GENERAL EDUCATION PLANNING AND OVERSIGHT TASK FORCE
October 2014 Progress Report to the University Faculty Senate (Informational)
READING GUIDE

In this two-part informational report, Part A presents research and data compiled over the last 18 months, as context and background for the Task Force's current thinking about changes to Penn State's General Education program. Part B focuses on options for change, including multiple curriculum prototypes and additional questions to consider. Below is an abbreviated guide to the report, with page numbers indicating where key elements appear.

Page (starting page of the relevant section)

3 Background This section and the subsequent sections in Part A summarize national and Penn State research and data on General Education. This context has informed the Task Force's present thinking about the concepts described in Part B of the report.

6, 53 Learning Objectives The Task Force is considering a set of seven measurable learning objectives for General Education, based on national best practices, as defined beginning on page 6. Adopting such objectives, which are open for comment, would enable us to evaluate our Gen Ed curriculum in a way consistent with national practices, and to make ongoing, data-driven adjustments (see page 53, and p. 91 for a sample rubric for one of the objectives, Integrative Learning, with a link to others).

31, Appendix J Curriculum Prototypes Three possible models for the General Education curriculum are proposed to facilitate conversation. Faculty are encouraged to consider the strengths and potential tradeoffs of each model (pp. 34-39). All of them show how we might structure Gen Ed in relation to the learning objectives. All include components such as skills, a distribution across knowledge domains, and interdisciplinary integration or course clusters, though they reflect different emphases. No single one of these prototypes is being proposed as the final model for Penn State; rather, these are to allow us to consider pros and cons. The Task Force is seeking input on these prototypes, with the objective of creating a hybrid, modified, or new model that maximizes the strengths that faculty emphasize while minimizing the tradeoffs. For context, our current Gen Ed requirements appear on p. 63.

51 Faculty Support Excellence in any General Education curriculum is dependent on the faculty and other instructors who teach it. The Task Force is considering means to provide faculty with structures and resources to better support and reward their commitment to General Education. Among these ideas is a General Education Institute.

54 Additional Questions The Task Force is discussing ten or more additional topics that will impact General Education regardless of the particular curriculum model. These topics include, for example, first-year experience, academic rigor, and questions about writing, quantitative skills, and physical activity courses. We invite input on these topics and suggestions for further topics or concerns that should be addressed.

GENERAL EDUCATION PLANNING AND OVERSIGHT TASK FORCE

A Progress Report to the University Faculty Senate

(Informational)

Table of Contents

EXECUTIVE SUMMARY

This report, presented in two parts, A) outlines the past year of work completed by the General Education Planning and Oversight Task Force (Gen Ed Task Force) regarding their charge to revisit and revise General Education, and B) describes the plan for engaging the University community in deliberative conversation about three prototype curricula, each of which is designed to meet the learning objectives presented in this report. **Importantly, none of the prototypes presented here represent proposals; rather, they are frameworks for deliberating opportunities and challenges.**

The Gen Ed Task Force was jointly charged by the Senate Chair and Provost to examine and propose revision to Penn State's General Education program. Since March 2013, the Gen Ed Task Force has researched advancements in General Education scholarship, benchmarked changes in General Education at other institutions, examined the strengths and weaknesses in our current system of General Education, developed an array of contemporary and assessable learning objectives, and solicited feedback from students, faculty, and other stakeholders. The first year of Task Force work culminated in a retreat during May 2014, which affirmed the primary focus on student learning and resulted in an agreement to develop and examine multiple curricular options. Details of these processes and their results are presented in Part A of this report.

Part B describes three prototype curricula, which are examples of how a General Education curriculum could be structured to meet the learning goals described in Part A. These prototypes were developed in response to the May retreat and refined following another retreat in August. Part B of this report also outlines the public deliberation process that will help inform the development of a curriculum that balances ideals with realities. Feedback from this deliberative process will inform the further actions and proposals of the Task Force.

Overall, the past year of work has helped clarify the opportunities we have to better align the way we structure student learning opportunities in General Education to contemporary research on pedagogy and national trends. While the strengths of our current General Education courses are significant, the opportunity exists for innovation that would strengthen student learning, provide us the evidence to demonstrate student growth, and provide stronger support and recognition of those who teach General Education courses. Evidence for gaps in our present General Education program, and ideas for how to best fill them, are based on the growing body of literature on General Education; national trends in higher education; and feedback from students, faculty, and stakeholders. In particular, several national studies suggest that General Education should be updated to become increasingly learning centered, guided by learning objectives, and structured to facilitate students' awareness of and ability to connect across multiple disciplinary perspectives. These opportunities for improvement exist, not because our current program is inherently flawed, but because it was not designed to accomplish objectives that have emerged as critical to higher education during the past 15 years and because it has not had the resource or infrastructure support to achieve some of the aims that it earlier identified.

To build a General Education structure that ensures the institution is providing all students—regardless of their majors or natural inclinations—learning opportunities that meet criteria consistent with the growing body of General Education scholarship, we must rethink the way our current program is structured. These characteristics challenge us to consider a curriculum that is more transparent in intent to students and is guided by clearly articulated and, wherever possible, measurable learning objectives.

Seven broad learning objectives have been selected for consideration by the Gen Ed Task Force: (1) Literacy, (2) Communication, (3) Global and Intercultural Competence, (4) Social Responsibility and Ethical Reasoning, (5) Integrative Thinking, (6) Critical and Analytic Thinking, and (7) Creative Thinking. [See Appendix A.] Collectively, these seven objectives reflect the values, abilities, skills and knowledge that every Penn State student should have the opportunity to develop through a General Education curriculum.

Along with the growing body of literature on General Education, there is a growing repertoire of assessment tools that can be used to assess learning objectives, in both formative and summative ways. While being able to demonstrate to students and other stakeholders the learning that students accomplish, there are other benefits to explicit and measured outcomes. Explicit learning objectives for General Education can make clear to students the point of this component of their degrees. This may help them to commit more fully to the excitement and challenges of engaging with new fields of inquiry, exercising their curiosity in new ways, expanding their worldviews in time and place, encountering multiple value systems, and thinking deeply about complex ideas that can appear to be disconnected from their immediate academic and career plans.

A major point from the past year of investigation is the need to better support, recognize, and reward faculty who teach in General Education. Part B of this report details the needs for faculty support identified by the Task Force, and elaborates a plan to propose structured and sustained support for faculty.

The Task Force's guiding priority is to envision a curriculum that will foster student learning while recognizing the complexity of Penn State and the movement of our students into and through the University. The public deliberation process and continuing Gen Ed Task Force research will include rigorous analysis of potential impacts of any General Education curriculum on articulation agreements, the ability for students to explore interests, discover majors, change majors, shift campuses, use transfer credits, and make timely degree progress. Analysis of these impacts will be a major focus of the fall semester's research, consultation, and deliberation.

Part A: National Research on General Education and the Penn State Context

I. Context for Penn State's Examination of General Education:

Part A of this report outlines the past year of work completed by the General Education Planning and Oversight Task Force regarding the charge to revisit and revise General Education. This work included: researching advancements in General Education scholarship, benchmarking changes in General Education at other institutions, developing an array of contemporary and assessable learning objectives, examining the strengths and weaknesses in our current system of General Education, and summarizing the feedback received from students, faculty, and other stakeholders. All of these tasks culminate in the exploration of opportunities and challenges to making changes to our current system. A companion report, Part B, outlines the plan for engaging the University community in deliberative conversation about the relative strengths and challenges of new curricular models, each of which is designed to meet the learning objectives presented in this report.

The revision of Penn State's long-standing General Education program presents an opportunity to enhance the educational experience of students and increase Penn State graduates' ability to meet the varied and complex challenges they will encounter. The University and the world around us have changed dramatically since Penn State's last major consideration of General Education, in 1997, as have the ways faculty approach teaching. As a starting point*, the way that information is conveyed has changed dramatically in the past two decades. The students we are educating and the world in which they will participate after they graduate demand that we, at the very least, seriously review our General Education program to see that it is providing what our definition says it should be providing in 2014.* Just as faculty regularly alter their course content, pedagogies, and assessments, the structure that frames those individual courses also needs to flex over time. We therefore have the opportunity to respond to these changes, while preserving strengths of our existing program, by creating an updated and distinctive academic experience for all students through General Education.

It is clear that there are many examples of excellence at Penn State, some of which exist within our current General Education program. The Gen Ed Task Force is investigating how we could systematically and sustainably provide these excellent opportunities to all Penn State students through the General Education program, an element of every Penn State undergraduate degree. To have a robust and common experience for all Penn State students, regardless of major, college, or campus, aligns with the emerging themes and directions of the University Strategic Plan[1] which calls for strategies to transform undergraduate education. Providing high quality education responsive to changes in the world is central to meeting President Barron's stated priorities (Excellence; Access and Affordability; Student Engagement; Diversity and Demographics; Student Career Success and Economic Development; and Technology).

[1] "University-Level Strategic Planning: Emerging Themes and Directions" Quality Advocates Session, Provost Nicholas Jones March 21, 2014
http://www.psu.edu/president/pia/advocates/2014/03/

The past year of work has been guided by assurances from University leadership that student learning is our guiding principle.

> "We need to give our students the best possible learning experience and in a way that would be distinctive and attractive at Penn State. Quality and excellence is and will always be a primary driver." (Provost Nick Jones)[2]

The Charge: Revisiting General Education at Penn State

On March 28, 2013, then Senate-Chair Yarnal and then-Interim Provost Pangborn charged the General Education Planning and Oversight Task Force, which they had jointly appointed with:

- Developing the process for revisiting and revising General Education
- Creating and managing a timeline with milestones for developing and implementing the process
- Determining subcommittees to be charged with addressing various components of the process
- Identifying the many stakeholders in General Education and insuring their consultation
- Providing ongoing oversight of the process, including oversight of the subcommittees

General Education has long been recognized as a critical component of Penn State's mission of research, teaching, and service. Its central role in shaping the lives of our undergraduates was reiterated in the 2009-10 University Strategic Plan, which called for a comprehensive review and re-evaluation of the goals and requirements of General Education at Penn State. At a national level, higher education faces the pressures of increasing tuition and decreasing public funding, and the potential for transformation by newly emerging technologies. Responding to these challenges as opportunities, we seek to make substantive changes to our undergraduate curricula that will elevate the academic quality of a Penn State education. With the national call for accountability and affordability in higher education, and the need to ensure that credit hours and tuition dollars fulfill the promised goals of an undergraduate degree, we must ensure not only that our requirements are worthy of the significant place they occupy in the curriculum, but also that they also prepare our graduates to thrive in increasingly competitive global contexts. We envision a distinctive Penn State General Education curriculum that embraces intellectual inquiry, diversity, and excellence. As we draft a proposal for the Faculty Senate's consideration, we seek robust constructive engagement with Senators and other stakeholders.

The purpose of General Education, broadly, is to provide students with a breadth of academic experiences that prepare them for life beyond the University. The University

[2] Email communication August 23, 2014 to Gen Ed Task Force Co-Chairs

Faculty Senate defined General Education in 1985 (and revised it in 1997[3]) as encompassing:[4]

> *"…the breadth of knowledge involving the major intellectual and aesthetic skills and achievements of humanity. This must include understanding and appreciation of the pluralistic nature of knowledge epitomized by the natural sciences, quantitative skills, social-behavioral sciences, humanities and arts. To achieve and share such an understanding and appreciation, skills in self-expression, quantitative analysis, information literacy, and collaborative interaction are necessary. General Education aids students in developing intellectual curiosity, strengthened ability to think, and a deeper sense of aesthetic appreciation. General Education, in essence, aims to cultivate a knowledgeable, informed, literate human being."*

Much of this definition holds as true in 2014 as it did in 1985 and in 1997. In addition, however, our current rethinking of General Education takes into account pedagogical, technological, scientific, social and economic changes; indeed change has occurred across every discipline and in every aspect of society over the past two decades since the design of our current General Education system. Further, General Education scholarship has developed as a field just as individual disciplinary fields have evolved. Pedagogical studies[5] in relation to higher education have grown dramatically as well in the past two decades, and this growth impacts significantly the field of General Education. Several national scale studies show that in many institutions, General Education programs are being updated to become increasingly:[6]

- Learning centered, as opposed to teaching centered[7]
- Guided in their curriculum by Learning Objectives (see Section II)
- Structured to facilitate students' awareness of and ability to connect across multiple disciplinary perspectives

---

[3] December 2, 1997 Faculty Senate Report Informational report/legislative reports for prior General Education revision http://senate.psu.edu/record/record120297.html
[4] Appendix A.1 General Education (Baccalaureate Degrees) http://www.psu.edu/ufs/policies/appx-a1.html of the University Senate policies
[5] For example: (a) D. Bok *Our Underachieving Colleges: A Candid Look at How Much Students Learn and Why They Should Be Learning More* (2008) Princeton University Press. (b) *LEAP (National Leadership Council for Liberal Education and America's Promise)* (2007) College Learning for the New Global Century. Washington, D.C.: American Association of Colleges & Universities (c) G. E. Miller *The Meaning of General Education: The Emergence of a Curriculum Paradigm* (1988) NY: Teachers College Press.
[6] Gaston, P. L.; Clark, J. E.; Ferren, A. S.; Maki, P.; Rhodes, T. L.; Schilling, K. M.; Smith, D. *General Education & Liberal Learning: Principles of Effective Practice 2010 AAC&U*
[7] A. E. Guskin "Restructuring to Enhance Student Learning (and Reduce Costs)." *Liberal Education* 1997, 83 (2), 10-19.

While there are examples of Penn State courses that meet these objectives, and examples of students who have achieved integrative thinking spanning disciplinary areas, these accomplishments are largely dependent on individual initiative. To build a structure that ensures the institution is providing *all* students learning opportunities that meet these innovative criteria, we must rethink the way that our current program is structured. These characteristics challenge us to rebuild a curriculum that is more transparent in intent to students, guided by clearly articulated and, wherever possible, measurable learning objectives. But even as our focus needs to shift away from General Education courses to General Education curriculum, we need also to remember that many of our most successful existing General Education courses may very well remain central and important components of a revised General Education curriculum. At the same time, we are committed to providing students with opportunities for breadth in their learning by exposure to seven epistemologically different domains.

A survey conducted in late 2008 by Hart Research Associates for the Association of American Colleges and Universities addressed the importance of coherence and learning objectives in developing General Education curricula.[8] This online survey of 433 Chief Academic Officers or their designated representatives at AAC&U member institutions both (a) measured the prevalence of specified learning objectives in higher education institutions at the time; and (b) documented recent trends in curricular change, specifically in the areas of general education and assessment. The report *Trends and Emerging Practices in Higher Education* found that, while the majority of institutions employ a distribution (or menu) model of General Education, only 15% employ this modality alone. Common intellectual experiences, thematic courses, upper-level requirements, core curricula and/or learning communities are often incorporated, as well.

Little systematic data exists that support increased learning or educational gains based on one model of General Education as opposed to another. For example, no institution has conducted a Pre-test/Post-test Control Group experimental study of General Education designed to compare, for example, a distributed model to an integrated model, or to run other controlled experiments to evaluate objectives. Even without such a systematic study, however, the fields of learning assessment and General Education have developed significantly since 1996 as previously described. We need to draw upon those developments to provide our students with an education updated to prepare them as best as we can for the world into which they will graduate.

II. General Education Curriculum Based on Learning Objectives

A focus of our General Education revision should be to create a curriculum based on learning objectives. Learning objectives are an essential component of any curriculum. They are written by faculty members to indicate intended objectives and to specify what learners should know or be able to do as a result of the educational experience. These

[8] "Learning and Assessment: Trends in Undergraduate Education; A Survey Among Members of the Association of American Colleges and Universities" 2009 survey conducted by Hart Research Associates (http://www.aacu.org/about/membersurvey)

objectives inform educational decision-making as instructors consider ways to help students achieve the objectives to demonstrate their mastery of these important learning elements. Learners who are aware of the objectives can use this understanding to guide their learning efforts. In the upcoming discussion and sample curriculum prototypes presented in this report, learning objectives are stated as a set of broad skills and abilities that a learner can apply. Each broad objective comprises significant specific components, and each component can be further determined by a set of objectives that identify its specific and measureable goals. Though these individual objectives are important, the focus of this section is on the broad learning objectives for General Education.

Seven broad learning objectives have been selected for consideration by the Gen Ed Task Force: **(1) Literacy, (2) Communication, (3) Global and Intercultural Competence, (4) Social Responsibility and Ethical Reasoning, (5) Integrative Thinking, (6) Critical and Analytic Thinking, and (7) Creative Thinking**. [See Appendix A for key components and definitions of these objectives.] Collectively, these seven objectives reflect the values, abilities, skills and knowledge that, if approved, the faculty as a whole would be committed to ensuring every Penn State student has the opportunity to develop. The statement of these objectives was developed primarily by the Assessment subcommittee of the Gen Ed Task Force, and has been discussed broadly among Task Force membership. Although the Gen Ed Task Force approved of these objectives,[9] the precise specification of these is understood as a working document, and input is very much invited. The following sections explain the processes used to arrive at the seven objectives. A vision for the role of these objectives in the General Education curriculum is described in Part B of this Senate Informational report.

Identifying Objectives for the General Education Curriculum

Deliberation over potential objectives for a revised General Education curriculum began with an examination of objectives within our current system of General Education. This examination revealed for key points that have focused the work of the General Education Task Force. First, the current definition of General Education is not framed in the context of learning objectives, which makes a broad assessment of student mastery of these important goals unfeasible. Some courses may use and regularly assess them, while others do not, and beyond the level of individual courses, there is no focus on assessing students' achievements of learning objectives in General Education as a whole. Second, the many domain-specific objectives currently presented for each skill and knowledge domain are focused on goals of the course and not on student mastery at the program level. Third, these goals include elements that are written in ways that are not feasible to measure. For example, terms such as "appreciate" and "develop consideration" do not easily lead to documentation of student mastery. Finally, the curriculum itself is not structured in ways that provide clear mandates or opportunities for all students to accomplish the skill and domain objectives such as those mentioned above,[10] because given the extent of student

[9] Gen Ed Task Force Meeting May 1, 2014.
[10] (See Appendix B or http://senate.psu.edu/curriculum_resources/guide/sec1.html#GeneralEducation)

choice – itself an important positive element –there is no mechanism to ensure that all students complete courses that address even a clear subset of these learning objectives.

In light of the above analysis of the current General Education program, the Assessment subcommittee has investigated possible learning objectives that could more clearly guide a revised General Education curriculum. This investigation included curricular comparisons with peer institutions,[11] reports from key national organizations dedicated to the furtherance of General Education (see Bibliography), surveys of Penn State employers and alumni (see Section VIII), and robust discussions of best practices in higher education. These activities led to a tentative proposal of seven objectives (Literacy; Communication; Global and Intercultural Competence; Social Responsibility and Ethical Reasoning; Integrative Thinking; Critical and Analytic Thinking; and Creative Thinking), each expressed through a suite of specific learning objectives. This proposal was the subject of small group discussions during the May 2014 Gen Ed Task Force retreat. Each small group focused on a subset of the objectives and discussions centered around questions of the appropriateness of individual elements and which, if any, components and objectives should be eliminated or added. Although the six areas of competencies were generally supported during retreat discussions, feedback resulted in revisions to several of the specific components and objectives specified under many of the learning objectives.

Work on the proposed learning objectives continued throughout summer 2014. In June 2014, Penn State sent a team to the General Education and Assessment Institute held by the American Association of Colleges and Universities (AAC&U). This team comprised experienced members of the Assessment Subcommittee and the Gen Ed Task Force (A. Christensen, T. Furman, B. Harper, J. Schulenberg, and P. Van Meter). The institute afforded an opportunity to get feedback on the proposed learning objectives from national experts and generate plans for how these could be assessed in the context of General Education. During the institute, the team was encouraged to examine how our proposed objectives align with the outcomes of a project called Liberal Education and America's Promise (LEAP),[12] that have been identified by AAC&U as essential to prepare students for the 21st century. One advantage of this alignment is that our proposed objectives can be associated with mastery rubrics developed by the AAC&U. Each of these rubrics was developed through an iterative and collaborative process that engaged educators, content experts, and assessment experts from across the nation. These rubrics provide metrics that have been established nationally as valid and reliable (see Appendix C). At the General Education and Assessment Institute, the Penn State team also developed ideas about how these objectives can be integrated meaningfully into a revised General Education curriculum in order to inform assessment. These ideas are described in Part B of this Senate Informational Report.

In July 2014, the Gen Ed Task Force welcomed Dr. Patricia Alexander, an international expert on student learning and development. During her visit, Dr. Alexander met with

[11] Peer institutions included University of Maryland; Michigan State University; Brigham Young University; University of California Santa Clara; Columbia University; Ohio University; SUNY Buffalo; University of Kansas

[12] Liberal Education & America's Promise (LEAP) http://www.aacu.org/leap

members of the Task Force and Senate Council to discuss the meanings of the proposed learning objectives, instructional activities that would support accomplishment of the objectives, and possible mechanisms of assessment. The Assessment subcommittee also met with Dr. Alexander to discuss the learning objectives in more detail and to elicit feedback on assessment mechanisms. Based on this discussion, the objectives were revised to split critical and analytic thinking and integrative thinking into two separate objectives, for the total of seven identified above.

Ongoing conversations include discussion of a proposal by the Joint Diversity Awareness Task Force to include the criterion "Power and Privilege" ("understanding of the nature of power, privilege, and discrimination in the United States and abroad at the societal, institutional, and individual levels") among those necessary for a course to receive US/IL designation. [13] Members of the Assessment Subcommittee have recently proposed to make this criterion one of the learning objectives, which will be explored more fully with the Task Force in the months ahead.

III. Benchmarking

In their October, 2012 Senate forensic report, a General Education study group provided some initial benchmarking data,[14] including information gathered during a General Education Colloquium (December 2011). Looking across the national landscape, "a majority of institutions continue to implement General Education as a nearly unlimited menu of course choices" for part of all of their in their curricula. Other curricular structures that are used, with far less frequency, include open curricula (with unlimited choice); completely prescribed curricula; and core curricula in which students enroll in common first year courses and then continue in the menu system. The detailed bibliography in this report provides a wealth of references on the scholarship of General Education.

As part of a Spring 2014 independent study project, a team of Smeal students conducted some initial benchmarking to understand the size and structure of General Education programs at Penn State versus peer institutions. In their study, they found among Big 10 institutions, Penn State requires the third highest number of credits in General Education, behind only Purdue and Minnesota (Figure 1). Penn State is the only university to require credits in health and physical activity, and requires a larger number of credits distributed among the knowledge domains than the peer institutions that were examined. These data informed the Task Force discussion on the number of credits of the Penn State General Education program, but so far it appears that the opportunities afforded with a 45 credit curriculum outweigh potential benefits of reducing its size. Moreover, the Task Force has maintained the importance of student exposure to learning in all currently defined knowledge and skill domains.

---

[13] Joint Diversity Awareness Task Force Progress Report, April 2014

[14] Forensic Session October 2012. Report Based on an Invitation from the President, Provost and the Chair of the University Faculty Senate to Examine General Education http://senate.psu.edu/gen_ed/genedrpt-aug2012.pdf

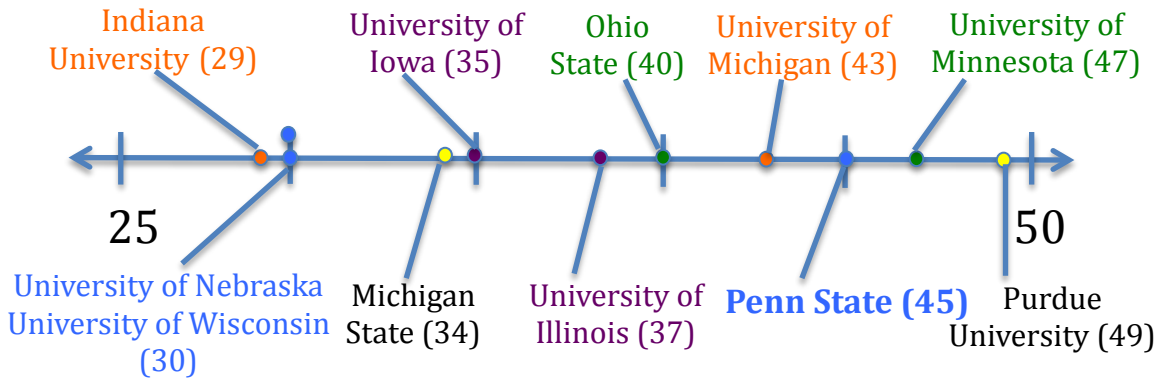

Figure 1: Credits required in General Education at benchmarked Big 10 institutions

During the last ten months, the Themes and Explorations subcommittee of the Gen Ed Task Force also conducted a benchmarking activity early in their process to discuss the potential role of a "themes" focused General Education program. This subcommittee searched for institutions that described their General Education program as including themes and, while it was not an exhaustive survey, their benchmarking did identify a range of institutions of varying sizes and missions. These institutions and some of their major characteristics are presented in Appendix D. While some institutions had elements that warrant further discussion, the search revealed that very few institutions of the size and complexity of Penn State have attempted a theme-based approach to General Education and, of those universities that have adopted themes, very few have structures that would ensure integrative thinking, multiple perspectives on a common issue, or any scaffolding[15] or progression through the curriculum. The program at Portland State University comes closest to the way that some committee members originally conceived thematic clusters as working, and Portland State was the only institution to have a readily available assessment plan. Appalachian State was the only institution that appeared to mandate that faculty teaching within a theme had to work together to demonstrate how integration between courses would occur. After this benchmarking, the Themes and Explorations subcommittee did not recommend pursuing the model either of Portland State or Appalachian State. However, it expressed interest in the concept of a limited number of credits devoted to a theme, along with credits reserved for exploration. More recently, the subcommittee noted the model of individual courses that integrate the perspectives of multiple disciplines or domains, as implemented at the University of Maryland and proposed by some Commonwealth faculty on the subcommittee.

[15] Scaffolding refers to a variety of instructional techniques used to move students progressively toward stronger understanding and, ultimately, greater independence in the learning process.

IV. Strengths and Weaknesses of the Current General Education Program

Conversations about revision to the General Education program at Penn State regularly gravitate toward the questions, "what evidence do we have to suggest change is needed (what's broken about our current program)?" and "what evidence do we have to suggest the changes proposed will be any better than what we currently have?" An October 2012 Senate report[9] and an Informational Report from October 2013[16] outlined several general critiques of our current General Education program (suggesting the need for change) and offered summaries of ways forward that are consistent with national best practice (evidence that certain changes have promise for improvement). Positive characteristics of our current program have been made clear. Indeed, there are many strong aspects to our current General Education program, which a plan for revision can aim to retain, but there is room for updating and improvement even if nothing is actually "broken." We seek ways to respond to the challenge of preserving the best aspects of our current program while drawing on national scholarship to meet the intellectual and practical needs of today's students, which differ in some ways from those of previous generations, and in taking best advantage of new opportunities. Any proposed changes are based on the growing body of literature on General Education and pedagogy (examples of which are in the bibliography for this report), as well as the wealth of expertise on our campuses.

In this section we provide a summary of the interrelated strengths and weaknesses of Penn State's current General Education program. Program strengths often come with tradeoffs in other areas that present weaknesses. Current political, economic, social, and ideological opportunities and threats also inform the current discussion on revision of General Education at Penn State.

Strengths

The most commonly noted strength of the current General Education program is in the *flexibility* it provides to students and programs. This flexibility relates to course offerings and selection, the ease of change of campus or college or major (including the discovery of majors), credit transfer from other institutions or credit acquisition by means such as Advanced Placement and CLEP, course substitutions, and the timing of course completion.

General Education requirements encompass a broad list of skill and knowledge domains, allowing students (depending on offerings at their campus of enrollment, or online) an extensive array of choices, and permitting departments and faculty a range of opportunities to offer courses that speak to faculty interests and encourage faculty to bring their research and creative activities into the classroom. In the ideal, this allows students the opportunity to develop an intellectually exploratory and cohesive core of General Education courses. Particular substitution rules (3-6-9, world language, and upper-level substitutions) further

[16] Faculty Senate Informational Report October 2013 "A Progress Report to the University Faculty Senate" General Education Planning and Oversight Task Force. http://senate.psu.edu/agenda/2013-2014/oct2013/appc.pdf

facilitate this opportunity. Flexibility in our current General Education program provides students with freedom to explore. However, many students do not take advantage of the wide array of choices; instead a large proportion of students enroll in a small number of courses to fulfill their General Education requirements: for example, COMM 150 and INART 115 (GA); HIST 020 and RL ST 001 (GH); NUTR 251 and KINES 017 (GHA); CHEM 110 and ASTRO 001 (GN); STAT 200 and MATH 21 (GQ); PSYCH 100 and SOC 001 (GS).[17]

Students can easily move from campus to campus within Penn State. In particular, the 45-credit General Education requirement currently facilitates the 2 + 2 system for many students by allowing degree progress through General Education even if major courses are not provided at a campus. Recommended Academic Plans for students beginning at campuses for degrees requiring completion at University Park reflect the completion of General Education during the first two years.[18] The 45-credit package with distributions across knowledge domains also facilitates the movement of students among majors and colleges. University-wide, some 45% percent[19] of Penn State students graduate from a college different from their initial enrollment. Because General Education credits are largely portable (especially when students move from highly prescribed majors to those that allow more flexibility, or when students have worked with academic advisers to plan for multiple options from the start), Penn State maintains a competitive six-year graduation rate.

This flexibility also helps to make Penn State attractive to incoming or transfer students because it facilitates the acquisition of credit for students who took college courses in high school or at other institutions prior to enrolling at Penn State. Each year, new first-year students transfer approximately 57,000 credits from Advanced Placement (AP) tests (making up 22% of all previously earned credit). The College Board Report in June 2014 shows that for the students beginning classes in summer or fall 2014, 2504 students (out of 4069 students from the incoming class who submitted scores) received AP credit. For these students, the most prevalent credits earned were for English Literature and Composition (ENGL 001 (GH)), followed by Calculus AB (MATH 140 (GQ)); U.S. Government and Politics (PL SC 001 (GS)); Statistics (STAT 100 or STAT 200 (GQ)); and Psychology (PSYCH 100 (GS)). This flexibility also facilitates transfer and adult learners with prior experience in gaining a Penn State degree. Each year, about 162,000 previously earned credits are transferred by advanced standing students as they transition to Penn State; this number can be anticipated to increase as World Campus grows.[20]

---

[17] Each of these enrolled between 1300 and 7000 students during the Fall 2011 – Spring 2012 time period. Data from the December 2012 report on Student Enrollment Patterns in General Education were used for this analysis.
[18] For example, see Earth and Mineral Sciences and Health and Human Development RAPs http://dus.psu.edu/students/sem_plans.html
[19] "Graduation Pathway for 2003 First-Time Full Time Baccalaureate-seeking Cohort" Office of Planning and Institutional Assessment, January 2011
[20] Prior Learning Assessment Task Force Report, October 11, 2013

The current flexibility of our General Education requirements also enables students to take courses at another institution while enrolled at Penn State, because many of our courses are available elsewhere as well (our requirements do not tend to be highly specialized or idiosyncratic). Each year, about 35,000 credits (14% of transferred credits) are completed by currently enrolled Penn State students at other institutions. This provides students the opportunity to take courses at another institution, which may facilitate students to achieve on-time graduation by taking courses that are often difficult to schedule at Penn State (CAS 100 and STAT 200, for example), or include study abroad (or "study away," which is not necessarily beyond the U.S.), or to take courses that students are concerned might adversely affect their CGPA if taken at Penn State. For all students transferring credit from other institutions, only 13% of those credits come in as direct equivalent, with the remainder often being processed as substitutions. Data on where these substitutions are counted on degree audits has not been systematically maintained, but the new Course Substitution Request System data suggest that about 40% of transferred credits are substituted in General Education. Although all students must take 60 Penn State credits to receive a Penn State degree, it is possible for upper-class transfer students to take all of those required 60 credits in their major, minor, or other degree components other than General Education.

Further, while some General Education sections are restricted to first-year (or first- and-second year) students, in most cases students are able to take General Education courses at any point in their academic careers, allowing students flexibility in how they structure each semester, and allowing departments flexibility in course offerings. Some students appreciate the opportunity to take a General Education course in their junior or senior year, rather than having a full load of courses in their major field(s) at that point.

Weaknesses

We used the term "weaknesses" in the terminology of the conventional SWOT analysis (Strengths, Weaknesses, Opportunities, Threats), but aspects about to be noted could equally well be regarded as "missed opportunities": aspects in which we could do better. Missed opportunities or areas of weakness exist, not because our current program is inherently flawed, but because it was not designed to accomplish objectives that have emerged as critical to higher education during the past 15 years, or because it has not had the resource or infrastructure support to achieve the aims that it earlier identified.

Our current General Education program is offered predominately at the entry level of the curriculum, meaning a very high percentage of enrollments are at the introductory level; only 48 of the 1254 General Education courses listed in the bulletin[21] are at the 300-level or higher. This is, of course, partly because our current General Education structure discourages the inclusion of courses with prerequisites and therefore discourages inclusion of 400-level courses (though they can be included as substitutions). This emphasis on introductory courses, as evidenced in student feedback summarized below, may imply to

[21] Undergraduate Degree Programs Bulletin
http://bulletins.psu.edu/undergrad/generaleducation/generalEd1

students that General Education courses are not as intellectually demanding as courses in a major and are unconnected to their overall learning. As noted in the March Forensic Report[22]

> "Analysis of the most frequently enrolled courses in each domain (Informational Report from Senate Committee on Undergraduate Education in December 2012) indicates no conceptual, topical, or curricular links among the courses that are completed by the vast majority of Penn State Students at any campus. The General Education requirements thus fail to capitalize on the intellectual potential of our students in two important arenas: (1) integrating knowledge and skills across multiple domains and (2) rising to developmentally appropriate intellectual levels."

Further, skill sets not currently emphasized by the General Education program have recently emerged as critical to employers, alumni, parents, and students (see data in Section VIII). In particular, intercultural competence, analytical thinking, and integrative thinking, though certainly referenced in some parts of our current Curricular Affairs guidelines, are not systematically implemented and emphasized within the current program, but these are skills needed for an educated citizenry in the 21st century. While many faculty have incorporated these skills into their courses, there is no systematic incentive or reward for doing so, and no institutional oversight to ensure that learning opportunities aligned with these critical skills are routinely offered to students.

While the current General Education program was built on ideals that continue to be valid, it has not been easy to determine its extent of success in meeting those ideals, because the program was developed without the benefit of contemporary advances in assessing programs and student learning. To date, assessment of General Education at Penn State has focused on both structural elements (e.g., patterns of instructor appointments in highly-enrolled courses in each domain[23]) and mastery of critical thinking (an ongoing pilot at University Park is using the Critical Thinking Assessment Test, with pilots at Greater Allegheny and Abington pending in fall 2014). The current General Education objectives, though many of us would probably agree with them as far as they go, are stated rather vaguely (Undergraduate Bulletin; Appendix B).

Although more specific course objectives are part of the Curricular Affairs process for individual courses (Appendix B), the relatively general nature of the objectives for General Education as a whole, coupled with the highly flexible and un-scaffolded curriculum, leads to a lack of clarity on how (through what sort of assessment instruments), where (in what

---

[22] Faculty Senate Informational Report March 2014. "A Progress Report to the Faculty Senate" Joint Diversity Awareness Task Force.
http://www.senate.psu.edu/agenda/2013-2014/mar2014/appc.htm

[23] Faculty Senate Informational Report December 2012 " Enrollment and Faculty Patterns in General Education Enrollment and Instructor Patterns in General Education Courses" Undergraduate Education.
http://www.senate.psu.edu/agenda/2012-2013/dec2012/appn.pdf

courses), and when (at what points in a student's academic development) learning and mastery can be assessed, beyond the individual instructor's grading of his/her students.

The flexible structure of the program also presents challenges to both instruction and rigor because instructors cannot assume students have had the prior opportunity to develop particular foundational skills. For example, whereas 80% of Penn State students have taken ENGL 015 (Rhetoric and Composition) or ESL 015 (English as a Second Language Composition) by the end of their third semester, only 65% of students university-wide complete ENGL 202 by the end of their 7th semester, with wide differences between majors (Appendix E). Similarly, students most commonly take CAS 100 (Effective Speech) in their sophomore or junior years, but more students enroll in this class in their senior or fifth year than in the freshman year of college (Appendix F).

A further weakness or missed opportunity concerns support for General Education. To teach with full effectiveness and to assess complex intellectual skills like integrative thinking or critical analytic thinking, faculty need professional development, support, and recognition for their investments in teaching. While course-by-course instruction in our current General Education program is often excellent, the University does not systematically and visibly encourage investment in General Education teaching or the monitoring of General Education program effectiveness. In the past year of university-wide conversations prior to this report, for example, many individuals pointed out that while active learning was designed as a key element of the current General Education program, in some situations--particularly in large courses taken by many of our students--support for instructors to fully implement active learning, such as support for teaching assistants, has been lacking. A successful revision will need to address this gap with appropriate resources (see Part B of this Informational Report).

V. Change, and the Opportunities It Provides

Conversations with stakeholders from the University community over the past year (see Sections VI, VII and VIII) have highlighted some important concerns, which can be called threats or challenges, related to a revision of General Education. Many of those concerns are related to tradeoffs that may be necessary if we decrease the flexibility in the curriculum described above and to the potential costs to departments and campuses as personnel and course offerings change. As we engage in deliberative conversation over the coming months, the tradeoffs we face need to be carefully examined.

One of the first actions of the General Education Task Force was to reaffirm our institutional commitment to one shared University-wide General Education program. Not all universities have made this commitment; in some, each college or location determines its students' graduation requirements. This commitment means that we face the challenge of designing a program that can be delivered at many locations, and in both online and residential modes, in ways that give all our students the advantages of taking their General Education at Penn State, with our distinctive identity as a student-focused research university.

Further, conversations around revision have revealed concerns that may affect morale and the willingness to embrace change; or to change General Education, in particular, at this time. In particular, some faculty or other stakeholders interpret this potential revision as a direct criticism of a General Education program that works well for them and their programs, or as a criticism of their (or their colleagues') current teaching. Some faculty place primacy on the learning that takes place in majors, and suggest that if further investments in undergraduate instruction are to be made, perhaps they should be made within the majors instead. Some faculty expressed concerns over changes in General Education that might reduce flexibility, and thus impact the transfer of credit and movement of students. Finally, in an institution that is undergoing change on many fronts, adding change to our long-standing General Education program presents additional areas of uncertainty in an already uncertain environment.

We have the opportunity to create a distinctive Penn State General Education curriculum that embraces intellectual inquiry, diversity, and excellence. The General Education Task Force has affirmed the central role of student learning in building a curriculum that ensures students will have opportunities to acquire the knowledge, skills, and experiences they will need to live and work in a global environment and to improve life for others and for themselves.

In revising General Education around student learning, we have the opportunity to increase the value of the Penn State brand by explicitly adding value to General Education. We also have the opportunity to change the culture around General Education at Penn State by refocusing on the important role it plays in a university education, elevating it to a central, more highly valued component of the Penn State experience. We have the opportunity to increase student demand for the educational opportunities structured into General Education by changing the way we make the learning objectives explicit and how we connect them to students' experiences[24]. As elaborated below, perceptions of General Education among students, alumni, and other stakeholders run across a wide spectrum. We have the opportunity to shift that spectrum toward the positive and valued aspects represented by this range of perceptions. By helping students more readily connect the learning in General Education with learning in the major, we help students better recognize the central role General Education plays in their university education.

In building a General Education curriculum, we also have the opportunity to strengthen our ability to deliver and assess student learning. A number of strategies for this strengthening may be considered, including structures or processes for providing support for those who teach General Education courses, policies for continually monitoring and updating the curriculum, and mechanisms for regular formative assessment that feeds into ongoing improvements.

We will be discussing these and other opportunities and concerns over the next several months. As is elaborated in Informational Report B, the university-wide deliberations will

[24] R. B. Alley "Watchable Wildlife and Demand-Driven General Education" *Journal of General Education* **2013**, 62 (1), p 37-42.

seek a balance between institutional values and the costs, financial or otherwise, associated with meeting them.

VI. Input from Meetings with Students

The Gen Ed Task Force Subcommittee on Student Opportunities and Constraints was charged to 1) determine potential opportunities and challenges; 2) elicit student perceptions; and 3) create a master list of opportunities and challenges perceived by students and as recognized by faculty and staff advisers. This subcommittee had six student representatives. Student representatives also sat on several other subcommittees as well as the parent task force.

Over the Spring 2014 semester, focus groups were held to seek input from students at 18 commonwealth campuses, 7 units from University Park including DUS and the Schreyer Honors College, and three non-traditional student populations. Meetings were also held with student government leaders, and students in some classes were engaged in the process to elicit their perceptions. In addition, ENGL/CAS faculty led 20 deliberations with students enrolled in *Rhetoric and Civic Life* (ENGL/CAS 138T) at University Park. A list of specific meetings and dates can be found in Appendix G.

Two types of student meetings were held. The first focus groups, in 23 meetings, consisted of open discussion, based on a set of guiding questions. These questions focused on what students perceived to be advantages or challenges with the current General Education model, their ideas for possible improvements, and discussions about the idea of "themes" in General Education. Later student focus groups, in 14 meetings, employed the Kettering model of public deliberation[25] that has been widely used in their National Issues Forum (www.nifi.org). On that model, the Gen Ed Task Force developed a Deliberation Guide to facilitate a process in which participants were asked to advocate for each of three visions of the main purpose of General Education to draw out the opportunities and challenges of alternative emphases. The three visions for the General Education curriculum at Penn State were: broadening horizons and expanding perceptions; seeing the interconnectedness among disciplines; and connecting classroom learning to outside experiences. Students were asked to vote on their favorite option before the deliberation began and then again afterwards to see if opinions shifted over the course of the discussion, which did happen frequently.

The process was crafted to foster deliberative discussion that helped us to identify common values capable of guiding decisions and action. The results of the deliberation process further reinforced the feedback we heard anecdotally in less structured conversations that students wanted flexibility in General Education, saw the value of writing, speaking, and quantitative skills, and appreciated the importance of integrating knowledge from across disciplines. The deliberation guides used for these student meetings are found in Appendix H.

---

[25] D. W. McIvor; D. W. M. Barker; N. McAfee *Democratizing Deliberation, A Political Theory Anthology.* Kettering Foundation Press **2012**, 184 pp.

Primary opportunities and concerns voiced by students.

The formats of the discussions at the smaller University College campuses, mid-sized Campus Colleges and University Park differed in structure. However, a number of commonalities that bridge all campuses have emerged, as well as clear differences that are noted below.

- Students had mixed opinions about General Education

At all campuses, students valued flexibility and the exploration enabled by General Education; many students recognized the importance of a well-rounded education and the fundamental skills and knowledge acquired in General Education. Many students cited exploration as a key opportunity to discover their major.

However, students also expressed concern about their perception that General Education coursework was irrelevant because it does not contribute to their academic or career goal; some commented that General Education was not worth their time or tuition; and some were dissatisfied with the quality of their General Education coursework. At University Park, students specifically commented about the lack of depth.

- Thematic clusters of courses were viewed favorably by students, but concerns were also expressed

One of the proposed curricular components discussed with students was an interdisciplinary thematic cluster of courses. Students anticipated benefits including more in-depth learning, student ownership, and the opportunity for interdisciplinary learning. Many students believed that themes would help them see the connection among General Education courses and increase the relevance of General Education to their academic goals; would increase the appeal of General Education; and increase their competitiveness in the job market.

However, students worried about the flexibility and availability of General Education themes, and identified logistical challenges and concerns for their implementation. Students, particularly at the Campus Colleges and University College, were concerned about possible financial impacts on their progress toward graduation due to lack of flexibility in the thematic component in General Education.

- Students recognized the potential benefits but also had concerns about experiential learning opportunities in General Education

In general, students value out-of-class experiential learning opportunities, such as internships, service learning, research or study abroad, and recognized that engagement has the potential to bring many benefits. Students noted that engaged scholarship can provide them with meaningful learning experiences, increase their interest, and provide opportunities to learn practical skills in real-life settings.

At all campuses, however, students expressed concern about added expense and workload if there were a required engaged scholarship component in General Education. Students also noted concern with how out-of-class work would be evaluated.

Some small focus groups of international students, adult learners, and world campus students also suggested additional variations in student perspectives for these groups. While international students tended to prefer more exploration in General Education, they had more reservations about the concept of an integrated thematic component. Adult students at University Park also preferred exploration in General Education, did not understand the value or purpose of thematic clusters, and thought that engaged scholarship did not quite apply to them. On the other hand, the focus group of World Campus students commented positively about the idea of engaged scholarship in General Education, and its potential to increase their competitiveness and connectedness.

- General issues with Gen Ed, and how advising can help

At all campuses, students identified difficulties with registering for General Education courses to fit both their schedules and interest. Moreover, students seemed to have limited understanding of General Education, and its purpose within their undergraduate curriculum. Many had misunderstanding about which courses were part of General Education, and often defined General Education as the courses that they needed to "get out of the way."

However, students generally referred to the central role of advising to help them to understand General Education and make appropriate course selections. Greater choice of courses to meet General Education requirements, more sessions of courses to facilitate scheduling, and additional advising were identified as mechanisms to increase student learning opportunities in General Education.

Data from student comments from website

There was also robust engagement of students on the gened.psu.edu website (see below); this was due at least in part because some faculty assigned readings and homework to students that included participation during the open comment periods, a factor that may, to some extent, affect the range of responses. Some representative student comments from the website include:

> "It would be unfortunate to limit a student's exploration … as I feel that one of the most important benefits of Gen Eds is offering students the ability to explore their

interests."

"Will a future employer really be impressed that I took Elementary Astronomy as a college freshman to only fulfill my Gen Ed requirement, or would they rather see that my classes were largely focused on the major that led to my applying for a job with them?"

"I believe that easy Gen Eds are crucial to our learning. They expose us to new concepts that we would not have learned otherwise and may not necessarily want to learn more about. They show us… new topics without being overwhelming and provide a general overview of knowledge that allows students to decide whether they want to delve into the field more or whether they should explore different academic paths."

"I know what I want to do. I know what I want my major to be and I know that I will be able to succeed in the classes associated with this major. However, I find myself placed in classes that, simply put, I'm not good at … They are extremely challenging for me and take away time from learning about my major and in turn bring down my GPA."

Other Student Voices

The Smeal College students described above (see Section III) included, in addition to benchmarking with CIC peer institutions, meetings with DUS advisers, first year students, and students at two Commonwealth Campuses (Altoona and New Kensington); they developed and administered a survey about General Education completed by more than 500 University Park (primarily Smeal, DUS, and HHD students) and 400 Commonwealth Campus students; and visited three popular General Education courses and administered Clicker questions. It was found that *a desire to maintain or increase GPA was selected as the most important reason that students took a General Education course*, followed by a desire to learn new things and to gain information about a major or minor. These data were presented in a preliminary discussion at the January 2014 Gen Ed Task Force Retreat, and then in the final report later that semester.

A "Student Voices" video compilation[26] was produced by WPSU for the Schreyer Institute for Teaching Excellence conference on General Education held in October 2013. To complement this video, recent graduate H. Wildeson undertook a senior capstone project in fall 2013 in which she interviewed faculty. In the video, University Park faculty who teach in the General Education program are asked about their perspectives and ideas for General Education. Wildeson gave permission for the Gen Ed Task Force to show the video during

[26] Schreyer Institute for Teaching Excellence video
https://streaming.psu.edu/media/?movieId=25399

meetings and discussions with faculty, and to make it available from the Task Force web site.[27]

In another undergraduate student project, a Presidential Leadership Academy (PLA) team submitted a report [28], which contains a proposal for a General Education model. As part of this project, the PLA team conducted interviews with 9 faculty and unit leaders at University Park, including 3 members of the Gen Ed Task Force and subcommittees. In their view, there is an existing challenge with some exploratory courses:

> "It is important, however, that exploration courses do not dissolve into un-engaging "fluff" courses which lack rigor and only give students a very peripheral glance at a subject."

And in response, they proposed a unique idea for exploratory courses:

> "… short courses which provide a more pointed investigation into a topic could be offered in conjunction with standard, full-semester courses. … reduce the amount of redundancy and "filler" material in introductory classes such that the course is more meaningful….Take the following examples illustrating how short courses could be constructed:
>
> > *· A 1.5 credit course on Game Theory could be offered as an alternative to an introductory course which provides a cursory glance at mathematical logic.*
> >
> > *· A 1.5 [credit course] on the Arab-Israeli Conflict could be offered as an alternative to a 3-credit introductory course"*

The PLA team further proposed an entire General Education program, which includes a "theme" or "focus" with a capstone course.

VII. Input from Meetings with Faculty

Faculty Teaching General Education Courses

Conversations with both students and faculty highlight the important role played by those who teach in General Education. Those who teach General Education courses deserve

---

[27] H. Wildeson video http://vimeo.com/82199805

[28] T. Groh, R. Gurunathan, E. Waschenko, C. Miller, S. Silversmith. *GENERAL EDUCATION AT PENN STATE: A Policy for Reforming Structure, Communication, and Assessment*. May 2014. http://gened.psu.edu/wp-content/uploads/sites/7232/2013/10/General_Education_Policy_Proposal.pdf

support, recognition, and opportunities for development. The challenges of doing so at Penn State are similar to those faced by our peer institutions.[29]

At Penn State, General Education courses are taught by a diversity of faculty (and, at University Park, graduate students). A 2012 report from the Committee on Undergraduate Education examined the enrollment patterns and instructor types in General Education courses.[30] This report found that in 2009 – 2012 a predominant portion of General Education courses (>76%) were taught by faculty in fixed-term appointments, and that University College and the Campus Colleges had a heavier reliance on fixed-term, *part-time* (e.g. FT2) faculty for delivery of these courses (~35%) than did University Park (15%). Indeed as the 2012 report indicates, General Education courses are less likely to be taught by tenure/tenured-line faculty than are other types of courses, such as those in the major or at the graduate level. Thus any General Education revision should take into consideration the diversity of our instructional faculty.

In the most recent report on Faculty Tenure Rates, it was noted that more than half of the full-time faculty at Penn State are on fixed term appointments:[31]

> Penn State employs almost 5,900 full-time faculty members, including lecturers, librarians and research faculty. Of these, almost 2,900 are either tenured or on the tenure track. The following data are University-wide counts for full-time faculty in fall 2013. (Source: Penn State Fact Book: Faculty Distribution by Tenure, Fall 2013.)

Tenured	2,203	(37.4%)
Tenure track-not tenured	672	(11.4%)
Other	3,015	(51.2%)
Total	5,890	(100.0%)

The Gen Ed Task Force has therefore tried to engage faculty at all levels from across the geographically-dispersed University in the discussion about General Education at Penn State. We have actively sought input on how best to support the development and pedagogy of all faculty – regardless of appointment – in the delivery of an excellent curriculum.

Synopsis of Spring 2014 Open Town Hall Meetings with Faculty

---

[29] Faculty Development: Finding Balance in Changing Roles. Peer Review, Fall 2007, Vol. 9 No. 4. http://www.aacu.org/peerreview/2007/fall

[30] Faculty Senate Informational Report, December 2012. "Enrollment and Instructor Patterns in General Education Courses" Senate Committee on Undergraduate Education. http://senate.psu.edu/agenda/2012-2013/dec2012/appn.pdf

[31] Faculty Senate Informational Report, April 2014. "Faculty Tenure Rates 2013-2014 Annual Report" Faculty Affairs. http://senate.psu.edu/agenda/2013-2014/apr2014/appm.htm

The Faculty Subcommittee of the General Education Task Force was charged with collecting initial faculty comments and input at General Education Town Halls that were scheduled regionally for the campuses and at the colleges at University Park beginning in mid-March and continuing throughout April into May. There have been 21 Town Hall meetings with faculty held to date (see Appendix I). While there are some issues raised that may be unique to particular campuses or colleges, clear, shared themes have emerged which are presented below. Overall, faculty clearly expressed a spectrum of support and enthusiasm, skepticism and negativity, and concern about their ability to participate in ongoing consultation in the process. The general tone of the individual meetings varied. However, it is clear that faculty are engaged and interested in the General Education discussion. Many faculty question why changes in our current General Education program are necessary (a topic that is addressed in Section III). It is important to note that there is variance in the level of faculty support for some of the initial proposed components (in particular, for thematic clusters of courses). The major themes emerging from the town hall meetings included:

- **Clarifying the Philosophy of General Education**

  Most faculty endorse the important role that General Education plays in the growth and development of students; recognizing it as an important opportunity for exploration that should not be driven by "employment" objectives.

  There was recurrent concern that the proposed changes could potentially restrict rather than enhance students' exploratory opportunities.

- **Opportunities and Challenges for Interdisciplinary Collaboration**

  Some faculty express enthusiasm for the opportunity to collaborate across disciplines and campuses. In addition, some faculty/campuses view the opportunity to identify themes as something that could enhance the "brand" and help to recruit students.

  On the other hand, many faculty express concern over the difficulties that arise in trying to initiate and sustain such collaborations, particularly when most faculty who teach General Education courses are fixed-term.

- **Institutional Issues**

  Many faculty emphasize that there are many broader institutional issues that impact the success of any General Education curriculum that are not addressed by the proposed revisions. These include such issues as: the composition of the faculty (standing versus fixed-term), how teaching is valued in promotion and tenure and salary decisions, academic standards for student admissions to Penn State, the diversity of Penn State's campuses, including World Campus (where growth is anticipated), among others.

Skepticism exists that unless the institutional culture and structure change, to give greater value to General Education, any General Education changes will be less than successful.

There are many questions about the level of institutional support and resources that will be necessary for revision of the General Education curriculum. In addition, there is also concern that if budgets are increasingly driven by enrollments, the institutional reward system may encourage the offering of "easy" courses, and it may become increasingly difficult for the faculty to maintain high academic standards unless there are specific rewards and incentives for doing so. Planned consultation with campus and college leadership in Fall 2014 (see Part B of this Informational Report) will focus on these aspects.

Common concerns that were voiced focused on what the potential impacts would be on campuses, colleges, majors and faculty; on the logistics for students; or with the process and timetable. Some faculty are concerned about how changes in General Education would impact faculty job security and teaching roles. A number of faculty are concerned that the timeline for the process was not sufficient to enable robust dialogue and consultation with faculty across the institution, and that greater clarity was needed to obtain meaningful input. In addition, many faculty and staff express concern over the logistical details of implementation of a curricular change, particularly around how the new student information system (LionPATH) will integrate with a General Education revision and how the increased importance academic advising may play in helping students understand and navigate a new General Education curriculum will be supported.

A meeting with a subset of Evan Pugh Professors echoed some of the concerns above. However, this group emphasized their perception of a general erosion of academic rigor and raised questions about the effectiveness of learning in large classroom and on-line settings with little TA support. They recommended careful examination of budget models to enable better support of strong pedagogical technique.

In the majority of meetings with faculty there were also positive comments and suggestions. Some of these have been directly incorporated in the curricular prototypes (see Part B of this Informational Report). For example, faculty made suggestions about requiring a C or better in the foundational courses in writing, communication and quantification; incorporation of modern skills (e.g. information literacy, visual literacy, conflict resolution); or alternative models (e.g. individual integrative courses vs. a themed series of courses). Many faculty teaching in the current General Education program were favorable about the opportunity to teach more advanced coursework beyond the 100 level. Elevation of ethics in the curriculum and strengthening the global competencies components were generally referred to with favorable comments. Integration of research and education within General Education was viewed as a particularly desirable goal (consistent with a separate Faculty Senate vote in Spring 2014)[32], though faculty felt that

[32] Chairs and Vice Chairs of the Senate Committees on Curricular Affairs, Educational Equity and Campus Environment, Faculty Affairs, Global Programs, Outreach, Research,

research or other engaged scholarship experiences should be optional in General Education, not a requirement, for all students.

Several additional suggestions made by faculty and staff advisers are notable. Faculty and staff in several campus locations suggest that steps should be made to ensure that General Education is consistent across all campuses; that General Education should be 're-branded' to emphasize its relevance and importance to student learning; and that faculty teaching in General Education should be recognized.

Synopsis of comments submitted by faculty on the web site

In partnership with the Teaching and Learning with Technology office at Penn State, the General Education Task Force has created a public website (gened.psu.edu), that is designed to engage the university community in a broad, inclusive, and ongoing dialogue about the value of General Education and to include them to the extent possible in the process by which decisions are made about the shape of the new curriculum.

The gened.psu.edu website has become a living space of ongoing conversation and deliberation about the emerging General Education program at Penn State. Since it was launched on August 24, 2013 the site has been visited by individuals in 22 countries and at 57 colleges or universities, including Penn State. As of May 8th, there were more than 240,000 individual page views and 900 views of the Forensic Report submitted to the Faculty Senate in March 2014 and posted on this site.

A recent qualitative analysis[33] of the over 200 comments on this website (gened.psu.edu) used focused coding to identify common themes. Many of the comments submitted via the website were either questions posed by faculty or students regarding the General Education reform process or moderator comments that were largely directed at these questions. Other comments revealed the presence of six major themes: (1) Current Reform Debate; (2) Challenges Of Implementing General Education Reform; (3) Suggestions For Implementing General Education Reform; (4) Proposed Themes; (5) Support for Exploration And Skills; and (6) the Concept of General Education.

With regards to the issue of resources and related support for General Education, many of the comments expressed a wariness of resources that might be needed for the perceived curricular limitations of a theme-based General Education curriculum. However, this view was not uniformly held and a variety of opinions regarding General Education reform were expressed on the website.

Student Life, Undergraduate Education, and University Planning "Engaged Scholarship Report", Advisory/Consultative Report April 2014 http://senate.psu.edu/agenda/2013-2014/apr2014/appg.htm

[33] The Gen Ed Task Force thanks the Office of Planning and Institutional Assessment for their expertise and effort in compiling and reporting the comments submitted on the gened.psu.edu website.

- **Representative comments from faculty:**

  "The word 'General' to me means a broad overview of a topic. If you want to follow the theme concept, then you should change the descriptive word to "Advanced" or "In Depth" electives. I view the Gen Ed courses as planting seeds of knowledge. It will take them time to bloom. It might not happen in the 4 years of college."

  "This is a very exciting process and the ideas are flowing with wonderful energy! I agree wholeheartedly that ethics and creative thinking are crucial. I would also add leadership. It doesn't have to be only 'lead the world' type leadership, but personal leadership at its foundation."

  "On the 'what could be better' side of the discussion, smaller classes would be an improvement in many areas that I have knowledge of. Many students get their sense of just being a "number" at PSU partly because of some of their 500+ seat GenEd Courses that they are not even required to attend, much less actively participate in, except perhaps online, a poor substitute for the inspired dialog possible with a professor and an active class."

  "As I review the comments, questions and responses by the GETF I Would like to raise the concern of an enforced requirement of taking 'our Penn State' Courses for the General Education core and/or theme requirements. Perhaps I am not interpreting the meaning and power of the 'firewall' but we need to be cautious on restricting transferability of courses from other accredited schools because the student hasn't had enough of our 'gen ed' courses."

The Gen Ed Task Force process moving forward includes plans to continue to engage faculty in face-to-face meetings as well as welcome comments and dialog on our interactive web site (see Informational Report Part B).

Meetings have included discussions with the Academic Leadership Council (of Chancellors and Deans), Academic Council on Undergraduate Education, Council of Campus Chancellors, and Campus Administrative Officers (see Appendix I). In addition, the Gen Ed Task Force benefits from regular consultation with an advisory group of Chancellors and Deans.[34] These discussions span topics from the objectives and structure of the General Education curriculum to administrative aspects. In particular, this group is concerned with balancing the ideals of student learning and the real costs to colleges and campuses to deliver these learning opportunities. As a whole, this advisory group has strongly encouraged the Task Force to make sure principles and learning objectives are the driving factor behind recommendations.

[34] Chancellors and Deans Advisory Group to the Gen Ed Task Force includes: Nan Crouter, Madlyn Hanes, Melanie Hatch, Keith Hillkirk, Barbara Korner, Dan Larson, Susan Welch, Ann Williams

VIII. Input from Additional Penn State Stakeholders

The Gen Ed Task Force identified additional stakeholders that include alumni, corporate recruiters, and academic partners in articulation agreements here and abroad. In this initial consultation phase, surveys were sent out to the first two groups. Additional consultation with other stakeholders will take place as the curriculum model is further clarified; see Part B of the Informational Report.

Penn State Alumni Survey Data

In partnership with the Penn State Alumni Association, the Gen Ed Task Force sent an invitation to 10,000 Penn State alumni who had graduated with a baccalaureate degree within the last 15 years (i.e. in the time period of the current General Education program). The sample was randomly generated from all undergraduates from all majors and campuses. We received 1079 responses to our invitation to complete a brief survey (11% response rate). When asked what were the best aspect(s) of their General Education courses, the most frequent responses were: "I was exposed to topics outside my major" (76%); "There was flexibility" (49%); and "I explored new ideas" (48%). Alumni were also asked which skills or attributes they wished, in hindsight, were more highly emphasized in General Education. The most frequently selected responses were Critical Thinking (56%); Communication Skills (55%); and Integrative Thinking (45%).

In addition, a large number of the respondents (433) supplied comments in the free response portion of the survey. In a qualitative analysis, these were tagged as belonging in one or more categories, and summarized:

Positive Comments (110):

- enjoyed exploration, gave broad perspective
- helped find my major/career
- General Education is important to help students be well rounded
- valuable part of education
- gave me a break from math/science/engineering courses in my major

"Part of Penn State's superiority in education is due in large part to the General Education requirements. Penn State does not just ensure that students are well educated in their field, but that they receive a well-rounded education."

" I was a liberal arts major, and in the moment, I was incredibly annoyed that I had to take math and science classes to satisfy my Gen Ed courses. Today, I'm so grateful that Penn State had such a strong Gen Ed component. This theater major now works in finance."

"General education courses set PSU apart from most schools." "15 years later, I still credit my comfort with speaking in front of audiences with my mandatory speaking course."

Negative (69):

- waste of time and money, not relevant to major, no benefit
- too many credits/courses
- mostly prescribed by major, needed more flexibility
- variable difficulty and quality
- hard time scheduling classes

"Each class seemed like a box to check off instead of a learning experience."

"If they really did emphasize critical thinking and communication skills they would have had value, but…I had to learn that on the job."

"Gen Ed classes were scheduled based on the probability of attaining the highest grade for the least amount of effort in order to pad my GPA, which they ALWAYS did."

Suggestions (121):

- emphasize written, oral communication more
- emphasize math, computer skills, data analysis more
- find a way to cohesively group courses, develop integrative thinking
- more flexibility
- more structure
- make more relevant to major
- emphasize development of skills for "real world" (e.g. personal finance, negotiation)

"Gen Ed classes were usually easier than major classes. This might be by design to offer a little relief for students, however, I think there's an opportunity to increase the quality of these classes, even if it increases the difficulty a bit."

"I think everyone should need to take a course on general finances (consolidating loans, buying a home, paying student loans, etc) and retirement planning. I had no idea what I was doing in these areas after graduating and they are fundamentals of everyone's life!"

"Gen Eds are what the student makes of them. You can't make someone want to learn something outside their field. Provide Gen Ed courses aimed at a target audience: Art for engineers, Humanities for Engineers."

"As a student, I definitely appreciated the 'cafeteria style' choices of Gen Ed coursework. However, looking back now, I wish there was a more cohesive grouping of courses--one that I could make more sense of their connectedness."

"Students should be encouraged to view their Gen Eds more seriously. Right now, many see it as a waste of time and expect it to be easy."

"I think it would be better to focus on each student having a minor instead of all of these random classes that don't really go towards anything."

National Corporate Recruiter and Penn State Corporate Recruiter Survey Data

There have been a number of national surveys of corporate recruiters and employers to seek input on what employers look for in undergraduates. The National Association of Colleges Employers Job Outlook Survey (April 2014) identified the five top personal qualities or skills that employers seek:[35]

- Ability to make decisions and solve problems
- Ability to verbally communicate with persons inside and outside the organization
- Ability to obtain and process information
- Ability to plan, organize, and prioritize work
- Ability to analyze quantitative data

According to a report in the Chronicle of Higher Education (December 2012),[36] a survey of employer perceptions noted that "when it comes to the skills most needed by employers, job candidates are lacking most in written and oral communication skills, adaptability and managing multiple priorities, and making decisions and problem solving". In addition, employers place the responsibility on colleges and universities to prepare graduates in written and oral communications and decision-making skills. The survey results suggest that employers believe that colleges need to "work harder to produce these traits in their graduates".

In an April 2013 report,[37] the AAC&U surveyed employers on their priorities for college learning and student success. In this report, employers identified cross-disciplinary skills and knowledge as critical to a student's potential for career success, and "they view these skills as more important than a student's choice of undergraduate major". In addition:

- Nearly all those surveyed (93%) agreed, "a candidate's demonstrated capacity to think critically, communicate clearly, and solve complex problems is more important than their undergraduate major."
- More than nine in ten of those surveyed said it is important that those they hire demonstrate ethical judgment and integrity; intercultural skills; and the capacity for continued new learning.

---

[35] National Association of Colleges and Employers Job Outlook Survey April 2014 [https://www.naceweb.org/about-us/press/skills-employers-value-in-new-hires.aspx accessed 8/22/14]

[36] The Chronicle of Higher Education Report "The Role of Higher Education in Career Development: Employer Perceptions" December 2012

[37] The Association of American Colleges and Universities "It Takes More than a Major: Employer Priorities for College Learning and Student Success" April 2013

- More than three in four employers say they want colleges to place more emphasis on helping students develop five key learning outcomes, including: critical thinking, complex problem-solving, written and oral communication, and applied knowledge in real-world settings.

The Wall Street Journal (WSJ) has recognized Penn State for our ability to prepare graduates for the job market. In a September 2010 WSJ survey of corporate recruiters, Penn State was rated first among 100 colleges and universities across the country.[38]

In addition to that survey, we sought to ask recruiters with a relationship with Penn State about their perception of the value of the skills and attributes of General Education. In partnership with Penn State Career Services, in April 2014 the Gen Ed Task Force sent a brief survey to 16,000 corporate recruiters, from whom we received responses from 980 (6% response rate).

We first asked corporate recruiters for their opinions on the value of various skills and attributes, all of which are current or potential learning objectives for General Education, and to rate these using a Likert scale of 1 (low) to 4 (high). Consistent with national studies cited above, the four skills and attributes that were rated as the most valuable were critical thinking, speaking, listening and writing.

We then asked respondents what skills and attributes would make Penn State graduates more attractive candidates for a position in their company. The results indicate that of 8 possible attributes, the three most highly rated were critical thinking (83%), teamwork (81%), integrative thinking (65%); in contrast, the attribute rated the lowest (of the eight) was a high grade point average.

IX. Summary and outcomes of May 2014 retreat

The opportunities and challenges of General Education modernization at Penn State, synthesizing all of the comments and input from students, faculty, and other stakeholders, were the focus of the discussion at the May 2014 retreat. At the conclusion of the retreat, the task force agreed that *our foremost goal is fostering student learning*.

In summary, opportunities we have identified include:

- leveraging the strengths of our faculty and better integrating General Education teaching with research;
- improving student learning and providing students with a context with which to understand the importance of General Education;
- promoting faculty collaboration and pedagogy development;
- becoming a national leader in General Education curriculum assessment and research

[38] *Wall Street Journal* "Penn State Tops Recruiter Rankings" September 13, 2010

Challenges that members of the Task Force and other members of the University community have raised in discussions, town hall meetings, focus groups, and on the website are identified below. We will be exploring ways to meet these challenges.

- maintaining flexibility and mobility for students;
- delivering the curriculum on all campuses, including World Campus;
- achieving a good balance between preserving continuity with the strengths we have now and making changes to foster innovations and improvements;
- supporting, incentivizing, and rewarding faculty participation in an excellent General Education curriculum;
- upholding strong academic standards;
- securing ongoing resources for faculty and units to fund and maintain improvements to the curriculum

As a result of the feedback received at that point, the Gen Ed Task Force decided to lengthen the timeline for the process: instead of presenting a legislative report to the Faculty Senate during the fall of 2014, as planned earlier, during the summer of 2014 the task force instead developed several possible curriculum prototypes for additional deliberation and input from the University community. These, together with more information on the process moving forward are described in Part B of this Informational Report.

Part B: The Process for Deliberation, Including Curriculum Prototypes

The first part of this report, Part A, outlines the importance of making transformative change in General Education and elaborates the principles guiding the work of the General Education Task Force. To summarize, a revision of the General Education program offers significant opportunities to enhance student learning and to better support the faculty who facilitate that learning; it also entails trade-offs and costs. While envisioning a curriculum that can meet the ideals of strengthening student learning around key objectives, we also need to be mindful of any barriers that proposed changes may present to student movement through the University and to the costs that may be encountered as the institution shifts to new ways of structuring learning opportunities. Part B of this report outlines the public deliberation process that will help inform the examination of the opportunities and barriers in the development of a curriculum that balances ideals with realities. It also provides three sample curriculum prototypes for discussion none, of which represents an actual proposal from the Task Force at this point.

X. The Deliberation Process and Prototype Curricula that Have Emerged for University-wide deliberation

Process for engaging the academic community in substantive deliberation

The leadership and membership of the Task Force are deeply committed to engaging the entire Penn State community in discussions around this important portion of our curriculum. For a deliberative process to be inclusive, it must be structured to enable members of the community to genuinely participate in the process by which decisions are made. To facilitate this participation, the General Education Planning and Oversight Task Force (Gen Ed Task Force) has partnered with the University Teaching and Learning with Technology Office, and with faculty and graduate students with expertise in practices of deliberation from the Department of Communication Arts and Science, to establish a process of deliberation that will enable members of the University community to contribute in substantive ways to the decisions associated with the new General Education curriculum.

During the 2013-2014 academic year, the Gen Ed Task Force developed practices of ongoing deliberation based on the Kettering Foundation's model of public deliberation widely used in the foundation's National Issues Forum. Over the course of the Fall 2014 semester, the Gen Ed Task Force is implementing a modified version of that model to enable deliberation on three General Education curriculum prototypes. This deliberative process will be ongoing and asynchronous through the Penn State General Education website (http://gened.psu.edu). Further, it will be supplemented by continuing in-person facilitated conversations about the prototypes at every campus and college across the University.

Submission, Deliberation and Refinement of Curricular Prototypes

During summer 2014, the Gen Ed Task Force developed several curriculum prototypes, with the intention of presenting the University community with multiple viable alternative models for organizing General Education. This document includes analysis of how each prototype aligns with the student learning objectives developed for General Education, and will serve as a basis for identifying ways in which each prototype would impact unit budgets and staffing, as well as student movement through the University.

This process of considering curriculum models drew upon meetings and consultations undertaken during the 2013-14 academic year. In late Spring 2014, the Gen Ed Task Force solicited models, now called prototypes, from all members of the Gen Ed Task Force and its seven subcommittees — more than 80 participants in all — and then examined the initial set of 18 prototypes that were received (more on this below). From the outset, the anticipation was that none of these prototypes would be the final curriculum design that the Gen Ed Task Force will recommend to the Faculty Senate. Rather, by examining multiple options, we gave ourselves the opportunity to identify aspects that would reflect our values and goals for General Education, and to construct a curriculum that maximizes student learning. This process of considering alternative prototypes allowed us to anticipate and advocate for the resources needed to enhance student learning, and to reflect on the tradeoffs that may be necessary for implementation of a new General Education curriculum.

Among the eighteen prototypes proposed in May 2014, some emphasized a common core, others restructured the current flexible 'cafeteria style' menu, many focused on facilitating connections across knowledge domains, and others emphasized competencies around a variety of modern literacies. All Task Force and subcommittee members were then invited to two meetings to examine the submitted models. In May and June 2014, thirty-five individuals participated in one or both of those meetings either in person or via Adobe Connect.

The first discussion focused on identifying the pros and cons of each of the eighteen prototypes. Several prototypes did not address the vision and learning goals of General Education at Penn State and were removed from further discussion. Some others that did address our situation showed significant overlap in intent and structure. Following the initial meeting, these were consolidated into four distinct prototypes, which were discussed in a second meeting. At the August retreat, three of the models that had unique approaches to fostering integrative connections across knowledge domains were further deliberated. A fourth model, which was a combination of two of the others, was introduced to the deliberation on the second day of the retreat after attendees had an opportunity to discuss the individual components.

The discussions at the August retreat affirmed several central principles that have been the subject of ongoing discussion since then:

- There is value in students taking a breadth of courses, and the curriculum should encourage distribution across all of the current skill and knowledge domains.
- Attempts at structuring integrative learning (across multiple disciplines and domains) for students are valued, and multiple ways to accomplish this should be examined.
- Maintaining flexibility is important, as it promotes discovery and allows for student movement across campuses, colleges, majors, and institutions.
- The curriculum should support gains in students' intercultural competency, and expand to global competency, along with the other identified learning objectives of Communication; Literacy; Critical and Analytical Thinking; Social Responsibility and Ethical Reasoning; Creative Thinking; Integrative Thinking; and Global and Intercultural Competence.

There was also agreement around the need for greater precision and clarity around terms like "integration" and "global competency." Several additional questions were identified for further discussion (see Section XIV). The Gen Ed Task Force is also explicitly concerned with avoiding barriers to student degree progress or other unintended negative consequences. Analysis of potential impacts on, for example, articulation agreements; the ability for students to explore multiple interests, discover majors, change majors, shift campuses, transfer credits, and make timely degree progress; and internal implications for Penn State colleges and campuses, will be a major focus of the fall semester's research, consultation, and deliberation

As a result of the August retreat, two new curricula were proposed, re-framing General Education in terms of the learning objectives. After further discussion by the Gen Ed Task Force, three prototypes have been chosen to bring forward for University-wide discussion and deliberation. Again, *none of these prototypes is expected to represent a final curriculum recommendation that may be proposed to Faculty Senate*: the prototypes are intended to focus discussion of the varying ways in which the General Education curriculum might be revised. Our task now is to deliberate the gains and tradeoffs of each prototype so that we can identify the components that best match the faculty's vision for General Education, in a curriculum that is sustainable and deliverable across the entire institution.

XI. Curricular Prototypes for Consideration: Structures and Definitions

The summary charts for each the three prototypes are shown below, and the deliberation guide describing some of the potential opportunities and tradeoffs that each represents is in Appendix J. For comparison, Penn State's current General Education model is in a similar format in Appendix B.

Each of the three prototypes totals 45 credits, which is the same as in Penn State's current General Education program. While this consistency among the prototypes facilitates side-by-side comparison, the Gen Ed Task Force has not yet come to consensus on whether to recommend that the number of credits remain the same. To date, discussions of a reduction in credits have raised multiple concerns around sustaining the 2+2 model, identifying areas for reduction (e.g. where should there be fewer courses/credits?), negatively impacting degree progress by impinging upon student flexibility for transfers and changes of major if fewer General Education credits (which are usually relatively portable) were to count, and negatively impacting the degree requirements in certain majors that rely on General Education courses. In the other direction, discussions about reducing the number of credits have yielded no clear positive benefits for student learning. While time to graduation might be reduced with a smaller General Education program, alternative strategies for improving time to graduation were suggested. As prototypes are deliberated, areas for the reduction of credits may become clear, but at the moment, the costs appear to outweigh the gains on this particular aspect of a revision of the General Education program.

Each of the three prototypes maintains the current domain structure and requires students to experience breadth across all domains. The Gen Ed Task Force has come to consensus that the breadth across all skill and knowledge domains be maintained in any new curricular prototype, as the domains offer intellectual benefits of breadth and involve significant stabilizing structure.

Below we describe key aspects of each of the three prototypes, noting that there are many aspects yet to be explored. Further, it is possible that components of these prototypes might be recombined, so that, for example, the approach to Integration in one prototype could be combined with the approach to Skills in another. Additional questions about General Education, not necessarily related to any of these three prototypes, are also identified in Section XIV.

1. **Modern Literacies Prototype**

This curricular prototype (Figure 2) presents opportunities to gain foundational skills in writing, communication, and quantification, as well as in a number of newly identified

Penn State General Education Prototype — ***Modern Literacies***

This model provides flexible options for completion of the integration component of the curriculum and reflects elements proposed during spring consultation period.

**	Cr	Total Credits	Description	Domains/Courses (Credits)	Details/Rules/Restrictio
Competencies/Distribution		36			
Advanced Writing	6			GWS	
Speaking	3			GWS	
Quantification	6			GQ	
Learning to Learn	1			X	Must include at least 3 credits in GA, GH, GS, and GHA, and 6 credits in GN.
Inquiry	3			Any area	
Social Responsibility	3			Any area	
Cultural Competency	6			Any area	
Personal financial literacy	2			X	
Exploration	6			Area not yet met above	
Integration					
	9		Multi-disciplinary/domain courses		Students select 9 credits of interdisciplinary courses that draw upon different domains; Can be a new course or a modification of an existing course, with the suffix I.
		OR			
	9				
			Credits from a completed		
		9	interdisciplinary minor		
		45	**Total**		

Figure 2 Modern Literacies General Education Prototype

modern literacies that were suggested in the feedback from faculty, students, and alumni. Building on these skills, this prototype would give students a breadth of exposure to topics in all of the current knowledge domains, and develop their integrative thinking in a flexible way through multi-disciplinary courses or an interdisciplinary minor.

Key Definitions:

Learning to Learn**:** to be taken in the first semester of enrollment at Penn State. Topics would include the research-based understanding of learning; studies of learning and misconceptions; effective mechanisms for study that enable learning; and metacognition.

Inquiry**:** to introduce students to the fundamental habits of inquiry in research, including scientific method and literacy; information literacy; data analysis (including visual representations of data) and basic statistics/probability; causality versus correlation; and ethical considerations.

Social Responsibility: to introduce students to ways of thinking and communicating about issues of societal and global importance. Included would be modes of negotiation and conflict resolution, ethical reasoning, and understanding of perspectives to consider.

Cultural Competency: to provide students with opportunities to gain competency in U.S. cultures and in either International Cultures or Global Competency (see below, in Opportunities p. 45, for definitions).

Personal Financial Literacy: to provide students exposure to real-world personal financial issues including managing debt; planning for mortgage or loan payments; and constructing a household monthly budget plan.

Exploration: to provide students with an opportunity to explore any knowledge domain that has not been included in the above courses.

Integration: Two potential pathways for completion of this learning objective are offered. One option is to take three courses, each of which is interdisciplinary or multi-disciplinary and spans at least two knowledge domains. These interdisciplinary courses may include courses that are currently offered; others may be proposed. These courses would be taught in teams or individually. Students could choose to take three courses with similar or quite different topics.

Alternatively, students would have the option of completing an interdisciplinary or multidisciplinary minor that spans at least two knowledge domains; some are already offered, and others could be developed. When the minor is completed (at least 18 credits are required for a minor), 9 of the credits in that minor would also fulfill the integration component of the General Education curriculum. Because all minors require 6 credits at the 400 level, this choice within this prototype, provides scaffolding.

The new course designations above do not each refer to a single course, nor is the series intended to be a common core for all Penn State students. Topics could be approached from many disciplinary perspectives, and could be included in a number of different courses. Thus these names represent learning objectives rather than specific course titles.

2. Chosen Topics Prototype

This General Education curriculum prototype (Figure 3) contains components for foundational skill, exploration, and intercultural competency. The integration component is designed to reaffirm the foundational importance of writing, speaking, and numeracy, and to infuse a dimension of exploration into the curriculum. The distinguishing feature, however, is its focus on cultivating in students the ability to analyze, evaluate, and interpret a single important topic from a variety of disciplinary perspectives.

Skill Foundations: In this prototype, these are defined as writing, communication, and quantitative skills. In addition to requiring an integrated writing/speaking course in the first year, a C or better would be required in the foundational coursework. Advanced writing is required prior to students taking the writing-intensive coursework in their majors.

Penn State General Education Prototype — ***Chosen Topics***

This prototype reflects one option of how to deliver an integrative curriculum. It also highlights an early skills component as well as a clearly defined intercultural competency component.

**	Cr	Total Credits	Description	Domains/Courses (Credits)	Details/Rules/Restrictions
Skills					Writing and speaking integrated ENGL 15/CAS100 model (C or better required).
	9		Writing Advanced Writing Speaking	GWS	Advanced writing in second year/before W course in major.
	6		Quantification	GQ	3 credits at or above minimum level of numeracy (C or better required); 3 additional credits elsewhere in Gen Ed
		15			
Exploration	12-21		Arts Humanities Social & Behavioral Sciences Health & Physical Activity Natural Sciences	GA GH GS GHA GN	**Between Integration and Exploration:** Minimum of 6 cr each in GA, GH, GS, and GN, and 3 cr in GHA. Maximum of 12 cr in GA, GH, GS, and GN, 6 cr in GHA.
Integration	9-18		Series of courses, each of which may be from a single or multiple domains/disicplines, that address a chosen topic		Topic will be at least 9 credits (and up to 18 cr), and span at least 3 domains, one of which must be GQ. Topic title would be noted on transcript. Credits from a completed interdisciplinary minor may be used to satisfy this requirement. Chosen topics may have a capstone course and must have one course >200-level.
		30			
Intercultural Competency	**(3)**		**US Cultures**	US	US courses must focus primarily (=>75%) on issues of power, privilege, and difference in the US.
	(3)		**International Cultures**	IL	Courses must focus primarily (=>75%) on intercultural contexts and contain learning objectives of intercultural competency.
	(3)		**Global Competency**	GC	All courses may overlap (double count) with other general education or degree requirements, including in the major.
		(9)			
		45	**Total**		

Figure 3: Chosen Topics General Education Prototype

Exploration/Breadth: Students have opportunity for coursework in each of the knowledge domains, and can flexibly distribute this among the domains. Between exploration and integration, students must take coursework in all domains (see details/rules/restrictions).

Cultural competency: This present University requirement (separate from General Education requirements) is maintained for all students (i.e. potentially overlapping with major or General Education requirements, as it does now), but the course content would be elevated to 75% and coursework is expanded by one course to include Global Competency (see page 45).

Integration: In this curriculum prototype, students have the opportunity to learn integrative thinking across domains and to scaffold their learning through either of two options. One would consist of taking a series of three courses that, together, use different perspectives to address a shared organizing topic. (In earlier discussions, this concept was often called a theme.) Each of these courses could be from a single discipline or could be multi-disciplinary, which together span multiple domains and perspectives, and within which there might be a capstone course or project. The topic would be selected by the student from an approved list of possible topics, and would be noted on the student's transcript. The second option is that, as in the first prototype described above, completion of an interdisciplinary minor (at least 18 credits) would fulfill this requirement.

3. Scaffolded Prototype

While both of the previous prototypes provide opportunities for scaffolding, this General Education prototype (Figure 4) is organized around the proposed General Education

Penn State General Education Prototype — ***Scaffolded Learning***

This model is specifically designed around the learning outcomes and explicitly requires scaffolded learning.

**	Cr	Total Credits	Description	Learning Objectives	Details/Rules/Restrictions
Foundations			Taken in the first year to establish a common skill set		
Quantification					
Logical thinking and reasoning	3				
Data analysis and decision making	3			Literacy & Communication	
Communication					
Writing	3				
Speaking	3				
		12			
Core Concerns			Between the core concerns and the explorations courses, students must take 6 credits in each knowledge domain (GA, GH, GS, GN, GHA)	Must take courses with emphasis in all learning objectives Each learning objective represented at least twice	Organized under two frames: Major Global Issues and The Human Condition Each course emphasizes at least 2 learning objectives Core courses build on foundation skills Core includes courses across all domains Level 3: General Education seminar courses discuss and explore ways that Level 1 & 2 gen ed learning contributes to understanding the major
Level 1					
0 - 200 level	9				
Level 2					
200 - 400 level	9				
Level 3					
400 level	6				
		24			
Explorations					Completely free for students to explore new areas of interest
Free choice	9				
		9			
		45	**Total**		

Figure 4 Scaffolded Learning General Education Prototype

learning objectives (associated with "Core Concerns") to provide students with foundational skills, opportunities to explore, and—distinctively for this prototype—a required scaffold for their learning as students progress through the curriculum to the 400 level. This scaffold is organized around the Core Concerns, which are pursued in progressive levels and culminate in 400-level capstone experiences. Breadth is preserved, since between the Core Concerns and the Explorations courses, students must take 6 credits in each knowledge domain.

Foundations: These courses are taken in the first year to establish a common set of skills in quantification and communication. Quantification includes credits in logical thinking and reasoning; and in data analysis and decision-making. Communication includes writing and speaking.

Core Concerns: These clusters of courses address the seven University-wide learning objectives for General Education described in report Part A. Courses in these clusters would be organized under two overarching frameworks: Major Global Issues (e.g. health, energy and food security, poverty, conflict, urbanization, environmental

degradation, sustainability, etc.) and the Human Condition (who am I and why am I here). Each course in a cluster would emphasize at least two of the learning objectives, and within each cluster there would be courses that utilize and build upon the communication and quantification skills developed in the foundation courses. Clusters include courses from all knowledge domains, and are grouped by level.

- **Level 1**: Students select three courses, in either a Major Global Issues or Human Condition cluster, that among them address the seven learning objectives.

- **Level 2**: Students select three courses, in either a Major Global Issues or Human Condition cluster, that among them address the seven learning objectives, but at a more advanced level.

Students could take the Level 1 cluster from Major Global Issues and the Level 2 from Human Condition, or vice-versa, or select all 18 credits from one of these categories to form an interdisciplinary/multidisciplinary minor. (An official minor would include 6 400-level credits, unless that definition changes.)

- **Level 3**: Students select two courses at the 400 level that link the General Edcuation learning objectives and the clusters to their major. In these two senior-level seminars, students (who may have followed very different paths through the "Core Competencies" in Level 1 and Level 2) explore, discover, and share the ways in which those clusters contribute to their understanding of their own major, and the way in which their major informs these larger questions.

Explorations: Flexible credits completely free for students to explore new areas of interest, as long as (see above) the student's total General Education program includes 6 credits in each of the following knowledge domains: GN, GA, GH, GS, GHA.

Online deliberation of these prototypes

Our online deliberation process will be ongoing, open to all members of the Penn State community, and iterative. In September 2014, the three prototypes will be posted on the gened.psu.edu website in a way that does not privilege one over another. Each prototype has a short title, a description, and a rubric outlining the opportunities and tradeoffs of the prototype. The University community will be invited to comment on the details of these prototypes and on their general value—the strengths and opportunities they afford, and the tradeoffs they might involve. There will also be a space for comparative comments among the prototypes and for comments on any other aspect of this Informational Report. The online deliberation process will be facilitated by a member of the Communication Arts and Sciences (CAS) faculty and a graduate student, both with expertise in practices of deliberation on- and offline. All comments will be posted to the website, although facilitators may highlight certain comments to draw out themes and facilitate conversation. The facilitators will also gather qualitative data related to the online deliberative process and will report their findings to the General Education Task Force. Members of the

University community can choose to post anonymously if they do not want their names associated with the content of the comment, and every effort will be made facilitate an open and transparent process of deliberation.

Members of the University community will be invited to comment on the prototypes between September 22nd and October 24th. Recognizing that, as Laura Black puts it, "storytelling enables a kind of perspective taking that is fruitful for deliberation because it allows participants to understand the reasonableness of another's perspective, even during a disagreement,"[39] the General Education website will invite members of the community to tell their Gen Ed Stories. In addition, the facilitators of the deliberation will identify stories when they appear in the process of deliberation, and curate them to the Gen Ed Stories section of the website.

After this initial period of deliberation and storytelling, a qualitative analysis of the comments and stories will be provided by the CAS facilitators to the Gen Ed Task Force for their consideration. Based on the online deliberations and stories, and on the ongoing face-to-face conversations the Task Force will simultaneously undertake, alterations to the prototypes will then be made by the Gen Ed Task Force. Revised prototypes will be posted to the website for further comment in November. A second round of on-line comments and stories will occur through the end of the semester. In January 2015, a second qualitative analysis will be provided to the Gen Ed Task Force by the CAS facilitators to inform the Task Force in preparation of a legislative report(s) (see below).

In addition to online deliberation, scheduled meetings with every campus and college will provide face-to-face opportunities for discussion and feedback (Section XV).

XII. Opportunities and implications of these prototypes

Opportunity: Explicit, Connected Learning

A hallmark of modern college curricula is the structured and repeated facilitation of integrative learning. Institutions and accrediting bodies have been addressing the need to facilitate students' integrative skills for the past several decades. A 2007 publication summarizing the state of the art said, "Campuses are discussing not whether integrative learning will be part of undergraduate learning, but rather how it will be defined, fostered, supported, and assessed."[40] The Task Force team who attended the American Association of Colleges and Universities (AAC&U) Institute on General Education and Assessment[41] reported on the centrality of this principle for any modern General Education program. Research on integrative learning, while suggesting a variety of ways it can be defined and

[39] Black, Laura. "Deliberation, Storytelling, and Dialogic Moments." *Communication Theory* 18 (2008): 93–116.
[40] Huber, Mary T, et al. "Leading Initiatives for Integrative Learning." *Liberal Education* Spring 2007, p. 46-51.
[41] See the report at http://gened.psu.edu/wp-content/uploads/sites/7232/2013/10/Main-AACU-Takeaways.pdf

taught, indicates that students need multiple opportunities to practice thinking across disciplines and in tying together concepts they had not previously connected.

All three prototypes present structured opportunities for students to practice integrative thinking by examining a topic from a variety of disciplinary perspectives. Although exposing students to differences in disciplinary ways of thinking is at the heart of existing distribution requirements at Penn State and elsewhere, students are rarely asked to recognize and make sense of those differences.[42] Some students develop an awareness of the multiple ways of thinking they are asked to practice, and come to see the complementary value of those perspectives, however the University does not currently structure this learning across courses for all Penn State students. Rather, it is left to students' individual inclinations to seek connections among their General Education courses, or not. Providing a structure that prompts and supports students to recognize the different mental operations required from discipline to discipline, the different criteria for evidence, and the different perspectives each discipline offers on a particular topic helps students practice integrative thinking habits. Frequent practice can facilitate students' development of integrative thinking as a habit, enabling them to handle more complex topics in upper level courses and, as graduates, to better meet future challenges.[43] While many major and minors involve integration across disciplines, not all of them do so, and research has emphasized the importance of integration in General Education as well as in a student's major or minor field.

Making the expectation for integration explicit will also help students value and practice this skill. "Students who understand the purposes of the courses they take usually learn more effectively."[6] Clear learning objectives, explicitly linked to skills relevant to students' current and future lives, create perceived value for the educational experience and help students invest in their own learning.[44]

Although the integrative components of the first two prototypes include an option with scaffolding (both have an option for interdisciplinary minors to extend this component of General Education through the 400 level; the Chosen Topics prototype also requires at least one course within integration above the 200 level, which could be a faculty-proposed and led capstone course), the Scaffolded prototype places a stronger emphasis on scaffolding. This prototype requires the building of learning across three levels, encouraging students to engage concepts at progressively greater levels of sophistication as they grow and develop academically. Majors and minors require similar structures because there is educational value in building on prior learning to refine, challenge, and

---

[42] Pace, David and Mittendorf, John. Decoding the Disciplines: Helping Students Learn Disciplinary Ways of Thinking. *New Directions in Teaching and Learning*, Number 98. (2004)

[43] *The Degree Qualifications Profile*. January 2011. The Lumina Foundation for Education. http://www.luminafoundation.org/publications/The_Degree_Qualifications_Profile.pdf

[44] Alley, Richard P. Watchable Wildlife and Demand-Driven General Education. *The Journal of General Education* v.62 no.1 (2013) p.37-42.

apply that prior learning to novel concepts. Scaffolding in General Education thus presents students with additional opportunities to practice integrative skills.

Implication: Budgetary Concerns

Cost is one of the greatest concerns of any curricular change, particularly in changes like those proposed in the integrative components of these prototypes. Because the General Education curriculum remains tightly bound up with major programs in many areas (General Education courses also serve as introductory or as supporting courses for majors), it is difficult to parse out costs specifically associated with General Education from those associated with majors. Nevertheless, the Budget subcommittee of the Gen Ed Task Force has analyzed the cost of delivering the current General Education curriculum at Penn State and has found the main factor driving instructional (salary) costs to be class size. A second important-- but less influential-- factor affecting cost is instructor level. Currently, by delivering the General Education program at the 001-200 level in courses that are often quite large (particularly at University Park), Penn State is able to effectively subsidize the higher cost of upper level courses and majors. It is assumed that class sizes in 300-400 level courses will be smaller than in 001-200 level courses, and that upper-level courses are less likely to be taught by part-time faculty or graduate students. Thus, moving some General Education requirements up to the higher level might entail an increase in the costs of delivering the General Education curriculum.

The Budget Subcommittee of the Gen Ed Task Force will develop specific budget implications for each of the proposed prototypes to inform the deliberation process. The Task Force is committed to continuing to share information on our website gened.psu.edu as the subcommittees and Task Force continue to research and analyze the options for the curriculum. It will also provide a full budget report with any legislative report put forth to the Faculty Senate by the Gen Ed Task Force.

Implication: flexibility (ease of student mobility) concerns

A different type of cost might be if courses have prerequisites, as is now the expectation at the 400 level, students may find their schedules constrained as they would need to take those courses in sequence (first the prerequisite, then the 400-level), and scheduling would be less flexible than now. Further, it may become less feasible to use as many credits from high school AP, CLEP, prior learning, etc., within General Education, as credits from those sources might not accord with scaffolded levels. Advanced standing students, many of whom may bring with them credits that are at the current General Education level, may find that they cannot fill as many General Education categories with those credits and therefore must take more credits at Penn State.

Faculty at some of the smaller campus locations have indicated that the range of available 400-level courses may not be extensive, so that students might find themselves forced to take courses in which they were not interested, or they might seek to come to University Park sooner to have a broader range of upper-level choices. Other faculty have expressed

concerns that they might need to water down their 400-level courses to accommodate students who did not have the preparation expected of majors in that field, as well as dealing with potential growth in the size of these upper-level courses. In the other direction, some faculty who do not now have large upper-level enrollments have pointed out that scaffolding within General Education would be a benefit, as it would bring more students into their upper-level courses and allow the curriculum to expand at that level. Other faculty, who typically teach General Education only at the 100 level, have expressed an interest in developing and teaching advanced General Education coursework.

Opportunity: Provide all students with foundational skills in the first year

Several high profile, national-level efforts have attempted to assure that students across institutions are developing common sets of skills and are reaching comparable levels of competencies. The Lumina Foundation's Degree Qualifications Profile (DQP)[6] and the AAC&U's LEAP Essential Learning Outcomes (LEAP)[45] represent two influential and closely aligned examples for higher education. In particular, the DQP focuses on conceptual knowledge and essential competencies that the Foundation believes all higher education institutions should be helping students to develop throughout their college careers. These common elements present assurances to students, especially those who transfer from one institution to another, that they are able to make timely degree progress. The common elements also provide shared objectives that all higher education institutions should be accountable for providing to students, according to the Lumina Foundation, and a standard by which students can evaluate the relative merit of an institution's educational opportunities. Aligning our General Education with these common standards would facilitate student movement into and through Penn State, and would particularly benefit those who come from non-traditional backgrounds.

Both DQP and LEAP emphasize growth of skills by the early presentation of foundational skills, followed by reinforcement and refinement of those skills at higher levels of the curriculum. In light of this, each of the three prototypes that the Gen Ed Task Force offers in this report includes common learning opportunities in foundational skills, and one (Scaffolded Learning) explicitly requires that these introductory courses occur early in the student's academic career. These foundational courses provide opportunities to even out the variation among prior skill sets and elevate proficiency for all students (as existing Penn State skills courses may also do, but they are not always taken early). If students are presented with early writing, speaking, and quantification experiences, instructors teaching at the 200-level and above can expect to scaffold experiences from a common starting point, and they should be able to challenge students to develop increasingly complex communication and numeracy skills. If instructors can be assured that students have taken rigorous courses on foundational concepts and techniques, instructors can set high standards, and students will be equipped to meet them. For example, the body of

[45] *Essential Learning Outcomes*, Liberal Education & America's Promise. Association of American Colleges & Universities. http://www.aacu.org/leap/essential-learning-outcomes

scholarship around Writing across the Curriculum addresses the benefits of building on foundational skills in writing throughout a student's college career: [46]

> *"…writing is closely linked with thinking and… in presenting students with significant problems to write about—and in creating an environment that demands their best writing—we can promote their general cognitive and intellectual growth….Emphasizing writing and critical thinking, therefore, generally increases the academic rigor of a course."*

Implications: Impacts on students' scheduling

Many first-year students are already scheduling writing and speaking courses. However, not all first-year students are presently being accommodated or choose to take these courses in their first year (see Appendices E and F). To meet the scheduling requirements of delivering 6 credits of foundational writing and communication skills courses in the first year (all three prototypes assume 6 credits or more), an initial increased investment in General Writing and Speaking (GWS) course instructors will be required to ensure that all students can schedule the requisite courses in the first year and to simultaneously deliver the courses to upper-class students who have not yet taken these. Fewer sections will be needed once the transition is completed. An expansion of Penn State's LEAP program (Learning Edge Academic Program for new first-year students) might be necessary to distribute the associated workload or to address the needs of students requiring remediation before they are able to complete the first-year skills requirement.

Early completion of quantification skills courses would also be required with these prototypes. The recent implementation of a new math placement assessment program includes the opportunity for students to review mathematical concepts and re-test. Shifts in enrollments and student success in relevant courses will be studied over the coming year, and the implications for a new General Education curriculum will need to be examined in the context of the new placement and remediation tool.

Requiring quantification and writing courses early may also have implications for degree progress, particularly for students who need review courses before taking introductory courses required in their intended majors. Careful assessment of the impact on student degree progress is a priority for the Task Force as these prototypes are deliberated.

Finally, a related scheduling implication is that if students take more writing, speaking and quantification skills credits in their first year, presumably this will displace something else from their schedules. We will need to consider potential impacts on other general education and major degree courses, especially those that are encouraged to also take early (e.g. world languages), ability for students to make entrance-to-major progress (especially for enrollment controlled majors), and on recommended academic plans.

---

[46] Bean, John. *Engaging Ideas: The Professor's Guide to Integrating Writing, Critical Thinking, and Active Learning in the Classroom*. (2011) John Wiley and Sons, San Francisco.

Opportunity: Enhance learning opportunities for intercultural competence

Each prototype presents students with structured opportunities to develop intercultural competence, in addition to the existing goals of achieving greater understanding of diversity and culture. This component of the General Education curriculum reflects the demands that today's social reality poses to its future citizens.[47] In light of the profound transformations taking place in the modern world, students need to acquire the skills and thinking patterns required of global citizens. Whether they remain in their local communities upon graduation or choose to live and work in remote places, Penn State graduates will be a part of a community more diverse and integrated with the rest of the world than previous cohorts. The current globalization trends refer not only to an unprecedented rate of integration and interdependence throughout the world but also to an enhanced awareness of the challenges that globalization entails. As social problems become much more visible on a global scale, more people become aware of the pressing need for global responses to the existing inequities and injustices in different parts of the world—both in the U.S. and abroad.

The Senate Global Programs Committee, in response to a letter requesting input on this component of the General Education curriculum, stated (May 5, 2014):

> *One of the goals of general education should be the development of students as global citizens. To achieve this goal, a global perspective must be integrated into the curriculum, including both General Education and academic programs. International study and global engagement must be encouraged and supported for all students, both through their courses and programs and through independent exploration. Today, all disciplines and careers are positively affected by including global perspectives – the citizens and countries of the world are truly interconnected. Although international study and/or travel are highly desirable, not all students are able to go abroad due to a variety of constraints such as finances, work or family obligations, and academic programs. Thus, other mechanisms such as working globally through problem design, using distance technologies to communicate with those from other cultures, incorporating international topics within courses, and embedding international travel into General Education courses may be used. For Penn State to be recognized as a global University, the faculty, staff, and students of the University must adopt global engagement as a core value for our teaching, research, and service and outreach.*

Therefore, with a revised General Education curriculum, we have an opportunity to convey to students the importance of two key messages. First, it is critically important that they develop a capacity for understanding and reflecting on the meaning and consequences of global dynamics, as enacted in different local and global contexts (e.g., issues such as inequality and poverty, migration, human rights, religious and ethnic identities and cultural

[47] Galinova, E. (in press). Promoting holistic global citizenship in college: Implications for education practitioners. In Lee, A., & Williams, R. D. (Eds.). *Internationalizing undergraduate education: Critical conversations for 21st century practitioners*. Rotterdam, The Netherlands: Sense.

traditions, global health, sustainability, climate change and environmental protection) for the future of humanity. Hence each of the curricular prototypes contains a proposal to include a new global competence component, with one required course (3 credits) that has a strong focus (at least 75%) on issues of global social and ethical responsibility.

Second, it is just as important for students to be able to function in diverse communities and cooperate on resolving conflicts and tackling global challenges with people very different from them. Successful Penn State graduates need to understand, appreciate, and critically examine multiple cultural perspectives, including their own. They need to develop a sophisticated knowledge of at least one cultural worldview very different from their own, and they need to have the capacity to critically examine deeply engrained conventions of their own cultural background. The social construction of reality, including issues of power, privilege and dominance, is integral to the discussions of these topics. It is also essential that a US cultures component be strong and distinct from international or global competencies. This is reflected in the prototypes as requirements for two courses (6 credits) with a strong focus (75% or more) on developing intercultural competence, whether in U.S. (3 credits) or international contexts (3 credits). In the "Chosen Topic" prototype, these two courses are in addition to the 3 credits of Global Competence above. In the "Modern Literacies" prototype, these competencies are contained with the "social responsibility" and "cultural competency" components, whereas in the "Scaffolded Learning" prototype, these are explicitly contained in the curriculum as one of the seven learning objectives, each of which must be represented at least twice within the "core concerns" coursework.

Implications: Investment in course development and review

While many existing courses likely accomplish these objectives, which are clearly related to the existing US and IL University requirement, others will need to be revised or developed. In some cases, these may be opportunities for faculty to develop courses that speak directly to their research interests. Courses that currently meet the US or IL requirements, but do not meet the proposed new standard of 75% content dealing with diversity or international material, may need retooling to meet the higher content requirements, and some faculty may need access to professional development resources to support development in this area. New courses or modifications to existing courses will require the investment of faculty time, and therefore, come at a cost to competing priorities for faculty and departments.

Further, courses for each of these categories will need to be evaluated for alignment with the new learning objectives and content requirements. Other institutions have approached this type of change by creating expedited processes, implementing rolling review periods, and drawing on a wider array of reviewers than is used in regular instances of curricular review. In Penn State's case, the Joint Diversity Awareness Task Force presents an opportunity for collaboration in aspects of this effort; other groups may also assist, for example for international courses.

Opportunity: Elevate the prominence of social responsibility/ethics in the curriculum

Social responsibility and ethics have increasing importance for all members of society. How students learn about and gain competence in these areas, as well as how they translate them to their lives and actions as members of society, has been of recent interest by the Faculty Senate, which since 2011 has appointed two Task Forces[48] charged to look at academic integrity, a student honor code, and student conduct statements. Most recently, on Sept 9, 2014 the Faculty Senate held a forensic session[49] to discuss Value Statements proposed by the Advisory Council on Continued Excellence. Those Value Statements were informed by the results of the Faculty Senate Task Forces.

Additionally, the Senate Student Life Committee, in response to a letter requesting input on this learning objective in the General Education curriculum (May 13, 2014), stated:

> *Stress three key components of life: ethics, responsible decision-making, and citizenship or civic engagement. Citizenship could in this context mean practicing strategies leading to individual and social well-being. The choice to interpret responsible living as containing citizenship or civic engagement also flows from a core value of the University: preparing students to engage complex issues and express informed opinion through critical thinking, writing, and speech.*
>
> *Important that the courses have as a component ethics and responsible decision making, and which analyze the effect that decisions have on self, others, and the environment. These elements are woven into many courses that are taught at Penn State, but bringing those classes together as a consistent group of courses will imbue students with these values.*

Implications: Course development and revision

Many of the same costs associated with course development and review for ensuring that US/IL courses will meet updated standards and for adding global competency objectives would also apply to strengthening our efforts to integrate social and ethical thinking skills into the General Education curriculum.

Opportunity: Further integrate instructors' research expertise with the educational mission

Many faculty regularly incorporate their research into their courses now. However, the components of the prototypes present new opportunities to explicitly align their General Education course content with their research agendas. For example, a realignment to emphasize development of particular thinking skills may free faculty from covering as many specific topics and allow them to flex content around current innovations coming

---

[48] 2011-2012 Faculty Senate Academic Integrity/Honor Code Task Force; 2012-2013 Faculty Senate Student Conduct Code Task Force

[49] Senate Forensic Report September 2014 "Forensic Report on *Penn State Values* and *The Pennsylvania State University Values and Culture Survey*" http://senate.psu.edu/agenda/2014-2015/sep2014/appe.html

from their fields. Again, this infusion of research perspectives into teaching is not new to Penn State; many existing courses already accomplish this. However, the three General Education curriculum prototypes present new opportunities to explicitly integrate the education and research missions of the University.

In particular, the integrative component, though somewhat different in each prototype, presents opportunities for faculty who are researching particular topics from different disciplinary perspectives (such topics could be from any field, ancient or modern, e.g. ancient empires; technologies of literacy (from parchment scrolls to cell phones); sustainability; materials (from bronze to nanotechnology)) to collaborate, either explicitly through the development of inter- or multi-disciplinary courses or minors, or implicitly through having their courses included in a cluster that constitutes a student's selected "framework" or "chosen topic" for integration.

Implications: Infrastructure and support

Opportunities for instructors to more fully integrate research into their teaching may require additional resources. For example, if courses that do not now include student research projects are going to add such projects, often in ways that reflect the instructor's own research, then additional instructional staff (to permit smaller classes, or discussion groups) may be needed. In other situations, the integration of research might be facilitated by funds for field trips, participation in lab sessions, workshops with external visiting researchers in the instructor's field, etc.

Where the integration of research involves multiple courses, collaboration among faculty in developing courses, frameworks, or shared topics, each will require time investment, although the amount could vary greatly. If new inter- or multi-disciplinary courses are developed, residential or online, a significant investment in course development, design, and review will likely be required, and a support mechanism that creates the space, incentive, and structure for such collaboration is needed. Whether support is for individual instructors, courses, or collaborations, it is crucial for resources to be sustained.

Opportunity: Support faculty development and pedagogy in General Education

Each of the three General Education curriculum prototypes offered here (and indeed any curricular model) offers the opportunity to promote deep (rather than surface) learning. Some students will be self-motivated to pursue learning as deeply as possible, and this is already occurring, but to extend this level of achievement to all students will entail assessments and grading criteria that require students to demonstrate deep learning.[50] Crafting such assessment instruments may require the acquisition of new expertise for some instructors. Supporting faculty assessment expertise is a key component of this curricular review and revision process, and is elaborated in a separate section below.

[50] Huber, Mary T, et al. "Leading Initiatives for Integrative Learning." *Liberal Education* Spring 2007, p. 46-51.

Implication: Class size or instructor-to-student ratio

Some (though not all) forms of deep learning are facilitated by pedagogies that incorporate student engagement in "active learning" (to use a term familiar from our existing General Education program at Penn State). In some courses, the pedagogical implementation of those concepts has been incomplete because instructor-to-student ratios have made it difficult to teach in ways that engage students in writing, discussion, class presentations, teamwork, problem-solving, creative projects, or other activities that demand more than memorization or the ability to choose among a previously determined set of answers. While new forms of pedagogy, including those assisted by technology, may help to bridge this gap in some circumstances, in other circumstances the opportunity to reduce class sizes should be explored, in order to facilitate active-learning pedagogies.

The Task Force's Budget subcommittee will be analyzing possible budget implications that use a range of assumptions about instructor-to-student ratios.

Opportunity: Implement a General Education curricular assessment plan

A curricular assessment plan for General Education would have benefits to students, faculty, and the institution. Explicit learning objectives for General Education would make clear to students the point of this component of their degrees, helping them to commit more fully to the excitement and challenges of engaging with new fields of inquiry, exercising their curiosity in new ways, expanding their worldviews in time and place, encountering multiple value systems, and thinking deeply about complex ideas — whether related to art or zoology or anything in between — that can appear to be disconnected from their immediate career plans.

> *"Taking responsibility for the quality of student learning, not simply degree completion, involves three elements: 1) A clearly articulated, collective conception of the qualities of a college-educated person; 2) Intentional and collaborative faculty-led efforts across educational programs to cultivate those qualities; and 3) Cumulative assessments, across the curriculum and co-curriculum, to determine the extent to which students have achieved the desired learning."*[51]

While those concepts apply to a student's entire educational experience, not only to General Education, nevertheless General Education faculty can use assessments of student learning to inform their teaching, adjust to the needs of students, and facilitate improvement in learning. Students who understand how the ways they are assessed correlate with the value of their educations, and faculty who can use assessment to demonstrate accountability for providing high quality educational experiences can all reinforce a positive public perception of their institution and of higher education broadly.

Our vision for assessment in General Education is elaborated further in a separate section below (see section XVIII).

---

[51] *A Sea Change on Student Learning Assessment: An AAC&U Working Paper*, February, 2012

Summary: Balancing realities

University and campus leaders have consistently emphasized to the Gen Ed Task Force that our guiding priority should be student learning. The Gen Ed Task Force leadership meets regularly with a Deans and Chancellors Advisory Group, who echo this priority and encourage creative and transformative thinking that will enhance Penn State student learning. This advisory group is also concerned with striking a balance between ideals and costs, and the concerns that specific campuses and colleges may have when considering a General Education curriculum revision.

The transactional costs of change are a major concern to the Gen Ed Task Force and the University community. Further, unless resources are provided to make change sustainable beyond an initial transition period, any gains will be only temporary (and if gains are ephemeral, faculty are likely to question whether trying to improve General Education has been worth their time). Although some potential costs have been mentioned in this report, a full identification and examination of the costs associated with each of the three prototypes, or others that may emerge, will be a central component of the Task Force's work to come. Cost implications will need to be considered, and the Task Force includes a Budget subcommittee that will work with other experts to provide estimates. However, both the President and Provost have been clear that the Task Force's recommendations *should be based first and foremost on what is best for our students*.

The Gen Ed Task Force is also explicitly concerned with avoiding impediments to student degree progress or other unintended negative consequences. The public deliberation about General Education and the continuing data-gathering by the Gen Ed Task Force will inform a rigorous analysis of potential impacts on, for example, the articulation agreements that now govern the transferability of credits; the ability for students to explore multiple interests, discover majors, change majors, shift campuses, transfer credits, and make timely degree progress; and internal implications for Penn State colleges, campuses and online programming, etc. Analysis of such impacts will be a major focus of the fall semester's research, consultation, and deliberation.

XII. Key Components

1. Vision for faculty support

For any General Education reform to be successful, significant and sustainable, support for faculty to successfully develop, implement, assess and teach General Education is essential. Faculty support to reform General Education at Penn State at this time is particularly salient due to the length of time since the present General Education program was adopted; the changes in General Education nationwide since then; and the size and complexity of the University. There is also a unique opportunity afforded to Penn State to be a leader in General Education through institutional commitment to General Education research and pedagogy.

Paraphrasing from the AAC&U,[52] "a curriculum is only as good as the pedagogy that supports it." The past year of research and conversation has contributed to a strong sentiment across the Task Force that the need to elevate the profile of the General Education curriculum and the instructors who teach within it will require an infusion of support from the highest levels of the institution.

Some of the support needs identified by the Faculty Subcommittee and at the August retreat include: fostering communication between and collaborations among faculty, especially in supporting internal projects such as collaborative cross-college or cross-location teams pursuing the development of shared courses; facilitating course development; providing development opportunities, including workshops or other events specifically for General Education instructors; supporting research activities focusing on General Education scholarship; providing support with course assessment; and working with the Faculty Senate to guide or conduct assessments of the General Education curriculum. Overall, the Task Force recognizes an opportunity to promote ongoing interdisciplinary and University-wide collaboration in the implementation, coordination, and evaluation of any General Education curriculum approved by Faculty Senate.

During the past year, information about General Education faculty support at other institutions as well as what currently exists at Penn State has been collected and reviewed. Rather than implementing permanent structures, some institutions periodically bring outside groups in for training and development. Consultants are used at initial stages of implementation of curriculum change; teams are sent to institutes elsewhere; summer week-long faculty development sessions are held on campuses in order to launch a new curriculum. However this approach does not allow for on-going campus support. Other institutions merge General Education support into their already established teaching institutes, faculty senate (e.g., UK Core Standing Committee at University of Kentucky) or other faculty committees, or they create new faculty committees to handle the work (e.g Carolina Core Committee, University of South Carolina). However, the tasks of such committees or units within other structures are very limited and do not include the array of faculty development, support, and research/assessment activities that are believed to be necessary to support a revised General Education curriculum at Penn State.

Penn State presently supports teaching and faculty development in several ways, sometimes within Colleges or campuses (e.g. The Leonhard Center in the College of Engineering), and centrally (Schreyer Institute for Teaching Excellence (SITE)). Since General Education is University-wide, the Task Force has focused on options at that level. There is not yet general consensus as to the nature of what a Gen Ed faculty support structure might be, so further research will be conducted by the Gen Ed Task Force in consultation with relevant Senate committees to explore viable options.

---

[52] P. L. Gaston; J. E. Clark; A. S. Ferren; P. Maki; T. L. Rhodes; K. M. Schilling; D. Smith *General Education & Liberal Learning: Principles of Effective Practice* 2010 AAC&U Press; P. L. Gaston, J. G. Gaff *Revising General Education – And Avoiding the Potholes: A Guide for Curricular Change* 2009 AAC&U Press

2. Vision of Student Learning Objectives in a Revised General Education Curriculum

The seven learning objectives described in Appendix A are the result of the deliberative process described in that report and inform the working proposal currently being used by the Gen Ed Task Force. While the identification of learning objectives is a necessary step for a curriculum responsive to that broad concept, the statement alone is of course insufficient for development of a curriculum. Accordingly, discussions of these objectives amongst members of the Gen Ed Task Force, Faculty Senators, and other members of the University community that participated in the August 2014 retreat have suggested several roles that these objectives might play in a revised curriculum, as described in the remainder of this section.

- **The Role of Learning Objectives in Course Design and Students' Programs of Study**

Instructors are best able to design educational opportunities that support development of the competencies underlying an objective when the objective is explicitly identified and intentionally pursued.[53] Students, in addition, can only intentionally achieve an objective if they are made aware of it as such. For these reasons, the Task Force believes that the seven learning objectives should be made visible as follows:

1. Each course that is part of the General Education curriculum will identify learning objectives that will be targeted within that course.
2. The key learning objectives will be explicitly identified on the course syllabus.
3. Instructors will explicitly discuss these objectives with students.

Multiple learning opportunities that scaffold development over time are strongly advantageous for students to develop strong foundational abilities in the areas of the learning objectives, as applied from the work of Vygotsky and Brunner. These opportunities allow for initial exposure to the knowledge, skills, and abilities of a particular objective to be followed by additional occasions for practice, feedback, and more advanced instruction. Sometimes this iterative process, which includes risk taking and opportunities for students to learn from mistakes, takes place within individual courses. For example, courses that teach writing as a process involve practice, feedback, revision, and increasingly complex writing assignments; and some courses with specific prerequisites systematically assess, build upon, and iteratively practice what has been learned in the earlier courses. However, in other courses, scaffolding may not presently be incorporated. While scaffolding is found within majors and minors, the Task Force believes it is also important for achieving the learning objectives of General Education.

The Task Force has discussed, but not reached consensus on, realistic ways to expand scaffolding in General Education and ensure its availability to all students. Two options, among others, have been suggested: (1) the General Education curriculum should include

[53] Banta, T. W., Jones, E. A., & Black, K. E. (2009). *Designing Effective Assessment*. San Francisco, CA: Jossey-Bass.

courses that span academic levels from lower to upper division courses; in higher-level courses, instruction related to the learning objectives would build on the abilities gained in lower-level courses; and (2) the General Education program should require that students complete coursework that addresses each learning objective more than once, perhaps at least three times. For the first of these options in particular, we are awaiting budgetary estimates and other assessments of impact.

- **The Role of Learning Objectives in Assessment**

The Assessment subcommittee of the Gen Ed Task Force has discussed principles that can inform the development of effective practices for assessing student achievement of the seven learning objectives. These principles include:

1. To the degree possible, assessment should be meaningfully integrated with the learning activities of a course.
2. To the degree possible, instructors involved in the teaching of General Education courses should be involved in the design, analysis, and interpretation of assessments.
3. Instructors should be provided opportunities to obtain formative assessment data. Access to course-level data will be restricted to those directly involved in improving the design and delivery of the course, and will *not* be used in any faculty evaluations.
4. Assessment practices must inform the effectiveness of the General Education program as a whole. These evaluations will use institutional level data, aggregated across courses, to evaluate student gains from the start to the end of their studies.
5. Assessment should be based on practices that yield reliable and valid indicators of abilities.

The first two principles combine to outline an assessment plan that includes, but is not limited to, "signature assignments", or assignments that are embedded in the content of a course and require students to use the knowledge, skills, and abilities of a particular learning objective. Accordingly, signature assignments further both the content and General Education course objectives. The Assessment subcommittee recommends that one function of a General Education Faculty Institute be the development of templates for signature assignments that could assess each objective. Instructors would then insert course relevant content into templates.

The result would then be a set of assessments that provide both formative and summative information,[54] addressing the third and fourth principles above. In the context of the General Education program, formative assessment can provide both students and

[54] The purpose of formative assessment is "to improve." The purpose of summative assessment is "to prove." Formative assessment would be used to provide information that could help improve the program while it is in progress and summative assessment would be used to evaluate the program at some final stage, for example, for a report to administrators or other stakeholders.

instructors information about progress toward learning objectives as a student moves through the General Education program. This formative assessment information would come from student scores on signature assignments within specific courses. Information for *summative* assessment is gained by aggregating course level performances for students just beginning work toward a particular objective and comparing these scores to those obtained by students at the end of their studies. This evaluation can help inform the degree to which the whole of the General Education program is effectively supporting student development.

With respect to the fifth principle, the present thinking of the Task Force's Assessment subcommittee is that our General Education assessment should be informed by the Valid Assessment of Learning in Undergraduate Education (VALUE) rubrics,[55] which were developed through a collaborative effort of AAC&U, the State Higher Education Executive Officers' association (SHEEO), and the Multistate Collaborative to Advance Learning Outcomes Assessment (MSC).[56] The overall set of VALUE rubrics is comprised of 16 rubrics that each correspond to a specific learning objective. Amongst these 16 are rubrics that align with the seven learning objectives and components under consideration by the Gen Ed Task Force (See Appendix L for an example and a link to all VALUE rubrics). Each rubric provides a definition of the learning objective and identifies specific, measureable skills and abilities associated with that objective. For instance, the Critical Thinking rubric includes both the abilities to explain issues and to gather evidence. Each ability area is then operationalized in terms that identify specific performance characteristics that correspond to three developmental levels, called Benchmark, Milestone, and Capstone.[57]

We recognize, as previously noted, that not all aspects of a student's learning can be assessed according to these learning objectives, or any other short-run pattern of assessment. Even for short-term purposes, instructors and academic programs may have additional assessment standards (for instance, some expectations may derive from external accreditation agencies) to incorporate in their General Education courses.

XIV. Topics/questions remaining for additional discussion

In Task Force meetings, subcommittee meetings, retreats, and discussions with colleagues across the institution, a number of topics important to the revision process have arisen but have not yet been fully discussed. Some of these topics span all three of the curriculum prototypes in this report, or relate to issues not encompassed by the prototypes. These will be the subject of ongoing deliberations by the Task Force and as we continue to consult with the University community on these issues. The list below is not meant to close off discussion of other topics, and additional items to add to the Task Force's agenda are invited.

---

[55] http://www.aacu.org/value/rubrics/
[56] http://www.sheeo.org/projects/msc-multi-state-collaborative-advance-learning-outcomes-assessment
[57] See http://www.aacu.org/value/index.cfm for more information about the VALUE rubrics.

1) Separation of health and wellness from physical activity. Penn State is the only CIC institution that includes physical activity credits within a required category of General Education. For us, if physical activity is to be a required field, should the credits be listed separately from credits for domain-knowledge courses on health and wellness? Should physical activity be among the Skills areas rather than a domain-knowledge field?

2) Role and timing of advanced writing – at 200 or higher level. What courses should be included, if there is a writing requirement at the 200 or higher level? When should this requirement be scheduled, and how should this requirement relate to the requirement for Writing Across the Curriculum (often called "W" courses) in the student's college or major?

3) World languages. Should the General Education curriculum encourage the study of world languages—for example, should basic/intermediate language be a separate or alternative component within Skills, or should an upper-level writing course within a language be able to substitute for English 202?

4) Course Substitutions. Should the present opportunity for students to reallocate 3 credits within General Education (known as the "3/6/9" pattern), as long as no domain is totally eliminated, be continued? If so, would it need to change in a new curriculum structure?

5) Quantification. Should there be defined subcategories within quantification, such as data and decision-making, and logic and reason? How would these fit in with defining a minimum level of numeracy expected of students?

6) Risk taking. How might the General Education curriculum encourage and incentivize curiosity, risk taking, and building positively upon one's mistakes? Can the Satisfactory/Unsatisfactory grading option be used to encourage risk taking within General Education? (Currently this is not allowed in General Education.[58])

7) Academic rigor, quality control, and excellence. What will ensure the maintenance of high standards and "active learning," especially if changes in the budget model incentivize attracting large enrollments? Should standards exist for domain-knowledge courses—e.g., should humanities courses have a criterion for substantial reading and writing; should science and social science courses require the active use of quantitative skills? Can there be positive incentives for students and faculty that reward excellence in General Education?

8) The total number General Education credits. Should the General Education curriculum remain at 45 credits or should the number of credits be adjusted?

[58] Undergraduate Advising Handbook http://handbook.psu.edu/content/satisfactory-unsatisfactory-grading-system

Currently, the prototypes are all 45 credits for comparison and there have already been some discussions around this possibility (See section XI), but no decisions have been made.

9) First-year Experience. In addition to foundational skills courses, should there be any First-year experience component? What role does the First-Year Experience contribute to the achievement of the proposed General Education learning objectives?

10) Refinement of the Learning Objectives. The Assessment Subcommittee has defined and refined the proposed learning objective, and these remain a work in progress. For example, there is current discussion about including "Power and Privilege" as a learning objective (See Section II). The Gen Ed Task Force invites additional input from the University community on all proposed learning objectives.

There are certainly many other questions about curriculum choices, the details of implementation, and impacts on students, faculty, staff, facilities, support services, and budgets. As we refine the General Education curriculum prototypes and gather input from the University, additional work by the Task Force will focus on the careful examination of factors such as these so that the full implications and logistics are well understood before a final recommendation is made to Senate.

XV. Process for consultation and planned reports moving forward

The two parts (Parts A and B) of this informational report are the beginning of a year-long series of General Education reports to the Faculty Senate and scheduled University events during 2014-2015. This Informational report has presented the background and rationale for why we are examining and revising General Education, presented major issues and three sample curriculum prototypes, and detailed the processes used to solicit input and make decisions. During this academic year, there will be more deliberation and consultation to inform the final curricular recommendations that the Task Force will make to the Faculty Senate.

Opportunities for Comment and Deliberation

During the Fall 2014 semester the Gen Ed Task Force co-chairs will be visiting every campus and college to meet with faculty and advisers, with campus and college leadership, and with Faculty Senators. The schedule for these visits can be found in Appendix L. These visits, along with the visits to campuses and colleges in spring 2014, will provide the Gen Ed Task Force with a great deal of input and ideas for consideration and compromise.

The General Education website (gened.psu.edu) has also been a source of a great deal of input and feedback on General Education (Sections VI and VII). In fall 2014 it will again serve as a universally available platform, for anyone who is interested, to engage in the deliberation of curricular prototypes (see Section XI). Feedback received from the face-to-face meetings and website deliberation will help inform iterations of the curriculum

prototypes during the fall semester and ultimately the final recommendations to the Faculty Senate.

Senate Reports
As we move forward toward final curricular recommendations, the Gen Ed Task Force will consult with groups including standing committees and the student caucus of the Faculty Senate. In particular, the Senate's standing Committees on Undergraduate Education and Curricular Affairs and/or other Senate committees as selected by the Senate officers, will be consulted as iterations are made and consensus is sought on curriculum recommendations. The conversation began with the Senate Committee on Undergraduate Education focusing on learning objectives on September 9th 2014, and will continue in the coming months. We welcome addition input and feedback from the University community on the learning objectives of General Education.

One particularly important and innovative component that has emerged from the General Education discussion is the vision for faculty support (see Section III of this report), presented here as the creation of a General Education Faculty Institute. This component is largely independent of any specific curriculum requirement and will comprise an early set of recommendations to be made to the Faculty Senate. During the Fall 2014 semester, the Gen Ed Task Force will be working with the Senate Committees on Faculty Affairs and Intra-University Relations to draft a proposal on the vision, mission, and goals of the faculty support structure if preferable ideas emerge. We hope to have a jointly sponsored Advisory and Consultative report, jointly sponsored by the Task Force and these two Senate Committees, ready for vote by the Faculty Senate early in the spring. Full implementation of this component will require strong commitment and backing from the administration and it is important that the President and Provost be given our recommendations as soon as possible. As a reminder, for Advisory and Consultative reports, the Senate votes, but in matters such as the establishment of an Institute its vote would be, as the name implies, advisory rather than binding.

As results of the University-wide deliberation process become known, the Gen Ed Task Force will work to propose a curricular model that will become the Task Force's report to the Faculty Senate. This will be a Legislative report, because the Faculty Senate has authority over the curriculum, though implementation, including budgetary support, is a responsibility shared with the administration. At this point, it is expected that this report would be presented to the Faculty Senate during the March meeting.

XVI. Acknowledgements

The Gen Ed Task Force thanks the Office of Planning and Institutional Assessment for their expertise, especially for the effort in compiling and reporting the comments submitted on the gened.psu.edu website. The Gen Ed Task Force thanks the teams of students from the Smeal College of Business and the Presidential Leadership Academy for their contributions to collecting input from students, benchmarking analysis, and constructive ideas, and commends them for their excellent work. We are grateful to the faculty, staff and administrators who have assisted in planning and organizing the meetings with students

and faculty to enable us to discuss General Education face-to-face, including especially the staff in the Faculty Senate office. Finally, we wish to thank our partners in the TLT office for their work on our public dissemination web site, gened.psu.edu.

XVII. General Education Planning and Oversight Task Force Members

Martha Aynardi, Senior Lecturer in Biology, Director of Academic Support and Projects, Penn State Berks (Elected Senator; Senate Council Member; Member of the Senate Committee on Admissions, Records, Scheduling and Student Aid)
Robin Bower, Associate Professor of Spanish, Penn State Beaver (Elected Senator, Chair of the Senate Committee on Intra-University Relations)
Mark Brennan, Professor and UNESCO Chair in Rural Community, Leadership and Youth Development; College of Agricultural Sciences (Elected Senator, Vice-Chair of the Senate Committee on University Planning)
Robert Crane, Professor of Geography; College of Earth and Mineral Sciences
Caroline D. Eckhardt, Professor of Comparative Literature and English; Director, School of Languages and Literatures; College of the Liberal Arts (Elected Senator; Senate Council Member; Senate Liaison to the Graduate Council)
Robb Frederick, Public Information Coordinator, Office of Marketing Communication, Penn State Erie-Behrend
Tanya Furman, Professor of Geosciences; College of Earth and Mineral Sciences; Associate Vice President and Associate Dean for Undergraduate Education
Nichola Gutgold, Professor of Communications, Arts and Sciences; Associate Dean for Academic Affairs of the Schreyer Honors College
Betty Harper, Senior Planning and Research Associate, Office of Planning and Institutional Assessment
Terry Harrison, Earl P. Strong Executive Education Professor of Business and Professor of Supply Chain and Information Systems; Smeal College of Business (Elected Senator, Vice-Chair of the Senate Committee on Outreach)
Krishna Jayakar, Associate Professor of Communications; College of Communications (Elected Senator, Member of the Senate Committee on Faculty Affairs)
James Kasting, Evan Pugh Professor of Geosciences; College of Earth and Mineral Sciences
Patricia Koch, Professor of Biobehavioral Health (Elected Senator; Senate Council Member; Chair of the Senate Committee on Faculty Affairs)
Andrew Lau, Associate Professor of Engineering; College of Engineering
Marie Lindhorst, Advising Program Coordinator; Penn State World Campus
Christopher Long, Professor of Philosophy and Classics; Associate Dean for Graduate and Undergraduate Education; College of the Liberal Arts (Elected Senator; Member of the Senate Committee on Committees and Rules)
Paula Milone-Nuzzo, Professor and Dean; Penn State College of Nursing
Aldo Morales, Professor of Electrical Engineering; Penn State Harrisburg (Elected Senator; Vice-Chair of the Senate Committee on Educational Equity and Campus Environment)
Richard Robinett, Professor of Physics (Elected Senator, Vice Chair of the Senate Committee on Admissions, Records, Scheduling, and Student Aid)

Carlos Rodriquez, Undergraduate Student in Security and Risk Analysis, Representative of the University Park Undergraduate Association

Janet Schulenberg, Co-Chair of the General Education Task Force, Associate Director for Advising, Technology and Curriculum, Division of Undergraduate Studies (DUS Resource, Member of the Senate Committee on Curricular Affairs)

Keith Shapiro, Associate Professor of Art; College of Arts and Architecture (Elected Senator, Member of the Senate Committee on Curricular Affairs)

Norah Shultz, Senior Associate Dean for Academic Affairs & Professor of Sociology, Penn State Abington

Margaret Slattery, Co-Chair of the General Education Task Force, Assistant Professor and Undergraduate Program Coordinator of Biomedical Engineering (Elected Senator, Member of the Senate Committee on Curricular Affairs)

Rachel Smith, University Budget Officer

Jane Sutton, Professor of Communication Arts and Sciences, Penn State York (Elected Senator, Member of the Senate Committee on Educational Equity and Campus Environment)

Patrick Tanner, Director of Student and Enrollment Services, Penn State York

Ann Taylor, Senior Lecturer; College of Earth and Mineral Sciences; Director, John A. Dutton e-Education Institute (Elected Senator; Senate Council Member; Vice-Chair of the Senate Committee on Undergraduate Education)

Peggy Van Meter, Associate Professor of Education

Suzanne Weinstein, Director of Instructional Consulting, Assessment and Research, Schreyer Institute for Teaching Excellence

Mary Beth Williams, Co-chair of the General Education Task Force, Professor of Chemistry; Associate Dean for Undergraduate Education, Eberly College of Science

Kenneth Womack, Professor of English; Senior Associate Dean of Academic Affairs, Penn State Altoona (ACUE Member, Committee on Intra-University Relations)

Careen Yarnal, Associate Professor of Recreation, Park and Tourism Management; College of Health and Human Development (Elected Senator, Member of the Senate Committee on Outreach)

Selected Bibliography

Bok, Derek. *Our Underachieving Colleges: A Candid Look at How Much Students Learn and Why They Should Be Learning More*. Princeton: Princeton University Press, 2006.

Gaston, Paul L. et al. *General Education & Liberal Learning: Principles of Effective Practice*. Association of American Colleges and Universities, 2010.

Gaston, Paul L., and Jerry G. Gaff. *Revising General Education- And Avoiding the Potholes: A Guide for Curricular Change*. Washington, D.C.: Association of American Colleges and Universities, 2009.

Guskin, A. E. "Restructuring to Enhance Student Learning (and Reduce Costs)." *Liberal Education* 83.2 10–19.

Hart Research Associates. *Learning and Assessment: Trends in Undergraduate Education; A Survey Among Members of the Association of American Colleges and Universities*. Washington, D.C.: Hart Research Associates, 2009.

Lattuca, Lisa R., and Joan S. Stark. *Shaping the College Curriculum: Academic Plans in Context*. second. San Francisco, CA: Jossey-Bass, 2009.

Miller, Gary E. *The Meaning of General Education: The Emergence of a Curriculum Paradigm*. New York: Teachers College Press, Teachers College, Columbia University, 1988.

National Panel on American Commitments. *The Drama of Diversity and Democracy: Higher Education and American Commitments*. Washington, D.C.: Association of American Colleges and Universities, 2011.

Sternberg, Robert J., Jeremy Penn, and Christie Hawkins. *Assessing College Student Learning: Evaluating Alternative Models, Using Multiple Methods*. Washington, D.C.: Association of American Colleges and Universities, 2011.

Study Group on the Conditions of Excellence in American Higher Education. *Involvement in Learning: Realizing the Potential of American Higher Education: Final Report*. Washington, DC]: National Institute of Education, 1984.

The National Leadership Council for Liberal Education & America's Promise. *College Learning for the New Global Century*. Washington, D.C.: Association of American Colleges and Universities, 2007.

---. *Five High-Impact Practices: Research on Learning Outcomes, Completion, and Quality*. Washington, D.C.: Association of American Colleges and Universities, 2010.

---. *The LEAP Vision for Learning: Outcomes, Practices, Impact, and Employers' Views*. Washington, D.C.: Association of American Colleges and Universities, 2011.

The National Task Force on Civic Learning and Democratic Engagement. *A Crucible Moment: College Learning & Democracy's Future*. Washington, D.C.: Association of American Colleges and Universities, 2012.

University of California Commission on General Education in the 21st Century. *General Education in the 21st Century*. Center for Studies in Higher Education, University of California, Berkeley, 2007.

Zelizer, Barbie, ed. *Making the University Matter*. New York: Routledge, 2011.

Appendices

Appendix A. Proposed Key Components and Definitions of the Learning Objectives for General Education at Penn State

Communication is the oral, written, and visual sharing or exchange of information, news, or ideas. Effective communication allows for the building of trust and respect, as well as environments where creative ideas and problem solving flourish.

Critical and analytical thinking refers to a habit of mind characterized by the ability to comprehensively explore issues, ideas, artifacts, and events before accepting or formulating a conclusion. It "is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action. In its exemplary form, it is based on universal intellectual values that transcend subject matter divisions: clarity, accuracy, precision, consistency, relevance, sound evidence, good reasons, depth, breadth, and fairness."[59]

Integrative thinking involves the ability to synthesize knowledge across multiple domains, modes of inquiry, and perspectives, as well as the ability to identify linkages between existing knowledge and new information to formulate solutions to complex problems or create new understanding. Individuals who engage in integrative thinking are able to transfer knowledge to complex situations within and beyond the university.

Global and intercultural competence . Global competence is being aware that we are part of a global community, and that different countries and cultures have different perspectives; understanding global processes, and developing the skills necessary to function in a global society. Intercultural competence includes the ability to relativize one's self and value others; knowledge of the rules for individual and social interactions in one's own and other cultures; the ability to interpret, explain, and relate events and comments from another's culture to one's own; the ability to use existing knowledge, attitudes, and skills in cross-cultural interactions; and the ability to use perspectives , practice, and products in one's own cultures and in other cultures to make evaluations. [60]

[59] The National Council for Excellence in Critical Thinking, http://www.criticalthinking.org/pages/defining-critical-thinking/766

[60] Byram, M. (1997). Teaching and assessing intercultural communicative competence. Clevedon, England: Multilingual Matters.

Creative thinking is both the capacity to combine or synthesize existing ideas, images, or expertise in original ways and the experience of thinking, reacting, and working in an imaginative way characterized by innovation, divergent thinking, and risk taking.

Literacy refers to the "ability to identify, understand, interpret, create, communicate and compute using printed and written materials associated with varying contexts. Literacy involves a continuum of learning in enabling individuals to achieve their goals, to develop their knowledge and potential, and to participate fully in their community and wider society".[61] Key literacies include quantitative, information/technology, intercultural, aesthetic, and scientific.

Social responsibility and ethical reasoning include the ability to recognize and value one's role in the creation and maintenance of safe, equitable, and thriving communities as well as the self-knowledge, leadership, and advocacy skills need to support of this role.[62] In addition, it is the ability to assess one's "own ethical values and the social context of problems, recognize ethical issues in a variety of settings, describe how different ethical perspectives might be applied to ethical dilemmas and consider the ramifications of alternative actions."[63]

[61] United Nations Educational, Scientific, and Cultural Organization
[62] Adapted from Northwestern University Division of Student Affairs
[63] AACU&U, http://www.aacu.org/value/rubrics/ethicalreasoning.cfm

Appendix B. Penn State's Current General Education Program and Domain-Specific Objectives

Penn State Current General Education Program

	Total Credits	Description	Domains/Courses (Credits)	Details/Rules/Restrictions
Skills *help develop quantitative and communication skills.*	15	Writing/Speaking	GWS (9)	
		Quantification	GQ (6)	
Distribution *provide a broad overview of the world in which we live.*	30	Arts	GA (6)	3-6-9 for GA, GH, GS
		Social & Behavioral Sciences	GS (6)	World Language Substitution
		Humanities	GH (6)	200- to 400- level substitution
		Health & Physical Activity	GHA (3)	
		Natural Sciences	GN (9)	
Integration	0			
Intercultural Competancy	0			
University Requirements *help introduce students to the scholarly community of the University.*	1-3	First-Year Engagement		Can be transferred among/between any college/campus.
provide opportunities to increase understanding of the relationship between people of different cultures and widen international perspective.	6	US Cultures	US (3)	25% course content required for US/IL designation
		International Cultures	IL (3)	May also count as major, gen ed or elective courses
further enhance writing skills.	3	Writing Across the Curriculum	W, M, X, Y (3)	Typically courses in the major or college

Domain-Specific Objectives taken from the Faculty Senate Guide to Curricular Procedures

Criteria for determining whether a course meets the Skills objectives of General Education

WRITING/SPEAKING (GWS)
The objective is for students to communicate information clearly and set forth their beliefs persuasively both orally and in writing. In particular, they must be sufficiently proficient in writing, such that their expository prose meets the expectations of educated readers in both form and style. Gaining communication skills in a natural language or languages other than English may be incorporated as part of the objectives of communications. (Senate Agenda, 4-30-85.)

In the review of the course proposal the General Education subcommittee will examine whether the proposal meets the general General Education course criteria stated above and in addition shows how the course will:

1. teach students to organize materials in a logical and clear manner.
2. teach students to write clearly.
3. teach students to write proficiently with respect to form and style.
4. teach students to express ideas orally in a logical and clear manner.

5. provide constructive criticism of the efforts of students to meet the General Education objectives of the Writing/Speaking Area.
6. assess the degree to which its stated Writing/Speaking General Education objectives are met.

QUANTIFICATION (GQ)
The objective is for the students to work with numbers so as to measure space, time, mass, forces and probabilities; to reason quantitatively; and to apply basic mathematical processes to daily work and everyday living. (Senate Agenda, 4-30-85)

In the review of the course proposal the General Education committee will examine whether the proposal meets the general General Education course criteria stated above and in addition shows how the course will:

1. teach students to reason quantitatively.
2. teach students to measure probabilities.
3. apply basic mathematical principles and processes to practical problems of day-to-day living.
4. provide opportunities for students to formulate informed judgments based on quantitative reasoning.
5. assess the degree to which its stated Quantification General Education objectives are met.

Criteria for determining whether a course meets the General Education objectives of the Knowledge Domains for which it is intended.

General Education courses in the Knowledge Domains may be either courses that cover an area of knowledge of a field of study in a broad context or courses that treat a certain topic or field of study in greater depth or detail.

HEALTH AND PHYSICAL ACTIVITY (GHA)
Courses will focus on the theory and practice of life span wellness and fitness activities, and on the knowledge, attitudes, habits, and skills needed to live well. Courses are expected to promote an active and healthful lifestyle and are understood to include such diverse topics as diet, exercise, stress management, the wise use of leisure time, alcohol consumption and drug use, sexual health awareness, and safety education. Courses may be knowledge-focused or practice-focused or integrated in any manner. Theory-focused courses are understood to emphasize the transmission of knowledge about some aspect of healthful living. Practice-focused courses are understood to emphasize attitudes, habits, and skills needed to engage in healthful living. Traditional dance, exercise, and sport activity classes are understood to meet the practice-focused criterion if they will promote healthful living across the life span.

In the review of the course proposal the General Education committee will examine whether the proposal meets the general General Education course criteria stated above and in addition shows how the course will:

1. teach students to achieve and maintain good health.

2. promote an active and healthful lifestyle.
3. transmit knowledge about some aspect of healthful living, when emphasizing theory.
4. develop attitudes, habits, and skills needed to engage in healthful living and promote healthful living across the life span, when emphasis on practice (dance, exercise, and sport activity).

NATURAL SCIENCES (GN)
The goal of the Natural Sciences is to reveal the order, diversity, and beauty of nature and in so doing enable students to develop a greater appreciation of the world around them. The objective of the Natural Sciences is to understand the nature of science through exposure to the broad divisions of science--physical science, biological science, earth science, and applied natural science. The students should know how to acquire scientific factual information, to use scientific methodology and to develop an appreciation of the natural world.

All divisions of Natural Science employ inductive reasoning and establish theories and laws of nature based on observation, and deductive reasoning to draw conclusions based on these theories and laws. Such reasoning is applied to the study of both non-living and living matter. Students should gain an understanding of how scientists reason and how they draw conclusions. (Senate Agenda 4-30-85)

In the review of the course proposal the General Education committee will examine whether the proposal meets the general General Education course criteria stated above and in addition shows how the course will:

1. broadly survey the existing knowledge in the discipline.
2. develop an understanding of the inductive reasoning process and develop a student's ability to reason inductively.
3. develop an understanding of the deductive reasoning process and develop a student's ability to reason deductively.
4. include, if appropriate, laboratory work.
5. relate its field of study to other fields of the natural sciences.
6. assess the degree to which its stated Natural Sciences General Education objectives are met.

ARTS (GA)
Students should understand and appreciate some of the more important creative works, traditions, literature and history of the arts and architecture. The student should recognize the comprehensive role of arts and architecture as an expression of the cultural values of a society and the need to preserve these expressions for the benefit of future generations.
Students should recognize aesthetic values as an integral part of society's essential need and gain lifelong benefits through the acquisition and appreciation of arts-related skills. Students should be conversant with the terminology, techniques, attitudes, ideas and skills which comprise the arts areas so as to understand the approaches to human existence and distinguish among the arts. (Senate Agenda, 4-30-85)

In the review of the course proposal the General Education committee will examine whether the proposal meets the general General Education course criteria stated above and in addition shows how the course will:

1. develop an understanding of creative works of arts and architecture.
2. develop an understanding of the historical developments in arts and architecture.
3. provide an opportunity for students to comprehend the role of arts and architecture as an expression of the cultural values of a society.
4. help students become conversant with the terminology, techniques, and ideas that comprise the Arts Area.
5. lead students to a recognition of aesthetic values.
6. relate its field of study to other arts disciplines.
7. assess the degree to which its stated Arts General Education objectives are met.

HUMANITIES (GH)

The objective of humanistic studies is to direct students toward interpretation and evaluation for the sake of a more significant form of participation in reality, rather than in the direction of methodologies for the technical manipulation of natural and cultural phenomena. Humanistic studies are divided into four categories: (1) literature, (2) history and culture, (3) advanced language, and (4) philosophy.

The study of the Humanities should develop competency in interpretive understanding of the human condition and of the values inherent in it. This interpretive understanding should evolve into the development of insights and a critical evaluation of the meaning of life, in its everyday details as well as in its historical and universal dimensions. Through this development students should acquire knowledge of and concern for the humanistic values which motivate and inform all humanistic studies.

In literature, students should achieve these objectives through the study of works in which the human condition is presented and evaluated through aesthetic means. In the study of Western and non-Western culture and history, the student should gain access to various human traditions and their changes through the course of time. In studies of the development, structure, and use of language, students will probe the foundations of communication and thought and become aware of the scope and limitations of human communication. In philosophical studies, students will encounter philosophical and religious concepts and traditions which attempt to bring ultimate sense to human existence. (Senate Agenda, 4-30-85)

In the review of the course proposal the General Education subcommittee will examine whether the proposal meets the general General Education course criteria stated above and in addition shows how the course will:

1. develop broad, coherent overviews of major cultural or ideological currents throughout history.
2. develop emphases on important figures, ideas and events which influence the values of different societies.
3. develop competence in interpretive understanding of the human condition and of the values inherent in it.

4. lead the student to an appreciation of aesthetic values.
5. teach the student techniques for the objective evaluation of readings and the formulation of clear and valid responses.
6. assess the degree to which its stated Humanities General Education objectives are met.

SOCIAL AND BEHAVIORAL SCIENCES (GS)

The objective of the Social and Behavioral Sciences is an understanding of the diverse personal, interpersonal, and societal forces which shape people's lives and to approach these subjects through the concepts, principles and methods of scientific inquiry. The general goal is a theoretical understanding of the interrelationships of the determinants of the organization of human behavior. Students should be introduced to the scientific analysis of: (1) the forms, practices, and theories of politics; (2) the nature and operation of economic analysis; (3) the interrelationships of social institutions; (4) the dynamics of individual and group behavior and change; and (5) the processes and functions of human communication. Through the application of the methodologies of the Social and Behavioral Sciences, students should develop an understanding of the multiple nature of causality in social settings. The Social and Behavioral Sciences require a comprehensive, integrative, empirical and theoretical view of the social world. (Senate Agenda, 4-30-85)

In the review of the course proposals the General Education subcommittee will examine whether the proposal meets the general General Education course criteria stated above and in addition shows how the course will:

1. broadly survey the existing knowledge in the discipline.
2. develop the student's understanding of the scientific methodologies of social and behavioral sciences.
3. develop an understanding of the multiple nature of causality in social settings.
4. relate its specific field of study, where appropriate, to other areas in the social and behavioral sciences.
5. lead the student to an integration of the empirical knowledge and theoretical views of the social world.
6. assess the degree to which its stated Social and Behavioral Sciences General Education objectives are met.

Appendix C. LEAP Essential Learning Outcomes

The Essential Learning Outcomes

Beginning in school, and continuing at successively higher levels across their college studies, students should prepare for twenty-first-century challenges by gaining:

Knowledge of Human Cultures and the Physical and Natural World

- Through study in the sciences and mathematics, social sciences, humanities, histories, languages, and the arts

Focused *by engagement with big questions, both contemporary and enduring*

Intellectual and Practical Skills, including

- Inquiry and analysis
- Critical and creative thinking
- Written and oral communication
- Quantitative literacy
- Information literacy
- Teamwork and problem solving

Practiced extensively*, across the curriculum, in the context of progressively more challenging problems, projects, and standards for performance*

Personal and Social Responsibility, including

- Civic knowledge and engagement—local and global
- Intercultural knowledge and competence
- Ethical reasoning and action
- Foundations and skills for lifelong learning

Anchored *through active involvement with diverse communities and real-world challenges*

Integrative and Applied Learning, including

- Synthesis and advanced accomplishment across general and specialized studies

Demonstrated *through the application of knowledge, skills, and responsibilities to new settings and complex problems*

Note: This listing was developed through a multiyear dialogue with hundreds of colleges and universities about needed goals for student learning: analysis of a long series of recommendations and reports from the business community; and analysis of the accreditation requirements for engineering, business, nursing, and teacher education. The findings are documented in previous publications of the Association of American Colleges and Universities: *Greater Expectations: A New Vision for Learning as a Nation Goes to College* (2002), *Taking Responsibility for the Quality of the Baccalaureate Degree* (2004), and *College Learning for the New Global Century* (2007). For further information, see www.aacu.org/leap.

LEAP

Appendix D. Structures of Selected General Education Programs at Other Institutions: Benchmarking Regarding Thematic Clusters

This chart represents the results of a benchmarking effort, related specifically to theme-based General Education, undertaken by a working group of the Task Force's Themes and Explorations Subcommittee during Fall 2013. It includes only one of the CIC institutions (our usual benchmarking peers) as we did not find theme-based General Education programs at the others.

Institution	Structure	Comments
Appalachian State Liberal Arts College 18,000 students	4 "perspectives" Multiple themes in each Perspective. 1 theme from each perspective In each theme--2-3 courses from two different disciplines.	Faculty must demonstrate integration, e.g.: team teaching, regular meetings; learning communities; paired discussion sessions
Arcadia University Private University 4,000 students	4 theme-based areas of inquiry (more like "domains" theme (domain) classes and skills classes (skills include crossing boundaries, modern languages, quantitative reasoning, visual literacy and writing) Plus integrative experiences (first year seminars, global connections, university seminars)	Capstone in the major
Brigham Young University 27,191 students	11 "Mosaics" 4 classes, one from each of 4 general education requirement categories	
California State Univ. Chico 15,375 students	1) Foundation -- Skills and natural science. 2) American Institutions -- U.S. history/U.S. govt. 3) Pathways -- 10 broad themes. Students are not required to complete lower division work in a single Pathway. Must complete upper division work in one	18 units lower division 9 units upper division All Pathways have one or more capstone course. Students required to take a capstone & encouraged to take it last.

	Pathway	
California State Univ. LA 21,000 students	9 themes Each theme includes courses from natural science/math; social science; humanities	Lower division - domains Upper division - themes Can't be counted for major
Grand Valley State Liberal Arts 24,000 students	6 broad "Issues" 2 courses from one "issue"	
Hawaii Pacific University Private, non-profit ~6,300 undergraduates	Built around program objectives and student learning outcomes: 3 components: common core; cross-theme requirement; upper division gen ed requirement. 3 themes and 5 categories. Themes are not topical -- just a way of grouping categories for a 3x5 matrix. Students pick one course from each element in the matrix. Cross-theme courses provide skills that cross several areas and may double count with one of the categories.	No evidence to suggest integration. ower and upper division component. Upper division: Research and Writing; Citizenship. Citizenship requirement can be met by a Global Citizenship course or a service-learning course.
Portland State 30,000 students	14 thematic clusters. Year-long freshman inquiry course. Sophomore -- take 3 different "inquiry" courses. Pick one for: upper division 3 course cluster	All upper division inquiry clusters include a capstone -- interdisciplinary teams working on a problem in the Metropolitan area. Cluster courses can't be counted for major
Santa Clara University Jesuit Catholic University 5,435 students	12 "Pathways" 4 courses from one Pathway max 2 courses in the same discipline, Max 1 foundation (first year) course	All levels, but not necessarily progressive

University of California, Berkeley Public University ~26,000 undergraduates	No themes just a breadth requirement, but some integration through "Big Ideas" courses. Big Ideas courses not required but satisfy breadth requirement: 2 or more professors from different disciplines teaching a single course around a "big idea"	
University of California, Davis Public Research institution, ~35,000 students	Two components: Topical Breadth and Core Literacies. Breadth: 52 Units; core Literacies: 35 Units. Most courses carry units in one of these areas, so the requirement can be satisfied by taking General Education or Major classes.	No formal mechanism for integration, but large potential to integrate General education and the major.
University of Dayton Catholic University	9 thematic clusters. Each cluster contains at least three courses from three different domains of knowledge (6 domains) Select a cluster after taking the Humanities Base (first year skills-based courses)	Beginning in sophomore year
University of Minnesota-Twin Cities Land Grant (CIC) ~52,500 students	Two components: Distribution over domains (23 credits). Themes (12 credits). Students satisfy four of five themes: civic life and ethics; diversity and social justice in the US; environment; global perspectives; technology and society	No linkages and no integration

University of North Carolina-Charlotte Research institution ~26,000 students	Fundamental Skills; Inquiry into the Sciences, Communications Skills and "Themes of Liberal Education. Themes classes (12 credits) are individual courses in four key areas of learning: arts and society, the Western historical and cultural tradition, global understanding, and ethical and cultural critique.	Arts and Society and Ethical Issues and cultural critique both give a choice of 1 out of 5 courses. The other two themes each have multiple sections of a single course. No integration -- but something similar to a common core.
University of Rochester Private University ~6,000 undergraduates	Clusters of related classes within humanities; social sciences; and natural sciences and engineering. Students select a major in one area and complete a cluster of 3 or more classes in each of the other two areas	

Appendix E: Data on ENGL 015 and 202 Enrollments

Over 80% of students have taken ENGL 015 or ESL 015 by the end of their 3rd semester

Cumulative Enrollment by Semester		**2013-2014**		**2012-2013**		**2011-2012**		**2010-2011**		**2009-2010**	
Course	**Semester Standing**	**02**	**03**	**02**	**03**	**02**	**03**	**02**	**03**	**02**	**03**
ENGL 015	Rhetoric and Composition	60.9%	87.1%	59.4%	85.4%	59.7%	86.3%	60.1%	86.8%	59.4%	85.8%
ESL 015	English as a Second Language Composition for American Academic Commun-ication II	50.4%	83.7%	55.2%	84.8%	57.2%	82.6%	59.6%	85.3%	55.6%	81.8%

Around 65% of students complete their ENGL 202A, B, or D requirements by the end of their 7th semester. However, students enrolled in ENGL 202C tend to take the course in later semesters.

Cumulative Enrollment by Semester		**2013-2014**		**2012-2013**		**2011-2012**		**2010-2011**		**2009-2010**	
Course	**Semester Standing**	**06**	**07**	**06**	**07**	**06**	**07**	**06**	**07**	**06**	**07**
ENGL 202A	Social Sciences	49.6%	67.4%	47.9%	67.8%	51.0%	68.5%	51.5%	71.0%	49.5%	68.0%
ENGL 202B	Humanities	41.3%	66.9%	43.6%	67.0%	46.5%	68.4%	46.0%	67.8%	48.5%	67.3%
ENGL 202C	Technical Writing	39.9%	52.7%	38.9%	51.4%	46.3%	61.2%	38.3%	51.9%	36.9%	51.3%
ENGL 202D	Business Writing	48.2%	65.4%	45.9%	60.3%	44.9%	55.9%	45.9%	57.7%	46.3%	55.3%

Appendix F. Data on CAS 100 Enrollments

CAS 100 Students and Their Semester Standing – All PSU

Student Counts	SU11	FA11	SP12	SU12	FA12	SP13	SU13	FA13	Total
FR	797	941	700	763	807	621	761	938	6328
SO	570	2986	2625	474	2769	2433	485	2695	15037
JR	541	1589	1973	503	1376	1853	479	1631	10025
SR	361	826	863	394	801	835	409	742	5231
5th	157	307	541	147	323	545	155	357	2532
GR		4	2				1	1	8
Non-Degree	151	246	231	145	185	196	133	177	1464
Total	2577	6879	6935	2426	6361	6483	2423	6541	40625

From the Central Course Scheduling Committee June 2014. This data comes from the warehouse transcript and semester tables. It was pulled on March 17, 2014. The criteria were all students taking some version of CAS 100 at Penn State during the specified semesters. All course statuses, including withdrawals and late drops, are represented in these counts.

Appendix G. Meetings held by Members of the General Education Task Force with Students

The Council of Commonwealth Student Governments January 25, 2014
PS Mont Alto February 3, 2014
PS York February 7, 2014
PS New Kensington February 10, 2014
PS Shenango February 10, 2014
PS Beaver February 11, 2014
PS Greater Allegheny February 11, 2014
PS Harrisburg February 19, 2014
PS Lehigh Valley February 20, 2014
PS Erie February 25, 2014
PS Berks February 26, 2014
PS Brandywine February 27, 2014
PS Abington Students February 27, 2014
PS Altoona Students February 28, 2014
PS Dubois Students February 28, 2014
PS Wilkes-Barre March 6, 2014
DUS Student Leaders March 19, 2014
PS Hazleton March 21, 2014
University Park Undergraduate Association Academic Affairs Committee Focus Group March 26, 2014
DUS Students April 1, 2014
Schreyer Honors College Student Focus Group April 8, 2014
International Students Focus Group April 10, 2014
Adult Learner Focus Group April 11, 2014
World Campus Student Focus Group April 11, 2014
Information Sciences and Technology Student Focus Group April 14, 2014
UP Nursing Students April 16, 2014
PS Worthington-Scranton April 21, 2014
Smeal College of Business Student Focus Group April 24, 2014
Engineering Student Focus Group April 24 and 25, 2014
Council of Commonwealth Student Governments Focus Group April 26, 2015
Eberly College of Science Student Focus Group April 29, 2014
Agricultural Sciences Student Focus Group April 29, 2014
PS Schuylkill April 29, 2014
Earth & Mineral Sciences Student Focus Group April 30, 2014
College of Education student focus group: May 1, 2014
College of Communications student focus group: May 1, 2014
College of Liberal Arts student focus group: May 24, 2014

Appendix H. Deliberation Guide Used in University Park Student Focus Groups

GenEd Matters

gened.psu.edu| @PSUGenEd | #PSUGenEd

DELIBERATION GUIDE

Framing the GenEd Discussion

The General Education Task Force (GETF) has been charged with revising the current general education curriculum and has decided that a theme-based approach will best fulfill that charge. But the specific shape this curriculum takes will depend on a shared vision of General Education. In order to facilitate thoughtful exchange about the shape of General Education at Penn State, the GETF is adopting the Kettering model of public deliberation that has been widely used in their National Issues Forums (www.nifi.org).

Ultimately, the faculty will decide upon the shape of General Education at Penn State, but those decisions and the work of the Task Force ought to be supported and directed by collective deliberation.

The GenEd Deliberation Guide is designed to stimulate public deliberation on the values that should inform decisions about general education at Penn State. We make sound judgments by weighing the likely consequences of various options for action against the values we hold dear.

The GenEd Deliberation Guide articulates three General Education options, each weighted in a slightly different way to emphasize one of three approaches to General Education. For deliberative purposes, we ask people to advocate for each option and to recognize the opportunities they provide and the drawbacks they bring. We will ask participants to vote before the deliberation begins and then again afterwards. These options are crafted to foster deliberative discussion, not as examples of the final curriculum that will be proposed.

The Guide identifies what is most valuable in each option. It also presents the tensions between options that arise because different people value different things. The Kettering framework is designed to enable people to work through these tensions in order to identify a common set of values capable of guiding decisions and action.

GenEd Matters
gened.psu.edu| @PSUGenEd | #PSUGenEd
DELIBERATION GUIDE

Facilitator's Guide

1. Introduce yourself and read the *Framing the General Education Discussion* page to the group.
2. Review options 1, 2 and 3 based on the first page of the *Guide.*
3. Baseline Polling:
    a. Do you currently have a 'strong preference' for any of the 3 options? Strong Preference vs. No Strong Preference (record results)
    b. If you HAD to pick one at this point, which would you pick? Vote on Option 1, Option 2, Option 3 (record results)
4. Start by asking the group to develop the **best** arguments for Option 1.
5. Give them 5 minutes to discuss with partner.
6. Give them 5 minutes to report out to the group.
7. Repeat step 4-6 for options 2 and 3.
8. Frame a general discussion: remind the group to stay focused on "What would I do?" Invite them to be critical of other options, but stay focused on possible solutions.
    a. You might prompt them with language: It is OK to say, "I really like this option, except for this problem… Would they consider…. Instead?"
    b. As discussion develops, look for opportunities to highlight broader questions as they emerge, issues like engaged scholarship, study abroad, international or other US cultures, ethics, etc.…
    c. If one option seems to be winning the day, prompt the group to marshal the best argument against it.
9. Harvesting: "Is there anything you have been thinking in this discussion that has not come up yet?"
10. Final Polling:
    a. "Do you now have a 'strong preference' for any of the 3 options?" Strong Preference vs. No Strong Preference (record results).
    b. "If you HAD to pick one at this point, which would you pick?" Vote on Option 1, Option 2, Option 3 (record results)
11. Visit the website: gened.psu.edu and fill out the information:
    a. Baseline polling results.
    b. Brief description of ideas and themes that emerged.
    c. Specific suggestions of note.
    d. Final Polling

GenEd Matters

gened.psu.edu| @PSUGenEd | #PSUGenEd

DELIBERATION GUIDE

General Education at Penn State

What values should shape our curriculum?

General education impacts all aspects of the Penn State community, but views differ as to the values it should prioritize and the role it plays in a Penn State education.

Some understand General Education primarily as **an opportunity for students to broaden their horizons and discover unknown interests**; others say General Education should help students **integrate knowledge from a variety of disciplines into a coherent worldview** that will enable them to make informed decisions; a third view is that General Education should **give students the communication skills and qualifications experienced outside of the classroom** they need to succeed in a 21st century economy.

Each of the options below is designed to emphasize one of these values over the other.

The question is: What values should be priorities in our General Education curriculum at Penn State?

GenEd Matters
gened.psu.edu| @PSUGenEd | #PSUGenEd
DELIBERATION GUIDE

OPTION 2: Help you see the interconnectedness among disciplines

Option	What might be done?	Consequences & Tradeoffs
General Education is not simply about learning facts, but bringing knowledge from multiple disciplines and perspectives to bear on a singular theme or concept. In today's collegiate environment, students need to be able to draw on theories from disparate fields and articulate a critical analysis before moving forward and making decisions that will generate success. While these themes may be set in contemporary times, the process of integrating knowledge and defining new pathways for positive progress are timeless. The centerpiece of this approach is a single, integrated, interdisciplinary theme that will offer students an opportunity to investigate a focused topic from a multidisciplinary perspective over the course of their college careers. A capstone experience would allow students to observe and articulate synergies from their learning in various courses over all four years of study.	Faculty could collaborate to create new interdisciplinary course groupings and multidisciplinary themes that extend beyond the introductory level, thus giving greater depth to the general education experience.	If a 400-level capstone course is adopted, the University would need to find a way to offset costs.
	The University could create a unified set of learning outcomes for increased rigor and better assessment.	The logistics of a heavily theme-based curriculum would be difficult to manage at scale and the result could be decreased flexibility for students as they work to complete their degrees.
	Themes could focus on issues of deep and lasting social and political relevance.	Students might have difficulty completing themes that take up such a high percentage of the curriculum.
	Student s would learn how to bring different disciplinary perspectives to a specific topic or issue.	Students who aren't at University Park may not have many choices for themes due to a limited number of faculty at those locations. Alternatively, the University may have to spend a great deal of money to hire new faculty to teach these courses.
	Faculty research could be integrated into the General Education curriculum in a robust way with the theme capstone having a central research component.	
	A capstone experience could be developed to offer students the opportunity to synthesize the interdisciplinary knowledge they have gained in their study of the theme.	

GenEd Matters

gened.psu.edu| @PSUGenEd | #PSUGenEd

DELIBERATION GUIDE

OPTION 3: Connect classroom learning to outside experiences

Option	What might be done?	Consequences & Tradeoffs
General Education is founded on the application of knowledge and experiences. This particular point of view is essential in a 21st century economy that goes beyond the development of important skills like reading and a multitude of communication skills; employment culture now requires the ability to work effectively as individuals and in teams to produce at higher levels than has ever been expected. Engaging in scholarship at this intensity is indicative of a valuable member of society. In a new, more interconnected and increasingly dynamic economy, employers say colleges are not doing a good enough job in the skills most needed by employers. Focusing on outside experiences allows for faculty members to incorporate an infinite number of projects, locations, and experiences into their curriculum while addressing employer's needs to hire graduates who are well-versed in written and oral communication skills, adaptability and managing multiple priorities, making decisions, and problem solving.	Penn State could further strengthen its position as a premier university for career recruitment by emphasizing that every student learns to apply their knowledge and skills in ways that are necessary for success in the future economy.	The focus on skills and real world applications in isolation from deep domain knowledge within a major or discipline does not give students adequate opportunity to understand the wider implications of what they are learning or to value learning and knowledge for its inherent value, rather than its market value.
	Faculty could develop innovative new hybrid/studio/ blended courses where some elements of the class were delivered asynchronously while students worked in small groups with peers and faculty to apply skills, solve problems, and make decisions, highlighting collaborative and active learning through these interactions.	Courses that focus on individual applications rather than connecting the dots over four years of study might not result in students who can integrate their skills into the complete set of competencies that employers seek.
	Emerging initiatives in digital humanities, social data analytics and business analytics could be integrated into the General Education curriculum as students learn important analytical and quantitative reasoning skills.	The scope of creating out-of-classroom experiences for all students could be unwieldy and expensive for both students and the University. It could be problematic for students at Campuses and the World Campus who do not have access to enough opportunities.
	Real world applications might build deep connections with employers and others through internships, service learning, case studies, and capstone consulting projects.	

Appendix I. Meetings with Faculty

College of the Liberal Arts Faculty Meeting September 23, 2013
College of the Liberal Arts Advisers November 20, 2013
University College English Faculty Symposium February 29, 2014
Eberly College of Science Faculty Town Hall Meeting March 3, 2014
PS Altoona Faculty Town Hall March 9, 2014
PS Altoona Town Hall March 19, 2014
PS Behrend Faculty Town Hall (polycom with PS Shenango) March 25, 2014
PS Harrisburg Faculty Town Hall (polycom with PS Mont Alto and York) March 26, 2014
Evan Pugh Professors Meeting April 2, 2014
University College Arts, Humanities, Social Sciences Division Town Hall Faculty April 4, 2014
College of the Liberal Arts Faculty Town Hall April 8, 2014
Penn State Dubois Faculty Town Hall April 9, 2014
Penn State New Kensington Faculty Town Hall (faculty from PS Beaver, Fayette and Greater Allegheny in attendance and on polycom) April 18, 2014
PS Hazleton Faculty Town Hall April 22, 2014 (polycom with PS Worthington Scranton, Wilkes-Barre and Schuylkill)
College of Agricultural Sciences Town Hall April 22, 2014
Penn State York Town Hall Faculty Meeting April 22, 2014
College of Health & Human Development Faculty Town Hall April 22, 2014
College of Communications Faculty Town Hall April 23, 2014
PS Berks Faculty Town Hall April 24, 2014 (polycom with PS York, Brandywine)
Smeal College of Business Faculty Town Hall April 28, 2014
College of Earth & Mineral Sciences Faculty Meeting April 28, 2014
Arts & Architecture Faculty Town Hall Meeting May 2, 2014
PS Abington May 5, 2014
College of Information Sciences and Technology Faculty Town Hall Meeting May 8, 2014
College of Engineering Faculty Meeting May 8, 2014

Meetings with Support Units

Commission for Adult Learners March 19, 2014
E-Learning Advocates, March 21, 2013
Meeting with DUS Advisers May 5, 2014
Director of Office of Planning and Institutional Assessment June 5, 2014
Joint meeting with Equity Commissions (Commission on Lesbian, Gay, Bisexual and Transgender Equity; Commission on Racial/Ethnic Diversity; Commission for Women) and the Joint Diversity Awareness Task Force August 28, 2014

Meetings with Leadership Groups

University Faculty Senate Chair Sept 23, 2013; February 18, 2014; May 20, 2014; July 17, 2014; August 21, 2014

University Faculty Senate Council October 8, 2013; February 25, 2014; June 24, 2014
University Faculty Senate October 22, 2013; March 18, 2014
University Park Council of Academic Deans October 21, 2013; February 24, 2014
Council of Campus Chancellors October 7, 2013; February 24, 2014
Dean of Health & Human Development, Kinesiology Dept Head November 8, 2013
Administrative Council on Undergraduate Education August 1, 2013; December 2013, June 5, 2014
College of the Liberal Arts Undergraduate Council December 6, 2013
Eberly College of Science Undergraduate Program Heads December 12, 2013
Administrative Council on Multicultural Affairs February 11, 2014
Undergraduate Education Council February 10, 2014
College of the Liberal Arts Department Heads February 11, 2014
Deans & Chancellors Advisory Group February 19, 2014; May, 7,2014; September 11, 2014
Ag Sciences Program Coordinators February 22, 2014
Campus Administrative Officers March 6, 2014
PS Harrisburg leadership March 26, 2014
College of Communications Program Heads May 13, 2014
Eberly College of Science Department Heads May, 2014
College of Health & Human Development Department Heads and Deans May 22, 2014

Appendix J. Deliberation Guide for Curriculum Prototypes

General Education at Penn State

gened.psu.edu | @PSUGenEd | #PSUGenEd

DELIBERATION GUIDE

What values should shape our curriculum?

General Education (Gen Ed) impacts all aspects of the Penn State community, but views differ as to the shape of the curriculum and the values it should prioritize.

To facilitate an open and inclusive decision making process, the General Education Task Force has developed this deliberation guide based on a year-long conversation with the university community about General Education and informed by its own research.

We have adopted a "deliberative forum" approach that allows each of you, and *everyone* in the university community, to share your perspective on and experience with general education, and to consider comparatively several different approaches.

This guide is designed to enable all members of the University community to contribute in substantive ways to the decisions associated with the emerging new general education curriculum. Your comments and suggestions will inform the ongoing deliberations of the Gen Ed Task Force, which has been charged to propose a new general curriculum to the Faculty Senate.

To facilitate deliberation, three curriculum prototypes have been developed that highlight and amplify specific aspects of Gen Ed that received significant support during our conversations over the past year.

None of the three will be adopted as such.

Each prototype affords the University new opportunities and each comes with trade-offs. The prototypes are thus designed to encourage us to think about how best to translate what we value as a University into our Gen Ed curriculum.

The questions are: what elements of each should be priorities in our Gen Ed curriculum at Penn State? What additional opportunities and trade-offs can we identify? How can trade-offs be addressed? What other prototypes might be proposed beyond these three?

Our process will be iterative. The Task Force will consider the feedback received during in-person and online deliberations and make adjustments to these prototypes, add a new prototype or remove an existing prototype as determined by our ongoing deliberations.

General Education at Penn State

gened.psu.edu | @PSUGenEd | #PSUGenEd

DELIBERATION GUIDE

The Modern Literacies Prototype

Students require new literacies to thrive in a more dynamic, interconnected global environment. Recognizing this, the Modern Literacies prototype offers students opportunities to cultivate new literacies in learning, inquiry, applied quantification, social responsibility, and personal finance even as it reinforces traditional literacies in writing, speaking and quantification. This prototype ensures breadth by requiring 15 credits of domain area expertise outside of the major, and flexibility in the manner in which students develop integrative thinking.

	Cr	Total Credits	Description	Domain/ Courses (Credits)	Details/Rules/Restrictions
Competencies/Distribution		36			Must include at least 3 credits in GA, GH, GS, and GHA, and 6 credits in GN.
Advanced Writing	6			GWS	
Speaking	3			GWS	
Quantification	6			GQ	
Learning to Learn	1			X	
Inquiry	3			Any area	
Social Responsibility	3			Any area	
Cultural Competency	6			Any area	
Personal financial literacy	2			X	
Exploration	6			Area not yet met above	
Integration	9	9	Multi-disciplinary/ domain courses		Students select 9 credits of interdisciplinary courses that draw upon different domains; Can be a new course or a modification of an existing course, with the suffix I.
OR					
	9		Credits from a completed interdisciplinary minor		
		45	**Total**		

Key Definitions:

Learning: to be taken in the first semester of enrollment at Penn State. Topics would include the research-based understanding of learning; studies of learning and misconceptions; effective mechanisms for study that enable learning; and metacognition.

Inquiry: to introduce students to the fundamental habits of inquiry in research, including scientific method and literacy; information literacy; data analysis (including visual representations of data) and basic statistics/probability; causality versus correlation; and ethical considerations.

General Education at Penn State

gened.psu.edu | @PSUGenEd | #PSUGenEd

DELIBERATION GUIDE

Social Responsibility: to introduce students to ways of thinking and communicating about issues of societal and global importance. Included would be modes of negotiation and conflict resolution, ethical reasoning, and understanding of perspectives to consider.

Cultural Competency: to provide students with opportunities to learn cultural competency in U.S. cultures and in either International Cultures or Global Competency.

Personal Financial Literacy: to provide students exposure to real-world personal financial issues including managing debt; planning for mortgage or loan payments; and constructing a household monthly budget plan.

Exploration: to provide students with an opportunity to explore any knowledge domain that has not been included in the above courses.

Integration: Two potential pathways for completion of this learning objective are offered. One option is to take three courses, each of which is multi-disciplinary and spans at least two knowledge domains. These interdisciplinary courses may include courses that are currently offered; others may be proposed; these courses would be taught in teams or individually. Students could choose to take three courses with similar or quite different topics.

Alternatively, students would have the option of completing an interdisciplinary minor that spans more than one domain; some are already offered, and others could be developed. When the minor is completed (at least 18 credits are required for a minor), 9 of the credits in that minor would also fulfill the integration component of the General Education curriculum. Because all minors require 6 credits at the 400 level, this choice, within this prototype, provides scaffolding.

The new course designations above do not each refer to a single course, nor is the series intended to be a common core for all Penn State students. Topics could be approached from many disciplinary perspectives, and could be included in a number of different courses. Thus these names represent learning objectives rather than specific course titles.

Opportunities	Trade-Offs
Faculty collaboration for interdisciplinary courses	Would require many new courses
Students would gain relevant, updated skill sets	Students could take as few as 3 credits in each domain
Skills courses could be tailored to career options	Perhaps too oriented to professionalization
Would elevate ethics in the curriculum and orient students to social and cultural issues	New literacies might not be as easily mapped onto transfer courses.
Flexibility with regard to knowledge domains, opportunities to explore	
Courses could be tailored to campus expertise	

General Education at Penn State

gened.psu.edu | @PSUGenEd | #PSUGenEd

DELIBERATION GUIDE

The Chosen Topics Prototype

Penn State students need opportunities to explore new areas of study and to bring diverse disciplinary perspectives to bear on topics of significance. The Chosen Topics Prototype is designed to reaffirm the foundational importance of writing, speaking, and numeracy, and to infuse a dimension of exploration into the curriculum. Its distinguishing feature, however, is to cultivate in students the ability to analyze, evaluate, and interpret a single important topic from a variety of disciplinary perspectives.

	Cr	Total Credits	Description	Domain/ Courses (Credits)	Details/Rules/Restrictions
Skills	9	15	Writing Advanced Writing Speaking	GWS	• Writing and speaking integrated ENGL 15/CAS100 model (C or better required). • Advanced writing in second year/before W course in major.
	6		Quantification	GQ	• 3 credits at or above minimum level of numeracy (C or better required); 3 additional credits elsewhere in Gen Ed
Exploration	12-21	30	Arts	GA	**Between Integration & Exploration** • Minimum of 6 cr each in GA, GH, GS, and GN, and 3 cr in GHA. Maximum of 12 cr in GA, GH, GS, and GN, 6 cr in GHA.
			Humanities	GH	
			Social & Behavioral Science	GS	
			Health & Physical Activity	GHA	
			Natural Sciences	GN	
Integration	9-18		Series of courses, each of which may be from a single or multiple domains/disciplines, that address a chosen topic		• Topic will be at least 9 credits (and up to 18 cr), and span at least 3 domains, one of which must be GQ. • Topic title would be noted on transcript. • Central topic may have a capstone course and must have one course >200-level.
Intercultural Competency	3	9	U.S. Cultures	US	• US courses must focus primarily (=>75%) on issues of power, privilege, and difference in the US. • Courses must focus primarily (=>75%) on intercultural contexts and contain learning objectives of intercultural competency. • All courses may overlap (double count) with other general education or degree requirements, including in the major.
	3		International Cultures	IL	
	3		Global Competency	GC	
		45	**Total**		

General Education at Penn State

gened.psu.edu | @PSUGenEd | #PSUGenEd

DELIBERATION GUIDE

Key Definitions:

Skill Foundations: In this prototype, these are defined as writing, communication, and quantitative skills. In addition to requiring an integrated writing/speaking course in the first year, a C or better would be required in the foundational coursework. Advanced writing is required prior to students taking the writing-intensive coursework in their majors.

Exploration/Breadth: Students have opportunity for coursework in each of the knowledge domains, and can flexibly distribute this among the domains. Between exploration and integration, students must take coursework in all domains (see details/rules/restrictions).

Cultural competency: This present University requirement (separate from General Education requirements) is maintained for all students (i.e. potentially overlapping with major or General Education requirements, as it does now), but the course content would be elevated to 75% and coursework is expanded by one course to include Global Competency.

Integration: In this curriculum prototype, students have the opportunity to learn integrative thinking across domains and to scaffold their learning through either of two options. One would consist of taking a series of three courses that use different perspectives to address a shared organizing topic. In earlier discussions, this concept was often called a theme. Each of these courses could be from a single discipline or could be multi-disciplinary, and within the series there might be a capstone course or project. The topic of the series of courses would be noted on the student's transcript. The second option is that, as in the first prototype described above, completion of an interdisciplinary minor (at least 18 credits) would fulfill this requirement.

Opportunities	Trade-Offs
Faculty collaboration for interdisciplinary courses	Might require more collaboration across campuses than is feasible with current structures
Topics could focus on issues of timely or lasting significance	Choices of topic would be limited at some locations
Students would learn to bring different disciplinary perspectives to a specific topic or issue	Resources would be required to facilitate collaborative development of topics
Capstone could be developed as an option of the faculty	Faculty development would be needed to increase IL, US, and Global competencies
Topic could appear on the transcript	
Locations could create topics based on strengths	
Elevates global competency to allow students to meet that learning objective	

General Education at Penn State

gened.psu.edu | @PSUGenEd | #PSUGenEd

DELIBERATION GUIDE

The Scaffolded Prototype

General education at Penn State needs to be developmentally appropriate and extend through the entire curriculum. The Scaffolded prototype builds on foundational skills in writing, speaking, logical reasoning, data analysis and decision making to support student learning through all levels of the undergraduate curriculum. It brings disciplinary knowledge to bear on two broad frames, Major Global Issues and the Human Condition, at three curricular levels that include breadth in all domains, and offers students 9 credits of free exploration.

	Cr	Total Credits	Description	Learning Objectives	Details/Rules/ Restrictions
Foundations		12	Taken in the first year to establish a common skill set	Literacy & Communication	
Quantification					
Logical thinking and reasoning	3				
Data analysis and decision making	3				
Communication					
Writing	3				
Speaking	3				
Core Concerns		24	Between the core concerns and the explorations courses, students must take 6 credits in each knowledge domain (GA, GH, GS, GN, GHA)	• Must take courses with emphasis in all learning objectives • Each learning objective represented at least twice	• Organized under two frames: Major Global Issues and The Human Condition • Each course emphasizes at least 2 learning objectives • Core courses build on foundation skills • Core includes courses across all domains • Level 3: General Education seminar courses discuss and explore ways that Level 1 & 2 gen ed learning contributes to understanding the major
Level 1 (0 - 200 Level)	9				
Level 2 (200 - 400 Level)	9				
Level 3 (400 Level)	6				
Explorations		9			Completely free for students to explore new areas of interest
Free Choice	9				
		45	**Total**		

General Education at Penn State

gened.psu.edu | @PSUGenEd | #PSUGenEd

DELIBERATION GUIDE

Key Definitions:

Foundation: These courses are taken in the first year to establish a common set of skills in quantification and communication. Quantification includes credits in logical thinking and reasoning; and in data analysis and decision-making. Communication includes writing and speaking.

Core Competencies: These clusters of courses address the seven University-wide learning outcomes for General Education described in report Part A. Courses in these clusters would be organized under two overarching frameworks: Major Global Issues (e.g. health, energy and food security, poverty, conflict, urbanization, environmental degradation, sustainability, etc.) and the Human Condition (who am I and why am I here). Each course in a cluster would emphasize at least two of the learning outcomes, and within each cluster there would be courses that utilize and build upon the communication and quantification skills developed in the foundation courses. Clusters include courses from all knowledge domains, and are grouped by level.

- **Level 1**: Students select three courses, in either a Major Global Issues or Human Condition cluster, that among them address the seven learning outcomes.
- **Level 2**: Students select three courses, in either a Major Global Issues or Human Condition cluster, that among them address the seven learning outcomes, but at a more advanced level.

Students could take the Level 1 cluster from Major Global Issues and the Level 2 from Human Condition, or vice-versa, or select all 18 credits from one of these categories to form an interdisciplinary/multidisciplinary minor. (An official minor would include 6 400-level credits, unless that definition changes.)

- **Level 3**: Students select two courses at the 400 level that link the core learning outcomes and the clusters to their major. In these two senior-level seminars, students (who may have followed very different paths through the "Core Competencies" in Level 1 and Level 2) explore, discover, and share the ways in which those clusters and competencies contribute to their understanding of their own major, and the way in which their major informs these larger questions.

Exploration: Flexible credits completely free for students to explore new areas of interest, as long as (see above) the student's total General Education program includes 6 credits in each knowledge domain.

Opportunities	Trade-Offs
Deep integration with the learning objectives	Shifts independent advanced writing course into upper division Gen Ed courses
Would increase academic expectations and quality by embedding writing and quantification into Gen Ed courses at all levels	Upper division courses require more financial resources
Gen Ed would be tailored to developmentally appropriate levels	Would require significant amount of course development and reframing
Capstone could be developed as an option of the faculty	
Free exploration	
Capstone requirement	

Appendix K. Example AAC&U VALUE Rubrics.
See https://www.aacu.org/value/rubrics for the complete set of VALUE Rubrics and supporting documentation.
VALUE Rubrics were developed to assess: Integrative and Applied Learning, Civic Knowledge and Engagement, Intercultural Knowledge and Competence, Ethical Reasoning, Foundations and Skills for Lifelong Learning, Global Learning, Inquiry and Analysis, Critical Thinking, Creative Thinking, Written Communication, Oral Communication, Reading, Quantitative Literacy, Information Literacy, Teamwork, and Problem Solving

One example, for Integrative Learning, is shown below.

INTEGRATIVE LEARNING VALUE RUBRIC

for more information, please contact value@aacu.org

The VALUE rubrics were developed by teams of faculty experts representing colleges and universities across the United States through a process that examined many existing campus rubrics and related documents for each learning outcome and incorporated additional feedback from faculty. The rubrics articulate fundamental criteria for each learning outcome, with performance descriptors demonstrating progressively more sophisticated levels of attainment. The rubrics are intended for institutional-level use in evaluating and discussing student learning, not for grading. The core expectations articulated in all 15 of the VALUE rubrics can and should be translated into the language of individual campuses, disciplines, and even courses. The utility of the VALUE rubrics is to position learning at all undergraduate levels within a basic framework of expectations such that evidence of learning can by shared nationally through a common dialog and understanding of student success.

Definition

Integrative learning is an understanding and a disposition that a student builds across the curriculum and co-curriculum, from making simple connections among ideas and experiences to synthesizing and transferring learning to new, complex situations within and beyond the campus.

Framing Language

Fostering students' abilities to integrate learning—across courses, over time, and between campus and community life—is one of the most important goals and challenges for higher education. Initially, students connect previous learning to new classroom learning. Later, significant knowledge within individual disciplines serves as the foundation, but integrative learning goes beyond academic boundaries. Indeed, integrative experiences often occur as learners address real-world problems, unscripted and sufficiently broad, to require multiple areas of knowledge and multiple modes of inquiry, offering multiple solutions and benefiting from multiple perspectives. Integrative learning also involves internal changes in the learner. These internal changes, which indicate growth as a confident, lifelong learner, include the ability to adapt one's intellectual skills, to contribute in a wide variety of situations, and to understand and develop individual purpose, values and ethics. Developing students' capacities for integrative learning is central to personal success, social responsibility, and civic engagement in today's global society. Students face a rapidly changing and increasingly connected world where integrative learning becomes not just a benefit...but a necessity.

Because integrative learning is about making connections, this learning may not be as evident in traditional academic artifacts such as research papers and academic projects unless the student, for example, is prompted to draw implications for practice. These connections often surface, however, in reflective work, self assessment, or creative endeavors of all kinds. Integrative assignments foster learning between courses or by connecting courses to experientially-based work. Work samples or collections of work that include such artifacts give evidence of integrative learning. Faculty are encouraged to look for evidence that the student connects the learning gained in classroom study to learning gained in real life situations that are related to other learning experiences, extra-curricular activities, or work. Through integrative learning, students pull together their entire experience inside and outside of the formal classroom; thus, artificial barriers between formal study and informal or tacit learning become permeable. Integrative learning, whatever the context or source, builds upon connecting both theory and practice toward a deepened understanding.

Assignments to foster such connections and understanding could include, for example, composition papers that focus on topics from biology, economics, or history; mathematics assignments that apply mathematical tools to important issues and require written analysis to explain the implications and limitations of the mathematical treatment, or art history presentations that demonstrate aesthetic connections between selected paintings and novels. In this regard, some majors (e.g., interdisciplinary majors or problem-based field studies) seem to inherently evoke characteristics of integrative learning and result in work samples or collections of work that significantly demonstrate this outcome. However, fields of study that require accumulation of extensive and high-consensus content knowledge (such as accounting, engineering, or chemistry) also involve the kinds of complex and integrative constructions (e.g., ethical dilemmas and social consciousness) that seem to be highlighted so extensively in self reflection in arts and humanities, but they may be embedded in individual performances and less evident. The key in the development of such work samples or collections of work will be in designing structures that include artifacts and reflective writing or feedback that support students' examination of their learning and give evidence that, as graduates, they will extend their integrative abilities into the challenges of personal, professional, and civic life.

Glossary

The definitions that follow were developed to clarify terms and concepts used in this rubric only.

- Academic knowledge: Disciplinary learning; learning from academic study, texts, etc.
- Content: The information conveyed in the work samples or collections of work.
- Contexts: Actual or simulated situations in which a student demonstrates learning outcomes. New and challenging contexts encourage students to stretch beyond their current frames of reference.
- Co-curriculum: A parallel component of the academic curriculum that is in addition to formal classroom (student government, community service, residence hall activities, student organizations, etc.).
- Experience: Learning that takes place in a setting outside of the formal classroom, such as workplace, service learning site, internship site or another.
- Form: The external frameworks in which information and evidence are presented, ranging from choices for particular work sample or collection of works (such as a research paper, PowerPoint, video recording, etc.) to choices in make-up of the eportfolio.
- Performance: A dynamic and sustained act that brings together knowing and doing (creating a painting, solving an experimental design problem, developing a public relations strategy for a business, etc.); performance makes learning observable.
- Reflection: A meta-cognitive act of examining a performance in order to explore its significance and consequences.
- Self Assessment: Describing, interpreting, and judging a performance based on stated or implied expectations followed by planning for further learning.

INTEGRATIVE LEARNING VALUE RUBRIC

for more information, please contact value@aacu.org

Definition

Integrative learning is an understanding and a disposition that a student builds across the curriculum and cocurriculum, from making simple connections among ideas and experiences to synthesizing and transferring learning to new, complex situations within and beyond the campus.

Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.

	Capstone 4	Milestones 3	Milestones 2	Benchmark 1
Connections to Experience *Connects relevant experience and academic knowledge*	Meaningfully **synthesizes** connections among experiences outside of the formal classroom (including life experiences and academic experiences such as internships and travel abroad) to **deepen understanding** of fields of study and to broaden own points of view	Effectively **selects and develops** examples of life experiences, drawn from a variety of contexts (e.g., family life, artistic participation, civic involvement, work experience), to **illuminate** concepts/theories/frameworks of fields of study.	**Compares** life experiences and academic knowledge to infer differences, as well as similarities, and **acknowledge perspectives** other than own.	**Identifies** connections between life experiences and those academic texts and ideas **perceived as similar and related** to own interests.
Connections to Discipline *Sees (makes) connections across disciplines, perspectives*	Independently creates wholes out of multiple parts (synthesizes) or draws conclusions by combining examples, facts, or theories from more than one field of study or perspective.	Independently connects examples, facts, or theories from more than one field of study or perspective.	When prompted, connects examples, facts, or theories from more than one field of study or perspective.	When prompted, presents examples, facts, or theories from more than one field of study or perspective.
Transfer *Adapts and applies skills, abilities, theories, or methodologies gained in one situation to new situations*	Adapts and applies, independently, skills, abilities, theories, or methodologies gained in one situation to new situations **to solve difficult problems or explore complex issues in original ways.**	Adapts and applies skills, abilities, theories, or methodologies gained in one situation to new situations **to solve problems or explore issues.**	Uses skills, abilities, theories, or methodologies gained in one situation in a new situation **to contribute to understanding of problems or issues.**	Uses, in a basic way, skills, abilities, theories, or methodologies gained in one situation **in a new situation.**
Integrated Communication	Fulfills the assignment(s) by choosing a format, language, or graph (or other visual representation) **in ways that enhance meaning,** making clear the interdependence of language and meaning, thought, and expression.	Fulfills the assignment(s) by choosing a format, language, or graph (or other visual representation) **to explicitly connect content and form,** demonstrating awareness of purpose and audience.	Fulfills the assignment(s) by choosing a format, language, or graph (or other visual representation) that **connects in a basic way** what is being communicated (content) with how it is said (form).	Fulfills the assignment(s) (i.e. to produce an essay, a poster, a video, a PowerPoint presentation, etc.) **in an appropriate form.**
Reflection and Self-Assessment *Demonstrates a developing sense of self as a learner, building on prior experiences to respond to new and challenging contexts (may be evident in self-assessment, reflective, or creative work)*	Envisions a future self (and possibly makes plans that build on past experiences) that have occurred across multiple and diverse contexts.	Evaluates changes in own learning over time, recognizing complex contextual factors (e.g., works with ambiguity and risk, deals with frustration, considers ethical frameworks).	Articulates strengths and challenges (within specific performances or events) to increase effectiveness in different contexts (through increased self-awareness).	Describes own performances with general descriptors of success and failure.

Appendix L. Scheduled meetings for fall 2014

College of Arts & Architecture	Tuesday, September 30, 2014%
	Tuesday, October 14, 2014+
Penn State Abington	Monday, September 22, 2014#
Agricultural Sciences	Thursday, October 2, 2014%
Penn State Altoona	Tuesday, October 7, 2014#
Penn State Beaver	Friday, October 17, 2014#
Penn State Berks	Friday, September 26, 2014#
Penn State Brandywine	Monday, September 29, 2014#
Smeal College of Business	Tuesday, September 30, 2014%
College of Communications	Wednesday, September 24, 2014%
Penn State Dubois	Friday, October 3, 2014#
College of Education	September 18, 2014*
	Monday, October 13, 2014+
Earth and Mineral Sciences	Friday, October 3, 2014%
College of Engineering	Thursday, November 20, 2014%
Penn State Erie	Wednesday, October 15, 2014#
Penn State Fayette	Thursday, October 16, 2014#
Penn State Greater Allegheny	Friday, October 17, 2014#
Penn State Harrisburg	Friday, September 26, 2014#
Penn State Hazleton	Friday, September 26, 2014#
College of Health and Human Development	Tuesday, October 7, 2014%
College of Information Science and Technology	Friday, November 7, 2014%
College of the Liberal Arts	Tuesday, October 14, 2014#
	Thursday, October 16, 2014@
Penn State Lehigh Valley	Monday, September 29, 2014#
Libraries	To be scheduled
Penn State Mont Alto	Monday, September 22, 2014#
Penn State New Kensington	Wednesday, October 15, 2014#
College of Nursing	To be scheduled
Penn State Schuylkill	Monday, September 29, 2014#
Eberly College of Science	Monday, October 13, 2014%
Penn State Shenango	Wednesday, October 15, 2014#
Penn State Wilkes-Barre	Tuesday, September 30, 2014#
Penn State Worthington-Scranton	Tuesday, September 30, 2014#
Penn State York	Monday, September 22, 2014#

% Faculty Town Hall Meeting
+ Unit Leadership/Executive Meetings
* College Council Meeting
# Open town hall, followed by unit leadership meeting
@ Caucus meeting