

*Crafting a Vision for Applied and Integrated  
Liberal Arts and Sciences at UB: Insights from  
a Faculty Community Group*

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UB

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## **Introduction**

In the dawning 21<sup>st</sup> century, universities are confronting a context that places different demands on higher education and under different conditions. Public universities in particular are feeling increasingly squeezed as state legislatures, parents, and the public ask them to graduate more students, more quickly, oftentimes with fewer resources. A new “boomerang” generation of college graduates, burdened by historic levels of debt and mired in an anemic job market, face cyclical downgrading and settle for positions that do not require a degree. At the same time, “disruptive” forces such as MOOCs and for-profit providers hold out the promise of the same services for a fraction of the cost. Little wonder, then, that many analysts claim that the current model of higher education is unsustainable, and anticipate the bursting of the higher education “bubble” in the near future.

As if this scenario were not troubling enough, it is clear that the crisis afflicting higher education is most acute for arts and sciences disciplines. Focused on short-term workforce development and job creation, many state legislatures offer incentives to students to pursue degrees in engineering, business, and other professionally-oriented programs, while some even create disincentives for students pursuing disciplines such as history, philosophy, and literature that don’t enjoy as clear a pathway to gainful employment. The research found in colleges of arts and sciences is often fodder for critics, who deride its practitioners as out of touch and their projects as irrelevant boondoggles. Even general education, the bread and butter of many colleges of arts and sciences, is under threat as cost-conscious legislators promote policies that encourage private companies and other entities to offer lower division courses at a much lower cost. Yet it is also clear that well-to-do students aiming to attend elite colleges and universities will continue to enjoy the benefits of a well-rounded and capacious college education – these many “disruptions” facing higher education threaten to disproportionately affect students who are the first in their

families to attend college, who hail from lower socioeconomic strata, and who come from historically underrepresented communities.

As this visioning series highlighted, the challenges for a future-oriented college of arts and sciences serving a non-traditional student population are clear. A forward-looking college must make a robust, value-added argument for its courses, degrees, and research activities, an argument that addresses these larger social changes and doesn't run from them. Fortunately, our guest speakers affirmed something that we already believed: that the Yale Gordon College of Arts and Sciences (YGCAS), because of its focus on teaching and engagement (in addition to scholarly and creative activities), its wide array of applied and integrated degree programs, its location in an urban setting, and its diverse student population, is better positioned than most to adapt to and thrive in this new environment and to serve as a valuable model across higher education. In what follows, we offer suggestions for ways that the college can use some of our speakers' major insights to build upon our existing strengths and craft an inspiring vision and plan for our future.

### **The Value of Interdisciplinary and Applied Programs and Pedagogy**

University of Baltimore's brand, "Knowledge That Works" and YGCAS's newly adopted mission statement reflect a central, overarching goal for both UB and YGCAS: developing and sustaining interdisciplinary and applied programs and pedagogical practices. YGCAS is prompted to "encourage innovation and discovery...through interdisciplinary and discipline-based programs," and to offer "visionary, integrative learning." This echoes the call by AAC&U (2007) to embrace "integrative and applied learning" as an essential and quintessentially 21<sup>st</sup> century liberal education outcome. The notion of "knowledge for knowledge's sake" has been matched by a compelling charge to put knowledge to work in solving large, unscripted, real-world problems.

An informal analysis of current practices reveals that YGCAS faculty are engaged in a variety of applied and interdisciplinary efforts—learning communities, internships, applied coursework

and program offerings—but these efforts often happen in stand-alone courses, operate in disciplinary siloes, and are often duplicative rather than cumulative. For example, several faculty members at UB have developed relationships with businesses in the Baltimore community in order to facilitate internships, but these burgeoning relationships are rarely shared outside of our divisions, and sometimes fail to be shared in the same division, which represents a loss of opportunity. In addition, faculty are often encouraged to engage in interdisciplinary and applied work and possesses the motivation to do so, but in some cases tend to be rewarded more for discipline-based, individual, and “pure” research and teaching, the latter dominated by content coverage. Without serious consideration of the larger climate for this work, it is difficult for faculty to make and sustain the collaborations necessary to foster connections between and among disciplines. It then becomes even more difficult to involve students, and the larger community, in these efforts.

Several of the speakers alluded to the innovative technique of framing a learning community or seminar in terms of a “great problem” or “wicked problem.” Given that UB has successfully implemented learning communities, one of AAC&U's core high-impact practices, this would build on and extend an existing foundation. Examples of “wicked problems”—problems that are resistant to solution because of their complex and often multi-causal nature—include poverty, environmental degradation, illegal immigration, and pandemics. The value of framing learning communities at the freshmen, sophomore, or even the junior or senior level in terms of these major issues is that it would (1) weave complex, real-world social issues into core undergraduate requirements, (2) offer faculty an opportunity to form their own learning communities based upon how their discipline would tackle the problem, and (3) likely enhance motivation and engagement of our students. Karen Oates of Worcester Polytechnic Institute offered an example of the effectiveness of this technique. In a “great problem” seminar entitled “Cancer,” she essentially taught cellular biology. The students in effect didn't *realize* that she was teaching them cellular

biology because of the strong application of the course, and her approach led to greater student engagement, and likely deeper learning.

Although it may seem as if this approach does not differ substantially from our current educational practices, some of our current learning communities could be more highly integrated and point toward solving a larger, complex problem. Learning goals center around coverage of certain topics, and most faculty feel obligated to ensure that students are exposed to the same topics that they were exposed to as students. Thus, teaching to the discipline and teaching to an integrated, problem-based learning community represent competing motives. As Randy Bass stated, “We have reached the end of the era of the self-contained course as the center of the curriculum.” Moving forward requires that we let go of some of our precious content and our previous formal boundaries in order to achieve the more important learning goals of increasing real-world application, enhancing problem solving, and stimulating deep learning. Bass, referencing John Seely Brown, posits that professors at most colleges and universities spend the bulk of their time educating students about explicit content-based knowledge, but that students learn more deeply and are more marketable to employers when they have built *tacit knowledge*. We must heed the call to teach students how to analyze a problem from multiple perspectives, apply their knowledge in settings where unanticipated and unforeseen challenges arise, and develop and test possible solutions—all transferable skills that will serve them well. In an era where the leading edges of our disciplines can change markedly in a short period of time, it is important that YGCAS focus on core competencies that will help prepare students for a lifetime of work and allow them to adapt to a rapidly changing world.

### **The Role of the College in General Education**

All of the speakers in the series noted the importance of a general education program to YGCAS as well as to the mission of the University. At UB, although general education is jointly

administered with the Provost's Office, the primary responsibilities for general education fall to YGCAS. This includes oversight of the existing program, staffing and scheduling of courses, enrollment projections, and the creation and implementation of policies pertaining to general education.

Several of the speakers' recommendations that relate to the question of general education are in sync with the new outcomes-based general education program at UB. For instance, the need for students to develop greater global and intercultural literacies will be addressed in the Global and Intercultural Knowledge competency area, for which we hope YGCAS will be proposing new courses. Similarly, the idea of a general education curriculum that is integrated throughout the student's career, rather than relegated to the first two years, is reflected in UB's upper-division core and capstones courses, which will operate within the majors but reinforce general education learning goals. Moving forward, YGCAS will play an important role in the development and rigorous implementation of the new program.

We also identified several areas for growth within general education that can be spearheaded by YGCAS. For example, learning communities are currently central to the general education program, and several ideas for reworking the learning communities emerged in our discussions, including

- asking faculty to commit to offering a particular learning community for multiple semesters
- building learning communities into the major and/or upper-division
- designing learning communities around a central idea or "wicked problem"
- using learning communities as a way to talk across disciplines and increase collaborative work within the college

General education courses, within or independent of learning communities, can also be places for community engagement; indeed, this theme emerged in most of our discussions—UB should take greater advantage of its urban location. The general education program can be a place

where courses, learning communities, and co-curricular programs can be developed around community needs, and identifying such needs could be a place for programs and faculty within YGCAS to begin. Closer to home, campus-wide needs and issues also emerged as sites around which general education courses, including a new sophomore seminar, could cluster. Professional development and career exploration for students in the lower and upper division, [as is done at George Mason University](#), may also be worth considering as an element of the general education program. Finally, the move to an outcomes-based general education program means that we can be creative in thinking about how major programs can reinforce and deepen cross-cutting outcomes such as critical thinking.

Some of the challenges facing the continued development and implementation of general education at UB include the ongoing need to demonstrate the value of college and the value of education—beyond just career training—particularly for an institution with highly-visible professional programs. Regarding the issue of online instruction, for instance, we hope that general education courses will not be put online simply for matters of cost and convenience, but rather because the online or hybrid medium is as effective, or more effective, than face-to-face instruction. Finally, the realities of the UB student population pose a distinct set of challenges for general education. The need to remain very transfer-friendly and accommodate students' complicated schedules and the reality that we have many of our students for only part of their academic career can hamper the development of an integrated and meaningful general education program. Nonetheless, YGCAS, through the new general education program, can lead UB in being both innovative and flexible while also drawing on our existing strengths.

### **High-Impact Practices**

In recent years, there has been a renewed focus on student engagement and success in academia centered on high-impact educational practices. The practices are familiar to most campus



leaders: first-year experiences, common intellectual experiences, learning communities, writing-intensive courses, collaborative assignments and projects, undergraduate research, diversity/global learning, service learning, capstone courses and projects, and internships. These practices were highlighted by AAC&U as part of its LEAP initiative (Kuh 2008). As has already been noted, many of these practices (e.g., learning communities, undergraduate research, internship courses, capstone courses/projects and writing-intensive courses) have already been adopted by particular programs and divisions in YGCAS. The speaker series has introduced us to educational leaders who have successfully implemented large-scale programs at their institutions. These examples can prompt us to take stock and assess the practices we have initiated and determine what types of practices to scale up and promote as signature experiences of the College.

One key theme that was reiterated during each of the talks was the importance of staying true to the identity of the University and to the College. As an urban university, we are in the unique position to begin working within the greater Baltimore community on initiatives regarding community-based learning and diversity/global learning. This will not only enhance the academic experience for our students but will also further establish YGCAS within the greater Baltimore area.

The success of the programs described by our symposia speakers was based in the quality of the experiences for the students and continuing assessment by the universities as to their effectiveness. These are ongoing initiatives which continue to be honed and aligned with the learning and career objectives set forth by these initiatives. As YGCAS moves forward with these types of programs, we will need to establish a strong assessment plan for evaluating the impact our chosen practices have on our students. As a starting point for assessment, Kuh (2008) identified key elements that make these practices high impact:

- *Time on Task* – these practices “typically demand that students devote considerable time and effort to purposeful tasks”

- *Sustained Intellectual Engagement* – these practices put students “in circumstances that essentially demand they interact with faculty and peers about substantive matters, typically over extended periods of time”
- *Meaningful Engagement across Differences* – these practices increase “the likelihood that students will experience diversity through contact with people who are different from themselves”
- *New Ways of Thinking* – these practices “challenge students to develop new ways of thinking about and responding immediately to novel circumstances”
- *Frequent Feedback* – these practices offer students “frequent feedback about (their) performance”
- *Application and Transfer of Knowledge* – these practices “provide opportunities for students to see how their learning works in different settings” and “test what they are learning in unfamiliar situations”
- *Integration* – these practices ask students “to integrate [and] synthesize knowledge”
- *Personal Development* – these practices provide opportunities for students to “bring...values and beliefs into awareness [and] develop the ability to take the measure of events and put them into perspective”
- *Social Responsibility* – these practices help students “better understand themselves in relation to others and the larger world and...acquire the intellectual tools and ethical grounding to act with confidence for the betterment of the human condition.”

As a last note, providing high-impact activities for all of our students poses a unique challenge for YGCAS. Our student body is composed of traditional students (entering at their freshman year) as well as a large number of transfer and non-traditional students. Kuh (2008) and others recommend that all students experience *multiple* high-impact practices across their college careers. This may require that we initiate a program for the transfer/non-traditional students

which helps to transition them into the community in much the same way many first-year experiential programs do. Subsequent activities, such as internships, capstone courses/projects, or community initiatives, can be more closely aligned with a student's individual course of study. In all cases, a conscious effort needs to be made to address the needs of our unique student body.

### **Real World Issues Demand Multi-Disciplinary Research, Analysis and Problem-Solving**

YGCAS is unique in Maryland as one of very few Colleges of Arts and Sciences to exist in a truly urban setting. An urban setting brings excitement, opportunity, and experiences unmatched in a typical "college town." At the same time, the metropolis contains many people whose voices are not often heard: the impoverished, the disenfranchised, and the young. These opportunities and challenges can be leveraged into real-world, interdisciplinary problem-solving experiences for our students focused on strengthening our Baltimore communities. Based on what many of our speakers discussed, a combination of applied research experiences, problem-solving projects, and real-world engagement focused on the community and supported by a sound liberal arts curriculum would be exceptionally beneficial to our students.

Speakers throughout the visioning process discussed in detail the idea of involving students in the community and involving the community in student projects. They noted how such work captures and fosters student excitement about the material, promotes learning (and retention of learning), trains students in critical problem-solving skills, and builds good will between academic institutions and the communities in which they exist.

- Karen Oates from Worcester Polytechnic Institute presented an excellent example of this: in the "Great Problem" seminar, first-year students come together to understand a current significant issue that crosses disciplines. Food sustainability, for example, draws from biology, chemistry, and political science.
- In a local context, Ray Allen highlighted how MICA has developed numerous community-

engagement projects (such as the “real food farm truck”) that bring different disciplines together on a project meeting a community-identified need.

- Richard Guarasci from Wagner College presented a sequence of community-engaged learning opportunities with longstanding community partners. First-year students have something analogous to UB’s learning communities, joining two disciplines and requiring a one-credit, writing-intensive reflective tutorial seminar. In the second or third year, there is a similar intermediate learning community that culminates in a project. The fourth year involves a summative and reflective course with a 100-hour experiential component, again with longstanding community partners.

These interdisciplinary projects can happen at different points in the YGCAS curriculum. A “great problem” seminar could build on the kinds of collaboration already happening through the first-year learning communities in YGCAS. A community-engaged project like those done at MICA or Wagner College could be a capstone, complementing UB’s overall mission of engaging with and improving our Baltimore communities. It also lets potential employers know that our students can not only problem solve, but also apply that skill to real-world problems as part of a team.

Building on this idea of scaffolding real-world learning experiences throughout the curriculum, numerous speakers discussed the merits of having students develop portfolios of their work as they advance through the curriculum, so they are able to document their learning and show prospective employers what they are capable of upon graduation. Portfolios should include major pieces of a student’s academic career including research papers, class projects, real-world problem-solving projects, and capstone course artifacts, as well as pieces that demonstrate critical reflection and integration of learning.

YGCAS could encourage all courses to make use of portfolios as reflection tools, academic advancement criteria, and personal and professional showcases for students. We could tie stages of advancement to the portfolio by making the portfolio review a requirement for senior seminars. To

help students make choices over time about what they want to have in their portfolios, YGCAS could create a short 1-credit course on portfolio development at the 100 and 300 level for all students, or include this in the sophomore seminar and capstone course or in career development courses. Students could present their portfolios for review at different points in time. Reviewers could include peers, advisors, faculty in their home departments, faculty in other departments, and community and workforce/industry leaders.

### Conclusion

The YGCAS mission statement articulates the College's commitment to students: we aim for our graduates "to be reflective, skilled communicators, adept at addressing contemporary problems within an ethical framework and able to adapt to a changing world." To accomplish these goals with all students, YGCAS should zero in on a set of signature practices that align with the College's mission, programs, faculty interests, and urban setting. The speakers offered a roadmap for this work – well-designed, high-impact educational practices where students work with faculty and peers to tackle significant issues in and across disciplines. Careful attention needs to be paid to the quality of the practices, how many students participate in them, when they participate, and how well they develop critical skills and capacities. Equally careful attention needs to be paid to examining existing administrative structures and policies and aligning these structures and policies with the changes we seek in our programs, and ultimately, our students.

Kuh, G.D. 2008. *High-Impact Educational Practices: What They Are, Who Has Access to Them, and Why They Matter*. Washington, DC: AAC&U.

The National Council for Liberal Education and America's Promise. 2007. *College Learning for the New Global Century*. Washington, DC: AAC&U.