current in higher education.

"The impact was huge," Bass concluded. "It did for us what one always hopes grants will do. It allowed us to take an idea that may have changed the landscape. I don't know what would have happened to this program if it hadn't been endowed. I don't know if it would have had this traction. Some parts would have continued. But it has been a continuously thriving program for almost ten years."