

The Pennsylvania State University
Presidential Leadership Academy

GENERAL EDUCATION AT PENN STATE:

A Policy for Reforming Structure, Communication, and Assessment

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Chapter I. Introduction

"It is most unfortunate if we envisage general education as something formless—that is to say, the taking of one course after another; and as something negative, namely, the study of what is not in a field of concentration. Just as we regard the courses in concentration as having definite relations to one another, so should we envisage general education as an organic whole whose parts join in expounding a ruling idea and in serving a common aim."

— General Education in a Free Society:

Report of the Harvard Committee

General Education at Penn State can be improved upon. Currently, it lacks the cohesion and interrelation necessary for maintaining a deliberate and purposeful curriculum. Already, this issue has been recognized and the University has taken steps to address it (see: A General Education Conversation, 2012 and University Faculty Senate, 2013). We, the authors, have taken full stock of this issue as well. Based on careful research and investigative conversations with many of the people most intimately involved with the General Education program at Penn State, we have identified the underlying problems afflicting the program. In the policy that follows, we propose specific recommendations and solutions in hopes of providing what may serve as guidelines for the reform of Penn State's General Education. We have full confidence in the University, its faculty, administrators, and students, as well as its resources and capabilities. As such, we have full confidence that the insights of our proposal will be effectively considered and accounted for in the ongoing reform of General Education.

Section 1.1 Outline of Remaining Chapters

This proposal is codified into five primary Chapters including "Literature Review and Background," "Contextualizing the Problem," "A Policy Overview," "Policy Proposals," and "Conclusions and Final Remarks."

In Chapter II, titled "Literature Review and Background," we highlight the key texts which shaped our understanding of General Education in higher education as a whole as well as here at Penn State. Additionally, we discuss the evolution of General Education and the purposes it serves in a 21st century college education. This is followed by a review of recent trends in General Education across the nation. Finally, we enter into a discussion about the General Education program here at Penn State and the recent stirrings which have prompted the creation of the General Education Task Force and put the structure of the program under critical review. In the section titled "Contextualizing the Problem," we highlight the interviews conducted as part of our review of General Education which shaped our policy in notable ways. Finally, we isolate the key conclusions formulated from these interviews which directly feed into our policy decisions.

In Chapters III and IV, we outline the details of our policy by first providing an overview of the three key areas for reform isolated in our plan: the structure, communication, and assessment of General Education.

Chapter V, titled "Policy Proposals," is broken down into the three subsections titled "Reforming Structure," "Reforming Communication," and "Reforming Assessment." In these sections, we provide detailed plans for reforming the structural breakdown of the program, the manner with which the goals and purpose of the program are communicated, and the review process used to assess the strength of the program.

Finally, in Chapter VI, titled "Conclusions and Final Remarks," we summarize the motivation behind our new policy and how our proposed changes address the issues in Penn State's General Education program.

Chapter II. Literature Review and Background

Section 2.1 Documents

Our research spanned a broad range of resources and texts. Some documents were particularly influential and have played a significant role in shaping our understanding of General Education and its manifestation here at Penn State. In turn, they have also influenced our proposal for reforming General Education at Penn State. These critical documents are outlined below for reference and recognition, and they will be drawn from and expounded upon in the following report, along with a variety of other sources.

History and Theory:

- -The University of California Commission on General Education in the 21st Century (2007)
- -General Education in a Free Society: Report of the Harvard Committee (1945)
- -The Marketplace of Ideas (Menand, 2001)

Recent Stirrings at Penn State:

- -The Penn State University Bulletin
- -A Progress Report to the University Faculty Senate (GETF, 2013)
- -The Cohen Report (Cohen, 2012)

Section 2.2 History and Theory of General Education

When the Ivy League universities first emerged in the United States in the 1600's, higher education was reserved for an elite class of thinkers, and therefore the model and purpose of education did not in any way reflect vocational, career-oriented training. Trades such as engineering and law were instead learned through apprenticeship. As described in a collaborative report titled "General Education in the 21st Century" authored by the University of California Commission on General Education, higher education was "hierarchical, undemocratic, and faithful to a concept of the unity of knowledge under principles of Christian morality" (UC Commission, 2007, p. 8). The basic canon of knowledge required for every scholar was clearly delineated, ubiquitous, and steadfast.

The 18th and 19th century saw several changes in the scope of higher education with more secular principles, the emergence of public universities, and the emphasis on a practical, vocational schooling. In the context of liberal education, a divergence from the core model of a preset list of courses was observed. With the emergence of research universities, more disciplinary learning was established and it was determined that "faculty should have the freedom to teach what it wanted and students should have the freedom to take the classes they preferred" (UC Commission, 2007, p. 9). This introduced elective-based learning in which students could freely choose the courses they wished to take outside of degree requirements. However, in the early 20th century, General Education programs arose in response to this elective-based learning and, as described in the Chapter "The Making of the Modern University," were intended to "reduce the arbitrariness of the average student's education" (Reuben, 1996). It was determined that there may exist a core set of skills and knowledge that students needed to survive in a world that was growing more globalized and more scientific.

It is crucial to explore the theory that has shaped General Education in the past and which continues to do so, in order that past and current systems of General Education may be analyzed rationally. The reason *why* systems and structures of General Education are in place helps to explain the human thinking that originally justified their creation. Importantly, theory evolves out of a historical background. Its relation to historical developments encourages a heightened awareness of context, which is essential to avoiding errors of the past and moving forward in a successful manner. As such, theory is vital to policy development.

General Education theory begins with the establishment of a "General Education" in higher education. The University of California Commission on General Education notes that, "Although current ideas and ideals of what college should be like date back centuries, particular concern with General Education programs only began in the late 19th century" (2007, p. 8). The Commission attributes this primarily to the Morril Act of 1862 which established land-grant universities and "forever changed the face of public higher education and codified the goals of vocational education to practically serve the needs of society" (2007, p. 9). While such a time of expanded educational access and increasing specialization logically would lead to a call for enhancing and emphasizing that part of an education which is general, this was only the beginning of the "General Education."

Louis Menand, English scholar on higher education and Distinguished Professor at the City University of New York, writes that the belief in the importance of General Education in undergraduate teaching was largely a post WWII development (2001, p. 7). Despite this widespread belief, the scientific model and research (and therefore specialization) also took stronghold of the university around this same time and so General Education was "paid lip service" in practice and few colleges had specific General Education curricula (Menand, 2001, p.

7). Even though this was the case, many educators believed that there was a body of great works of the Western tradition that should be taught to college students and that this could "serve as a kind of benign cultural ideology in a nation wary of ideology" (Menand, 2001, p. 7-8). This is precisely the argument made in Harvard University's seminal report, "General Education in a Free Society" (1945). This historic report was the first comprehensive work to elaborate upon the theory behind a General Education, and it set up the standard model for General Education theory that has prevailed, if not in practice then at least in ideal, since WWII.

"General Education in a Free Society" has a chapter devoted specifically to *Theory of General Education* (General Education in a free society, 1945, p. 42). It is organized into five subsections: "Heritage and Change," "General and Special Education," "Areas of Knowledge," "Traits of Mind," and "The Good Man and the Citizen." The chapter is introduced as proposing to "consider what can, perhaps overformally, be called a philosophy of American education, and especially that part of it which is General Education" (General Education in a free society, 1945, p. 42). First, however, what is a General Education? The report answers this in the context of a liberal education:

If one clings to the root meaning of liberal as that which befits or helps to make free men, then general and liberal education have identical goals. The one may be thought of as an earlier stage of the other, similar in nature but less advanced in degree. (General Education in a free society, 1945, p. 52)

Following are brief summaries of what the Harvard report deemed the important theoretical underpinnings of General Education.

Heritage and Change:

The report frames the drive toward heritage and change as the competing yet complementary forces in modern (1945) society and higher education. They are manifested in numerous ways and take multiple forms in society and education, e.g. conservatism/liberalism, science/humanities, as well as others. It framed the "true task of education" as the attempt to "reconcile the sense of pattern and direction deriving from heritage with the sense of experiment and innovation deriving from science" (1945, p. 50). The authors confidently asserted that education cannot be wholly devoted to either one but must preserve "change within commitment" (General Education in a free society, 1945, p. 45).

General and Special Education:

Next, the report discussed what were seen as the educational manifestations of these two competing forces in contemporary Western society—general and special education, respectively. The authors equate General Education with being the start to a liberal education, which they feel is essential for democracy, for intelligence in judging the competence of workers in other specialized fields, as a distinct method/outlook that teaches one about the relationship among things, and that is to an extent "prescribed" rather than distributed and subject to full student choice. "It is used to indicate that part of a student's whole education which looks first of all to his life as a responsible human being and citizen" (General Education in a free society, 1945, p. 51).

Areas of Knowledge and Traits of Mind:

In these closely interrelated dimensions of General Education, the report discusses the distinction of fields within General Education, that is, the separation and independence of

academic departments, and it comments on the incorrectness of this approach as well as the issues it breeds.

The problem becomes what.... principles and methods to illustrate by the use of information. To the extent that a student becomes aware of the methods he is using, and critically conscious of his presuppositions, he learns to transcend his specialty and generates a liberal outlook in himself. (Harvard 63-64)

It further discusses which specific abilities that "transcend" specialties should be taught and learned as part of a General Education:

Education is not merely the imparting of knowledge but the cultivation of certain aptitudes and attitudes in the mind of the young....more particularly to the traits and characteristics of mind fostered by education. By characteristics we mean aims so important as to prescribe how General Education should be carried out and which abilities should be sought above all others in every part of it. These abilities, in our opinion, are: to think effectively, to communicate thought, to make relevant judgments, to discriminate among values. (General Education in a free society, 1945, p. 64-65)

The Good Man and the Citizen:

Lastly, the authors expound upon their opinion that, "The fruit of education is intelligence in action" (General Education in a free society, 1945, p. 75) and speak to the practical needs that a General Education must serve, specifically as those relate to the public sphere and democracy. They believe this balances another tension in education and American society between individualism and a commitment to democracy and a greater good.

Although "General Education in a Free Society" is the preeminent publication on General Education theory, it is important to return once again to historical background in order to place

this theory in context. Menand does just this, reminding us that Harvard's president at the time who sponsored the report "believed that general exposure to the great books could help the United States withstand the threat of what he actually referred to as the 'Russian hordes'" (Menand, 2001, p. 8). This perspective of Harvard's General Education theory as a postwar outgrowth intended to unify the nation from competing ideologies gives the high and mighty idea of imparting a cultural tradition, a "common heritage," a sharply political tinge and reminds us that theories are a product of the cultural times and often the political climate. He does, however, continue on to point out that, "A lot has changed in higher education in the last fifty years," (Menand, 2001, p. 8) and things are no longer what they were in 1945. With this in mind, Menand offers his personal view on how education and the societal purposes and dispositions that undergird it should relate in the public sphere:

It is important for research and teaching to be relevant—for the university to engage with the public culture, and to design its investigative paradigms with actual social and cultural life in view.... To continue to be relevant today, I believe academic inquiry ought to become less specialized, less technical, less exclusionary, and more holistic. I hope that this is the road down which postdisciplinarity is taking us. At the end of this road, though there is a great danger, which is that the culture of the university will become just an echo of the public culture. That would be a catastrophe. ... Academics need to look at the world to see what kind of teaching and thinking needs to be done, and how they might better organize themselves to do it; but they need to ignore the world's insistence that they reproduce its self-image. (Menand, 2001, p. 20-21)

Clearly there needs to be an engagement between the university and the public from Menand's point of view, but the two cannot be wedded and there must remain a critical space between them for fear of one becoming too much like the other.

Moreover, change is imminent. As Barry Latzer, professor of government at John Jay College of Criminal Justice of the City University of New York and a senior consultant to the American Council of Trustees and Alumni, points out in a 2014 op ed in *The Chronicle of Higher Education*, Harvard has recently changed their core curriculum General Education program that was established back in 1945 with their historic report. They have moved to the standard distribution model that currently predominates at most universities (Latzer, 2004). Latzer interprets this as a turn of the tide from the past when "Harvard's curricular innovations became the model for colleges around the nation" (2004). Now, it appears they have realized something has changed and are moving to change with it.

This same move towards change has been felt all across the nation in higher education. The University of California's boldly titled report, "General Education in the 21st Century," involved a comprehensive review of the California system of General Education and new recommendations for the future (2007). The difficulty of this task was openly admitted: "Like the idea of the university itself, the definitions and goals of General Education are often ambiguous and difficult to pin down" (UC Commission, 2007, p. 8). However, they also took a critical and open attitude to the entire issue: "As indicated, many current educational scholars lament what they see as the collapse of collegiate General Education for private and public institutions alike. The Commission subscribes neither to this extreme diagnosis nor to its opposite—that we have no cause for concern" (UC Commission, 2007, p. 8).

Recent developments and changes in General Education across the nation indicate that there is indeed a critical mass of concern and that the sociohistorical underpinnings of General Education theory are shifting once again. Important developments in General Education theory such as Harvard's publication of "General Education in a Free Society" have influenced and shaped General Education in the past, but in the 21st century there seems to be an impending sentiment that there is more to consider now and that change is needed. New policies are developing to try to stay on pace with change and this policy will follow suit by proposing a comprehensive reform of the existing General Education program at The Pennsylvania State University. By beginning with a foundational familiarity with the history, context, and theory behind General Education, we hope to avoid mistakes of the past and move forward successfully by recommending a policy with the potential to change the face of higher education, beginning here at Penn State.

Today General Education programs are ubiquitous in institutions of higher education. Some model the "elective-based" system fairly closely with the incorporation of great student choice qualified only by a flexible set of standards that must be met. Others have established a rigid core of required classes designed specifically to prepare students to thrive in the 21st century.

The key paradigm shifts in higher education which indicate the need for General Education reform include:

- i. **Increased emphasis on vocational learning**: After 1970, the number of students studying preprofessional fields such as engineering, business, and medicine began to exceed the number of students studying traditional arts and sciences (UC Commission, 2007).
- ii. **Disciplinary, Research-oriented Departments**: The latter half of the 20th Century brought a burgeoning emphasis on research and publications to academia. Graduate programs in both public

and private institutions saw an expansion leading to greater specialization in higher education (UC Commission, 2007).

Section 2.3 Survey of Recent Changes and Approaches in General Education Curricula

Recently, there has been a flurry of stirrings regarding General Education across the nation. A quick Google search will show a few million Chapters regarding the seemingly universal discontentment with how universities have been handling General Education. The literature expresses that students are quite literally treating General Education as a list of check boxes, or mere requirements that they need to pass to graduate. As such, university faculty and administrators have taken note of their students' lack of interest (perhaps even, lack of caring) for their General Education requirements. Hence, a number of new ideas have come to fruition to handle the "broken" General Education system.

An internal Penn State report, "A General Education Conversation," more commonly known as The Cohen Report, analyzes some of the new General Education systems. This report succinctly outlines the four "primary" General Education structures:

- 1) The Cafeteria Model A model where students pick and choose their General Education courses to fill set requirements. Penn State currently uses this model.
- 2) The Open Curriculum Model This model allows students to choose all of their General Education courses and "design" their own General Education curriculum.
- 3) The Fully Prescribed Curriculum This older model prescribes the General Education courses for students very similarly to the method a department or academic college may set course requirements for a major.

4) The Core Curriculum – A model where students are required to take courses from within set core areas (such as Science, Art, Music, etc). This is the current model used by Columbia University. (A General Education Conversation, 2012, p. 9)

An internet search will very quickly show that the four aforementioned methods are not the only structures currently used – to expand, they're only a fraction of the General Education methods. There are two more groupings of structures that merit mention:

5) The Theme/Clusters/Minors Approach – in this system, a student is given a handful of prescribed courses (i.e. intro to writing and freshmen seminar), then they are to select a 'theme' to pursue.

These 'themes' vary significantly. On one end of the spectrum is the system established by James Madison University where students select courses from five clusters (General Education Program) to form their General Education experience. On the other end of the spectrum exists the minor-based approach where students select their major and then select two to three minors to study in addition to their major. This system is currently used by the College of Idaho (College of Idaho Relies on Minors to Promote General Education, 2014). In the middle of this spectrum lies the University of Rochester where students are required to take a handful courses within a set cluster (more often called a theme) that lies outside of their major or field of study. For example, students studying engineering may take a theme focusing on American Literature. It must be noted that these themes are not large enough to be considered a minor (The Rochester Curriculum).

6) The Combination Approach – A significant number of schools have taken to combining the aforementioned structures to form their own structure. For example, one school may prescribe half of the student's coursework, but allow them complete freedom for the remainder of their

General Education experience. An example of a proposed combination system is that proposed by Penn State's General Education Task force which looks to combine the core curriculum with a thematic component (Education Task Force, 2014).

According to a survey issued by *The Chronicle of Higher Education*, "56 percent of academic officers reported that General Education was a growing priority for their institutions." Even more notably, this survey revealed, "A big majority, 89 percent, reported that their colleges were assessing or modifying their general-education programs" (Glenn, 2009). Universities are realizing that the current models of General Education are not as effective as possible.

Administrators and instructors alike want to provide students with the critical thinking skills and educational background necessary to navigate society's rapid growth. (Glenn, 2009) However, navigating the flurry of possible methods to reform General Education is rather difficult, especially with the almost innumerable methods of structuring the systems. Making this even more difficult is the lack of methods to assess the success rate of these systems.

There are currently no metrics to compare the aforementioned structures to one another (Variations on a Theme, 2014). Furthermore, some of these systems may "fail" at one school but "succeed" at another school. Since no two systems are identical, measuring these systems' failure and success rates may become very difficult. Furthermore, data supporting the success and failure rates of the systems within schools seems scarce. The only consistent trend in General Education seems to be the investigation and trial of new structures for General Education.

Section 2.4 Penn State's Current General Education Program

According to Penn State's University Bulletin, "General Education augments and rounds out the specialized training students receive in their majors and aims to cultivate a knowledgeable, informed, literate human being" (University Bulletin). The need for "a wide range of skills and knowledge" highlights the importance of General Education in degree programs (University Bulletin). Penn State notes that among these skills are:

- the ability to reason logically and quantitatively and to communicate effectively
- · an understanding of the sciences that makes sense of the natural environment
- · a familiarity with the cultural movements that have shaped societies and their values
- · an appreciation for the enduring arts that express, inspire, and continually change these values. (University Bulletin)

The breadth of these skills emphasizes Penn State's conviction that General Education courses can be "relevant to a major or to an individual's interests" (University Bulletin). In order to benefit from the complementary knowledge and skills General Education courses are intended to provide, Penn State underscores the role of careful planning with an academic advisor.

Another element the Penn State General Education system seeks to incorporate is a degree of flexibility. As stated on "The Baccalaureate Degree General Education Program" page of the University Bulletin, "Penn State wants students to use General Education to experiment and explore, to take academic risks, to discover things they did not know before, and to learn to do things they have not done before" (The Baccalaureate Degree General Education Program).

Flexibility is encouraged under the current system, but ultimately left to the discretion of the student. The Undergraduate Advising Handbook confirms "prior approval is not required" despite the ideal that "students should develop their plans to use flexibility in General Education

with an advisor" (General Education). Means of incorporating such flexibility in the students' education are further discussed under the "Structure & Requirements" section of the Bulletin.

2.4.A Structure & Requirements

A Penn State baccalaureate degree program requires 45 credits of General Education. In addition to "knowledge domain" requirements (i.e. art, natural science, humanities, and social science), students enrolled at Penn State complete a First-Year Engagement program, a United State Cultures course, an International Cultures course, and a writing-across-the-curriculum course as part of their General Education (University Bulletin).

The components of Penn State's current General Education program are broken into three categories—skills, knowledge domains, additional requirements—with numerous subcategories stemming from each. The following table depicting these components and required credits comes directly from the University Bulletin (The Baccalaureate Degree General Education Program):

SKILLS	credits	
Writing/Speaking (GWS)	9 credits	
Quantification (GQ)	6 credits	
total	15 credits	
KNOWLEDGE DOMAINS	credits	
Health and Physical Activity (GHA)	3 credits	
Natural Sciences (GN)	9 credits	
Arts (GA)	6 credits	
Humanities (GH)	6 credits	
Social and Behavioral Sciences (GS)	6 credits	
total	30 credits	
ADDITIONAL REQUIREMENTS	credits	
First-Year Engagement Program (S, T, X, or PSU)*	credits vary	
United States Cultures (US)	3 credits	
International Cultures (IL)	3 credits	
Writing Across the Curriculum (W, M, X,Y)	3 credits	

Though the table above depicts the requirements that many students complete, there are five ways by which substitutions and/or alterations can allow for enhanced student flexibility.

These include substitution of a 200- to 499- level course for a comparable lower-level course on the list of General Education courses, substitution of a 12th credit foreign language course for any 3 credit General Education course, taking 3, 6, and 9 credits in any arrangement among the domains of Natural Science, Arts, and Humanities (as opposed to the preset 6 credits of each), meeting the US and IL requirements via an "experiential learning program or practicum approved by the College Dean's Office," and meeting "First-Year Engagement Program requirements through completion of a First-Year Experience offered by any unit of the University" (The Baccalaureate Degree General Education Program). With permission of an adviser and a dean's representative, these exchanges allow for at least a degree of student flexibility.

2.4.B Discrepancies

Although the General Education requirements are "common to all degree programs and compose about one-third of the course work," colleges across Penn State University have adopted different policies as to how these credits can be completed, and where they can overlap with other degree requirements (University Bulletin). To exemplify these differences, one can compare two students – one majoring in Environmental Resource Management (ERM) in the College of Agricultural Sciences and the other majoring in Special Education (SPLED) in the College of Education. According to the University Bulletin, the ERM student can fulfill 27-30 of his or her 45 General Education credits via the requirements for the major (Undergraduate Degree Programs: Agricultural Sciences). On the other hand, the SPLED student can fulfill just 12-15 of his or her 45 General Education credits via the requirements for the major (Undergraduate Degree Programs: Education). Both majors require a minimum of 121 credits to obtain the respective B.S. degrees. Discrepancies in the current General Education system

surface not only in terms of the percentage of General Education classes that can be fulfilled through different majors, but also in what can count for a General Education class within each college. For example, a level 003 course of a foreign language can substitute for an Arts (GA), Humanities (GH), or Social and Behavioral Sciences course (GS) in the College of Engineering, however, in other colleges such as the Smeal College of Business, no such substitution is allowed.

Section 2.5 Benchmarking Penn State's General Education

The Cohen Report summarizes the beginning of the reevaluation of the General Education program at Penn State. The report draws from several faculty discussions regarding General Education that began in December 2011 and continued up through the publication of the Cohen Report in August 2012. The Cohen Report sums up what needs to be altered about General Education specifically at Penn State. Included in its findings are the lack of a cohesive curriculum and confusion on learning objectives among students and staff. It reports that lower divisions of courses vary greatly in scope but do not lend themselves to integration. A unified vision for General Education also is lacking, while structure, delivery, and conceptual clarity are nonexistent in the current system. (Cohen, 2013).

The Cohen Report also looks at other schools' General Education systems as a jumping off point for new curricular ideas. Currently practiced at Penn State is the "cafeteria style" program in which academic areas have been pre-grouped and students choose their own courses from within the specific groupings. The "open curriculum" is practiced at Amherst and Evergreen colleges, where students have nearly unlimited choice over their General Education. The "fully prescribed curriculum" practiced at St. Johns is nearly extinct, in which the entire selection of General Education is pre-chosen by the college. A more thematic approach is

practiced at Stanford where students engage in common "themes" for their first year then participate in a menu style after that. (Cohen, 2013, p. 28).

Section 2.6 A Call for Change at Penn State

In March of 2013, the Penn State General Education Planning and Oversight Task Force (GETF) was formed "to advance the process of revisiting and potentially revising General Education at Penn State" (A Progress Report, 2013). The Task Force was selected by University leaders and includes two administrators from Old Main, five unit administrators, and faculty members from a breadth of academic units. Formally charged in May 2013 by the Chair Elect of the University Faculty Senate and the Interim Provost and Vice President and the Dean for Undergraduate Education, the GETF has been tasked with the following responsibilities:

- 1. Developing the process for revisiting and revising General Education
- 2. Creating and managing a timeline with milestones for developing and implementing the process
- 3. Determining subcommittees to be charged with addressing various components of the process
- 4. Identifying the many stakeholders in General Education and ensuring their consultation
- 5. Providing ongoing oversight of the process, including oversight of the subcommittees
- 6. Making specific recommendations to the University Faculty Senate
- (A Progress Report, 2013)

To aid in the execution of these prescribed tasks, the GETF operates under the established guiding principle pertaining to General Education revision – "To enable students to acquire the skills, knowledge, and experiences for living and working in interconnected and

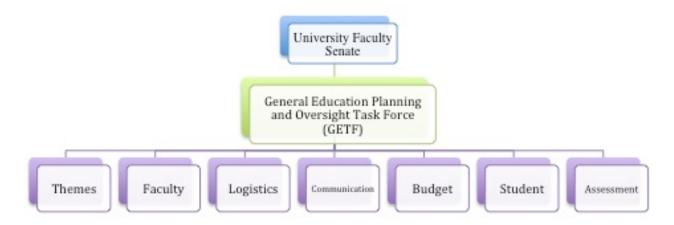
globalized contexts, so they can contribute to making life better for others, themselves, and the larger world" (A Progress Report, 2013). Before exploring options for reform, the GETF reached a consensus as to the value of a University-wide General Education and established a set of criteria that the revised General Education program should reflect. Such a program:

- Is distinctive and capitalizes on Penn State's research and educational strengths as a world-class public research institution with an extensive variety of academic opportunities;
- Reflects the strengths of our faculty and the needs of our students at all Penn State locations;
- · Is flexible and allows for multiple pathways for all student populations;
- Engages students in rigorous and intellectually challenging learning by spanning and complementing the entire undergraduate curricular experience, including upper division courses;
- Prepares students to live and work in our diverse global society;
- · Contains thematic clusters of courses (perhaps 9-12 credits) that together address an important topic from a variety of disciplinary or interdisciplinary perspectives;
- Includes exploration courses (perhaps 9 12 credits) in various knowledge domains to ensure flexibility for students to explore topics beyond their chosen theme.

(A Progress Report, 2013)

These tenets serve as guiding principles for the GETF and its seven subcommittees who are charged with accomplishing the previously stated goals. The subcommittees (as depicted in the following chart) include Themes and Exploration, Faculty and Staff, Logistics and Implementation, Communication and Transparency, Budget, Student Opportunities and

Constraints, and Assessment. Each committee includes members from the GETF in addition to members of the University at large (including students). Membership composition echoes the "diversity of campuses and fields of inquiry across Penn State" (A Progress Report, 2013).



As outlined in the October 2013 Progress Report to the University Faculty Senate, the date for implementation of the new General Education program is set for Fall 2016. In anticipation of this deadline, the Themes and Exploration committee has been working diligently on devising a structure for the program. In keeping with the "thematic clusters" introduced in the General Education program criteria section, this committee has devised objectives, characteristics, and a 30-credit template which they proposed to the GETF in March 2014. Their objectives highlight the integration of disciplines by stating that, "Themes invite us to deal with forms of complexity that extend beyond individual disciplines or methods of inquiry, and a well-designed Theme may reveal emergent phenomena that are more than the sum of their constituent parts" (Shapiro, 2014). It further states that, "The Exploration side, independent of the Theme, will allow students to explore an additional interest or include experiences such as study abroad, internships, or service learning" (Shapiro, 2014). Characteristics of the themes include broadness in scope, interdisciplinary inclusion, inclusion of faculty expertise, and multi-perspective views. The committee's 30-credit template currently in the works will require a minimum of 9 credits

within a Theme and 9 credits within the Exploration portion, with the remainder falling into either category (Shapiro, 2014). The committee believes that this flexibility will allow for "variations in students' situations," accommodating for transfer credits, double majors, study abroad experiences, and other engaged scholarship experiences (Shapiro, 2014).

Chapter III. Contextualizing the Problem

Section 3.1 Penn State Interviews

The following section compiles and summarizes a series of interviews conducted by the authors. These interviews were held with the hope of better understanding the perspectives of the members of the General Education Task Force and other university administrators. Furthermore, these interviews provided the authors with college-specific and administrative context on General Education.

Professor Brent Yarnal, College of Earth and Mineral Sciences

Professor Brent Yarnal provided a brief history of the General Education program at Penn State, placing the current discussions and stirrings in context. Citing Professor Jeremy Cohen's "A General Education Conversation" 2012 report as the impetus and "evidence" for the University's current conversation regarding the General Education program, then moving to his charge to the General Education Planning & Oversight Task Force, Professor Yarnal effectively summarized the landmark events that have fomented this climate for General Education reform at Penn State. From then on, he deferred most questions to the matters which have been discussed by the Task Force thus far, particularly stressing the need for integration and interdisciplinary inclusion, as well as adaptability to future needs. In this spirit, he commented on the difficulty in choosing, creating, and changing themes, and also how adaptability factors in with the faculty involved in General Education. He touched upon the Task Force conversations that raised the possibility of creating a General Education "institute" and others that suggested a core General Education faculty or a faculty rotation system. Regarding methods to ensure a devoted faculty, he drew from the example of his college, The College of Earth and Mineral

Sciences, saying, "We only hire faculty who are passionate about teaching." Overall, he offered a hopeful optimism about the proceedings of the Task Force.

Globe Discussion Group, Student Input

Early in the synthesis of this policy, a discussion-dinner was hosted in the Globe Special-Living Option ("The Globe") to gain a student perspective on the current structure of General Education as well as to discuss the then-current ideas proposed by the General Education task force. One of the key points brought up in this discussion was the concept of flexibility. Currently, the General Education structure is very rigid and "feels" like one is "checking off the boxes to graduation." Some in the discussion noted the complexity of acquiring a dual degree and balancing one's General Education requirements - a proposed solution was an alternative General Education approach for students matriculating multiple degrees in their tenure as an undergraduate. In the words of one attendee, "General Educations should be beneficial to one, as opposed to problematic." It seemed that many students shared similar discontentment with the General Education system. Furthermore, a number of individuals expressed the sentiment that the General Education system, in its current form, does not promote critical thinking. To summarize the following discussion, many believe that General Education should allow one to "like things outside of [one's] field" such that they could become a "more interesting person" who isn't focused in on one small niche of knowledge. General Education should help students to better visualize the crossroads and intersections of the countless fields of study.

Dean Dennis Shea, College of Health and Human Development

Dr. Dennis Shea, Associate Dean for Undergraduate Studies and Outreach in the College of Health and Human Development and member of the GETF, emphasized the need for greater rigor in the General Education program, noting specifically the variability in the rigor of General

Education courses. Dr. Shea also emphasized the importance of communicating the purpose of General Education to both students and faculty and encouraged reevaluating whether the literature on the University Bulletin website and in various course curricula properly conveys the learning goals and objectives. He also emphasized the idea that the General Education program ought to be about "educating students who are engaged with the world." He suggested that the program should build "not just competencies, but attitudes" by encouraging students to appreciate other viewpoints.

Professor Augustus (Gus) Colangelo, Smeal College of Business

The exigency for rebranding of the General Education program was brought to light during the meeting with Assistant Professor of Management, Gus Colangelo and a group of his MKTG 496 students who are studying the General Education system. These students analyzed each of the original Big Ten universities and found that the salient words in their descriptions of General Education included terms like "requirements," "program," "skills," "knowledge," and "courses." In order to make General Education more palatable to students, the MKTG 496 students suggested rebranding General Education to make it appear "purposeful, rigorous, relevant, and developmentally appropriate."

Dean Hampton N. Shirer, College of Earth and Mineral Sciences

"Exploratory" was the key word emerging from the discussion with Dean Hampton N. Shirer, Associate Dean for Academic Affairs in the College of Earth and Mineral Science. Indeed, Dean Shirer highlighted the value of taking courses outside one's major to initiate the discovery of something that may have otherwise been hidden. Further commentary included the suggestion of incorporating professionalism, behavior, and ethics into General Education throughout one's four years. When asked about the potential for bachelor degrees to be shortened

to three years with removal of General Education, Dean Shirer asserted that the "benefits of a well-designed General Education program outweigh the benefits of being efficient." Finally, Dean Shirer noted that the cutting edge research of faculty members should supplement the General Education course material, as notably demonstrated by Dr. Richard Alley, Evan Pugh Professor of Geosciences at Penn State.

Dean Renetta Engel, College of Engineering

Dean Engel, Associate Dean of Undergraduate Studies for the College of Engineering shared a key piece of information regarding General Education with relation to the College of Engineering: according to one of her colleagues, "Penn State is an excellent Engineering school that offers a General Education program." This point emphasizes the idea that "excellent" engineering can only exist if the person executing the engineering is able to contextualize their work; the General Education program exists to provide students with the opportunities they need in order to contextualize their work, and while doing so, develop other essential skills such as critical thinking. Dean Engel also emphasized the need for students to do more than "pick" General Education courses - students need to more wisely select their General Education coursework. Such courses should be selected to challenge one's abilities, not to seek "an easy A." To combat the culture of selecting easier coursework, Dean Engel suggested a stronger university-wide advising system for General Education. Furthermore, Dean Engel briefly discussed the idea of revamping the First-Year Seminars so that these introductory courses provide students with the knowledge necessary to select coursework that will help the individual refine their critical thinking abilities. Finally, a brief discussion was had regarding the idea of an Amazon.com-like course suggestion system (e.g. If you liked course 'X' you may enjoy courses 'A', 'B', and 'C').

Associate Vice President and Associate Dean Tanya Furman

In Dr. Furman's in-class discussion, numerous policy-critical topics were reviewed. One of the most prevalent topics within the discussion was the idea of "anti-intellectualism." Many students currently seek courses that will grant them the easy A, as opposed to courses that will challenge the student to review their perspectives. To alleviate the issue, Dr. Furman expanded upon the General Education Task Force's perspective behind the proposed theme approach (Footnote: Dr. Furman was not speaking on behalf of the Task Force, but rather providing an explanation of the concept to the class). The idea behind the theme is to require students to take courses outside of their major that are all related by a common topic, or theme. Such themes will be "firewalled" from the student's major to require the student to think outside of their usual realm of thought, and thus promote critical thinking skills. In order to implement such themes, Dr. Furman emphasized that themes must be structured such that there is no "easy way out" of the General Education coursework. In essence, Dr. Furman discussed the idea of establishing a set General Education curriculum, rather than providing students with a list of "boxes to check off" before graduation.

General Education Task Force Schreyer Focus Group

At the start and end of the session, the moderator had each student choose their favorite amongst the three options being discussed by the task force including: "exploration," "themes," and "engaged scholarship." In both cases, there was a unanimous vote for the program focused on engaged scholarship. However, the students identified important outcomes met by each of the options. Exploration provides basic literacy in a wide range of fields and serves students who come to college not knowing what they want. Themes extend beyond the introductory level and emphasize the overlap between different fields. Engaged Scholarship prepares students for the

real world and promotes collaboration. Some interesting ideas spurred by this discussion included General Education short courses which may last for half a semester and explore a specific idea in depth. Other students suggested making "engaged scholarship" a requirement without a credit amount attached to it. It would be a checkbox to cross off before a student graduates, but they would not receive a grade. Students would get as much out of the exercise as they put into it, similar in a sense to the honors thesis requirement in the Schreyer Honors College. Finally, students suggested incorporating online classes so that it is feasible to offer a greater range of General Education courses.

Dean Susan Welch, College of Liberal Arts

Dr. Susan Welch, Dean of Penn State's College of Liberal Arts, presented a more skeptical perspective on the discussions surrounding General Education reform at the University. She emphasized that the current program is not failing, but it can be more effective and it must be able to be scaled to meet the mass needs of all University students. She also shared the dual concerns of rigor and coherence in General Education courses. While these are fine goals, she noted that all the variables exist in a delicate balancing act. She seemed wary of providing a scripted coherence through the thematic approach at the expense of flexibility. One marked advantage of the thematic approach that she did mention was faculty collaboration, although she was quick to counter, acknowledging that any such collaboration simply could not be permanent. Briefly, she mused about other methods of achieving coherence in the General Education program and mentioned the possibility of simply providing a listing with grouped courses (without requiring them specifically) and then improving advising and communication. With much of the advising duties now carried out by professional advisors, the faculty have lost touch with engaging students in the curriculum and forging a meaningful educational experience. Dean

Welch also expressed concern about crediting too many educational experiences ("engaged scholarship" items), saying that too many badges or certificates could marginalize the value of the University's seal of approval. In all, she offered a much-needed realist perspective on the intricacies of reforming the current General Education curriculum.

Barry Bram, Office of Student Affairs

Barry Bram, member of the Office of Student Affairs, brought experienced insight on "engaged scholarship" to the table. Of particular interest was how this initiative fit into discussions of General Education reform. He said that an estimated 50% of Penn State students have had some sort of engaged scholarship experience (whether that be research, an internship, study abroad, etc.), so clearly this type of educational experience is important to a large body of University students. He did confirm what we had heard from other interviews and concluded ourselves--that the proposal to incorporate some sort of engaged scholarship component into the General Education requirements had been essentially rejected by the Task Force. Barry did, however, suggest that engaged scholarship might fit as part of General Education advising or departmental advising. This form of learning raises concerns about how to ensure the rigor and value of the experience and the risk of turning General Education requirements into a sort of "dumping ground," but nonetheless it sparks important questions about the traditional modes of learning and education.

Dean Paula Milone-Nuzzo, School of Nursing

Dean Milone-Nuzzo proposed the following bit of wisdom about both General Education and education as a greater enterprise: "There's nothing wrong with education, but we can do it better." Regarding the purpose of a General Education, she asserted that it is not simply part of a larger democratic ideal— "It's about everything...politics, ethics...everything." She sees the new

thematic approach to General Education as an attempt to teach more about the process of learning, an attempt to get students to see how learning is accomplished so that they can make it an integral part of their lives. But, she cautioned that there are multiple paths to the same end. While themes may be one way to teach the interdisciplinary process of learning, others still exist. She pointed to strong learning objectives, faculty collaboration, and capstone approaches as some others and asked, "Why not have more than one?" Dean Milone-Nuzzo did, however, caution about being too liberal in the approach, stating that something such as solely a minor can be too narrow a focus and not achieve the interdisciplinary inclusion that new General Education reformers are seeking. She expressed support for having full-time, permanent faculty teaching General Education courses and offering these courses at higher levels. Barring logistical implementation, she was certainly hopeful about some new path or combination of paths for achieving the aims of General Education.

Section 3.2 Main Policy Considerations

Our team ascertained several important messages and vital considerations from our survey of General Education broadly and in the context of Penn State. We recognized that a plan for reform would need to be a curricular plan —one that gives the General Education program a cohesive structure that lends itself to progression and development of the student. Furthermore, it would need to preserve flexibility so that students could still be provided a critical space for exploration, risk, and new experience. Aside from the content and structure of the new General Education curriculum, it must answer the call for collaboration and synthesis between disciplines. The curriculum should engage faculty as well as students and allow professors to be creative and directive. There must be a plan for the implementation of the new curriculum that centers around effective communication and that allows it to be adopted by all of Penn State and

its Commonwealth Campuses. And lastly, the new curriculum must be amenable to change. It is important that it achieves it aims and goals and that it is able to be altered if these are not being met. Students must learn what the curriculum intends to teach, and it is the responsibility of the General Education program to ensure this occurs.

Chapter IV. A Policy Overview

With the previous considerations in mind, our group set out to create a policy that met the demands for a reformed General Education program for Penn State. We achieved this by focusing ideas and proposals within the three broad areas of Structure, Communication, and Assessment. Our approach is based on the opinion that Penn State already has the resources, classes, faculty, and students to make the new General Education curriculum a success. Further, we aligned many of our ideas with the efforts of the GETF to facilitate the adoption of our proposal by the University. As such, our policy is not a sweeping reform. Rather, it is a calculated and deliberate restructuring and revitalization of General Education at Penn State. The following policy outlines a plan for reforming the Structure, Communication, and Assessment of General Education so that Penn State will be a leading example for all of higher education.

Chapter V. Policy Proposals

Section 5.1 Reforming Structure

The new General Education program will consist of 39 total credits which are broken down between three different modes of learning:

A. Exploration (9): Elective-based learning which allows students to branch away from the disciplinary learning undergone in their degree program and delve into a diverse range of fields which they find interesting. This will promote an appreciation for other viewpoints and perspectives which students may not otherwise be exposed to.

B. Focus (15): In-depth study of an interdisciplinary, culturally significant field. This type of learning will extend beyond the introductory level and provide students with a recognized proficiency in a certain topic.

C. Core Skills (15): Mastery of basic skills needed to thrive in the 21st Century as both a member of the workforce as well as an engaged citizen. These skills fall under the realm of communication, quantification, and health/well-being.

5.1.A Exploration:

As mentioned before, the exploration courses will incorporate great student choice and allow students to seek out introductory studies of a wide range of fields. John Downs, director of the Delta Program at the State College High School, an alternative education program that provides students with the power to direct their own education, pointed out why student choice is so pivotal. Having students take ownership of their education gives them a sense of autonomy and, in his experience, provides for a more stimulating education. Therefore, the nine exploration credits are at the student's disposal to freely try courses that qualify as General Educations.

It is important, however, that exploration courses do not dissolve into unengaging "fluff" courses which lack rigor and only give students a very peripheral glance at a subject. In consulting University Park undergraduates, it was suggested that courses can be repetitive and wasteful with the time given (SHC Focus Group, April 8, 2014). In order to boost efficacy and provide a degree of focus to General Education courses, short courses which provide a more pointed investigation into a topic could be offered in conjunction with standard, full-semester courses. Professors would have to be more frugal when constructing a syllabus due to the shortened term. This will likely reduce the amount of redundancy and "filler" material in introductory classes such that the course is more meaningful. These short courses would be 1.5 credits and last for half of the semester. 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 on the Arab-Israeli Conflict could be offered as an alternative to a 3-credit introductory course to international politics.

Through highly general, introductory classes, students only study the vocabulary and theories of a field in a broad context. However, since these short courses are more acutely focused, the same vocabulary and theories can instead be applied in the analysis of a more specific problem. Learning through the application of ideas is both engaging and effective.

5.1.B Focus:

The 15-total credits in the Focus category will be comprised of four 3-credit General Education courses and a final 3-credit Capstone course. This pattern is closely aligned with the "themes" option proposed by the GETF. As stated by the Themes and Exploration Subcommittee

of the GETF, "Themes invite us to deal with forms of complexity that extend beyond individual disciplines or methods of inquiry, and a well-designed Theme may reveal emergent phenomena that are more than the sum of their constituent parts" (Shapiro, 2014). The intention is that faculty from various departments could come together in order to design curricula for the Focus General Education courses that bring together perspectives and knowledge from multiple fields. These General Education courses would intentionally highlight the overlap between different fields. Our proposed Focus category satisfies all the GETF's concerns and aims while providing foci that are societally important and inherently interdisciplinary. It is important to note that courses themselves would not have to be modified to cater to the focus, nor would the courses themselves have to be explicitly interdisciplinary as these courses would still be taught by departmental faculty. Rather, it is a responsibility of the student to critically assess their coursework, seek out the linkages between their focus classes, and apply the different modes of thinking to the understanding of a common idea. Additionally, it is the responsibility of the faculty to facilitate this type of thought when presenting course material and designing assignments. Students participating in a General Education focus group found the idea of our proposed foci appealing in that it allows students to ask more complex questions and receive a more "tangible takeaway" from their General Education experience (personal communication, April 8, 2014).

The following figure provides an example of what a potential focus may look like:

Interdisciplinary Focus: "Risk"

Courses Included in Focus:

ECON 102: Introductory Microeconomic Analysis and Policy

STAT 100: Statistical Concepts and Reasoning

PHIL 010: Critical Thinking

HIST 130: Introduction to the Civil War Era

METEO 004: Weather and Risk

SRA 111: Introduction to Security and Risk Analysis

RM 302: Risk and Insurance

PL SC 410: Strategy and Politics

MATH 486: Mathematical Theory of Games

The foci are thematic in nature rather than pertaining to a highly specific topic. They act as threads between several different fields, or ideas that can be better understood by analyzing them from multiple different lenses. This allows the foci to provide for freedom of interpretation while maintaining a degree of commonality between coursework. As an example, the focus "risk" can be analyzed through a historical, political, industrial, and mathematical lens, and it is centered on far-reaching skills and ideas such as strategic planning, critical thinking, and crisis management.

As shown above, the focus would be designed by faculty to incorporate a number of different courses which students could choose between. As stated earlier, the focus would involve four 3-credit focus courses and a final 3-credit Capstone class. The four General Education courses would consist of two lower level courses and two upper level courses. The lower level courses would be more introductory in nature and would likely act as prerequisites

for upper level courses that students may choose between. Students would have the opportunity to declare their focus after at least two semesters at Penn State.

In order to assure that students are diversifying their courses, General Education courses would maintain their tags designating which of the four knowledge domains they are classified within (GN- natural sciences, GS- social sciences, GH- humanities, and GA-arts). Students will not be permitted to take all of their focus courses in the same knowledge domain. Additionally, between the focus and exploration courses, students will be required to have at least one course in each of the four knowledge domains.

Finally, each theme would finish with a 3-credit Capstone class. This Capstone class does not necessarily parallel the Capstone requirements in several majors. Rather, this is simply a project-oriented class that is purposefully designed to be collaborative, cumulative, and reflective. Students will work in groups to apply the interdisciplinary knowledge gathered from their General Education courses to tackle an issue related to their theme. By intentionally providing a plethora of different courses within each focus, the hope is that each student in the group would bring a slightly different perspective having taken different focus courses. The General Education faculty in charge of collaborating on the focus could determine how much freedom students have in terms of the medium and audience for the Capstone experience. Faculty would be encouraged to draw in outside sources and connect students to corporations and organizations which may have interest in the student projects. Additionally, faculty would be welcome to draw from their own research in order to provide unique resources for the students as they complete their Capstone.

Foci will be engendered through collaborations between faculty members teaching

General Education courses. These faculty members will correspond with one another to pitch

new ideas for these interdisciplinary learning tracks. They will compile courses which students can choose from within the focus as well as a set of learning objectives which describe in meaningful and pithy statements what students should take away from their focus coursework. Afterwards, the ideas for foci will undergo review by the General Education Institute, an administrative board outlined in the Communication and Assessment portions of this proposal.

For students who feel encumbered by the focus and wish to take greater ownership of their education, a specialized 2 & 2 plan would allow them to craft their own focus. This would entail taking a lower level and upper level course from one focus and pairing this with a lower level and upper level course from a second focus. These students would then have the challenge of bridging these two fields together in their Capstone project and explicitly demonstrating the manner in which the two foci play off of each other.

A potent function of the focus model is that it provides a clear "takeaway" for a student's General Education, as graduating from a focus signifies a degree of mastery in a concept. In order to make this explicit, a student's diploma will read their completed degree as well as the name of their interdisciplinary focus. Additionally, the creation of the foci will ideally pave the way for interdisciplinary minors which pick from various fields in order to gain comprehensive understanding of a societally significant concept. If so, a student's focus could segue into the completion of an interdisciplinary minor. In essence, these foci strike a balance between broadening a student's scope while allowing students to progress past the introductory level, general scope.

5.1.C Core Skills (The Core Four)

6-credit Writing and Speaking Sequence

The proposed writing and speaking sequence acts as an alternative to ENGL 015 (Rhetoric and Composition) and CAS 100 (Effective Speech). It draws inspiration from the Rhetoric and Civic Life sequence adopted in the Schreyer Honors College and Paterno Fellows program which applies both writing and speaking in conjunction through assignments such as written and oral deliberations. Since these communication tools go hand-in-hand, it is more natural to incorporate them into the same course rather than having ENGL 015 exclusively devoted to writing and CAS 100 exclusively devoted to speaking.

3-credit Quantifications

The quantifications requirement would be retained in the General Education program, and as before, students would be able to meet this requirement via their major courses. However, the credit load for the quantifications aspect of the General Education program has been reduced to 3 credits since the former 6-credit requirement appeared to be somewhat arbitrary, lacking strong justification. The evaluation mechanisms proposed will allow administrators to determine the whether students are appropriately mathematically literate when graduating from the General Education program.

In Washington State University's "Seven Learning Goals and Outcomes" they describe quantitative reasoning as the ability to "draw appropriate conclusions based on the quantitative analysis of data, while recognizing the limits of this analysis" and "express quantitative evidence in support of the argument or purpose of work" (*WSU Undergraduate Graduation Requirements*, 2014). Therefore, for students who are not predisposed to delve into mathematics and merely seek numeric literacy, courses which teach a practical use of mathematics such as "Mathematics

for Sustainability" or "The Mathematics of Money" should be promoted (*University Bulletin*, 2014). Rather than teaching computation, these courses foster practical skills in data analysis – a takeaway which Dr. Dennis Shea, Associate Dean in the College of Health and Human Development described as one of the key skills in the 21st Century (personal communication, February, 19, 2014).

3-credit Health and Physical Activity

The Health and Physical Activity requirements will remain as they are now. Students will have the freedom to choose how they wish to fulfill these Health and Physical Activity credits by incorporating GHA courses into their schedule.

3-credit First Year Seminar/ENGL 202 Combination

In this freshman year sequence, students will learn how to make academic and career choices while practicing how to advocate for themselves so that they can be successful in their field. The class would meet three times a week. Two of these meeting times will occur in small sections of about 20-25 students, similar in structure to the freshman seminars of the current system. All of the students in these sections would be of the same department or academic college. In these classes, a more specialized approach to career development would be adopted. Students would be introduced to their specific academic domain and professors of these classes would be encouraged to bring in guest speakers from academia and industry who can help give the students a glimpse of the academic and career choices that will be specific to their field.

In addition, once a week, the students will meet in larger writing labs with about double the students which will be facilitated by faculty from the English department. These writing labs will assist with writing resumes, cover letters, reports, and proposals. The curriculum of this course will parallel that of the ENGL 202 courses under the current system. When speaking to

Dr. Hampton N. Shirer, Associate Dean of Academic Affairs in the College of Earth and Mineral Sciences, he mentioned that ENGL 202 is only of value if it comes before the student must apply for their first internship. Similarly, Professor Gus Colangelo, former Associate Dean for Undergraduate Education and Director of Outreach for the Smeal College of Business, stressed the fact that because ENGL 202 sections fill up so rapidly "seniors can't get into 202 sooner," and as a result only receive the benefit of ENGL 202 after it is too late (personal communication, February, 17, 2014). Therefore, incorporating the information covered by ENGL 202 into the freshman seminar makes it more relevant and useful to students. It also adds meaning to the freshman seminar which at this point often lacks rigor or focus simply due to a lack of clear learning objectives.

Section 5.2 Reforming Communication

A successful implementation of structural changes is contingent upon effective communication. Indeed, though it is commendable for Penn State to reform General Education, communicating the established learning objectives and vocalizing the goals of the new program are just as vital as the reform itself.

Former American Journalist for the *Chicago Daily News*, Sydney J. Harris, once said, "The two words *information* and *communication* are often used interchangeably, but they signify quite different things. Information is giving out; communication is getting through" (Sydney J. Harris quote). The intentions and goals set forth by the current General Education system at Penn State are undoubtedly credible. Indeed, "General Education, in essence, augments and rounds out the specialized training students receive in their majors and aims to cultivate a knowledgeable, informed, literate human being" (University Bulletin). Though such an objective is laudable, simply stating the intention without fully ensuring successful implementation is inadequate.

To apply Harris's words, Penn State has *informed* students and faculty of the General Education mission. They have "given out" the aims and objectives, stating these publicly on the University Bulletin. The university has not, however, successfully *communicated* the goals of the program with utmost quality. To apply the words of Harris, they have not "gotten through." This is largely evidenced by the General Education Task Force's identification of the need for reform. As stated on Penn State's General Education website, "The current General Education curriculum does not always live up to this ideal. Too many students see General Education as a menu of unconnected experiences, a mere hoop through which to jump before their serious discipline-specific coursework begins" (Vision). Rather than benefiting from the cross-disciplinary experiences General Education courses intend to provide, many students view the courses as mere "requirements" that have to be fulfilled. Over time, "requirement fulfillment" has emerged as the focus for many students rather than "student fulfillment" or intellectual enrichment

To address this concern and begin the transition from an era of "informing" to one of "communicating," from one of "requirement fulfillment" to one of "intellectual fulfillment," faculty members need to take the lead. Although university leaders and policy makers can authoritatively institute positive change and promote learning objectives, "students will be most influenced by the messages sent by the individual *faculty* members in the courses they take" (Tritelli, D). To facilitate the transition, ensure that the ideals of the new system are adequately communicated, and to safeguard the system's sustainability, a General Education Institute should be formed. The mission, structure, and responsibilities of the General Education Institute are detailed below.

5.2.A Mission of the General Education Institute

The General Education Institute will communicate the purpose of General Education to both the students and the faculty. In addition to teaching the General Education courses, the Institute ultimately provides a common space for the professors to communicate and collaborate, ensuring that courses are well-integrated, the structure is properly communicated, and that the General Education system is achieving its specific learning objectives.

5.2.B Structure of the General Education Institute

The General Education Institute will be under the purview of the Faculty Senate as it is a curricular body. The Institute structure will consist of the following:

- · Core of professional, full-time advisors and other administrative personnel
- Two representative college-level advisors from each college
 - Includes representatives from The Division of Undergraduate Studies (DUS) and the Schreyer Honors College
 - Two representatives from each branch campus
 - General Education Institute will handle World Campus with World Campus

 Administration
- · 1 Tenured Faculty member oversee and organize each focus

The General Education Institute will have a physical location with collaborative spaces.

This format will urge professors to communicate amongst each other especially when creating syllabi and instructional plans, critical opportunities for ensuring course linkages.

5.2.C Responsibilities of the General Education Institute

The General Education Institute responsibilities are numerous yet largely focus around the instruction of courses and proper communication as to their purpose. Indeed, professors teaching General Education courses will partake in periodic mandatory workshops offered through the Institute whereby they learn how to communicate the goals of General Education and teach toward the "Focus" at-large. An essential figure in rebranding the new General Education system, the Institute fundamentally serves as a body of communicators and advisors, knowledgeable of the implementation structure and objectives. Curriculum development, especially in regards to the Institute's approval and establishment of such Foci, should ensure the interdisciplinary nature of the foci. As suggested in the "Communicating Commitment to Liberal Education" guide for institutions, the Association of American Colleges and Universities (AACU) asserts "faculty members must be centrally involved in developing curricular requirements and shaping clear learning goals for their own classes. Faculty members also must come to a shared understanding of the broad learning goals that cut across General Education and major programs, and they must develop a common language to describe these goals" (Tritelli, D.). The "cutting across" notion becomes all the more essential when implementing a thematic structure of foci whereby courses are clustered in a cross-disciplinary manner. As hinted by the AACU, faculty engagement should not be limited to communication within one department. Indeed, to achieve the linkages between courses in a focus, dialogues must unfold "across departments, units, divisions, and schools" (Tritelli, D.).

Faculty who teach General Education courses should be tasked with ensuring that the learning objectives are communicated effectively and take shape, that is, they surface in the classroom and not just in the University Bulletin. *Communication* and "getting through," as

opposed to simply "giving out," should not be underestimated because "if students are presented with curricular choices simply as a disconnected series of requirements, it is unlikely that they will ever understand what the most important outcomes of college are" (Tritelli, D.).

Some important questions that aid in developing communication strategies for the curriculum as set by the AACU include:

- When students first enter the institution, do advisers make clear to them the relationship between General Education requirements and their major requirements? Do advisers discuss the broad skills and capacities students will be expected to develop across their educational experiences—both in the classroom and beyond?
- · Is it made clear to students that all requirements—in General Education and majors—are designed to foster the achievement of particular overarching learning outcomes?
- Are there opportunities for cross-departmental dialogue about overarching learning goals and how they are developed first in General Education and then in particular majors?
- Does your institution regularly survey students about their understanding of the curriculum and the learning goals it is designed to foster?

 (Tritelli, D.).

Questions such as these serve as guiding principles not only for effective communication, but constructive evaluation as well. Indeed, responsibilities of the General Education Institute include program appraisal and assessment, and will be further discussed in the next section (Assessment). Internal reviews that take into consideration the above questions allow for greater insights into system performance and highlight areas for improvement.

The success of a cross-disciplinary General Education system, such as that of the foci approach, is contingent upon effective communication. Faculty should be tasked with promoting such ideals and ensuring that linkages between courses permeate across the General Education system. In sum, the aforementioned ownership and responsibility seized at the leadership level will be instrumental toward positive fruition and critical understanding of the proposed General Education reform.

Section 5.3 Reforming Assessment

Critical to the success of the new General Education curriculum is monitoring the system's successes and failures. Our plan for reforming the assessment of the General Education program will do just this. Three basic requirements were set forth as principles for the newly proposed system:

- 1. End the "cycle" of major General Education reform every 15-20 years
- 2. Allow for both piecemeal and overall system assessment
- 3. Avoid the standardized testing model of assessment

With these requirements in mind, our assessment policy takes an approach that assesses the General Education system at the course, focus, and system level. The assessment process will include collecting course, focus, and program feedback data from students, faculty, TA's, and alumni at various regular intervals. The longest interval length does not exceed five years.

The backbone of this proposal lies in the course, focus, and program's learning objectives (LOs). All courses at Penn State are required to establish learning objectives. This policy will extend this practice into the focus level and General Education system level; each focus, as well as the entire General Education system, will have specific LOs. The aforementioned feedback data will assess the individual component's effectiveness via student completion of learning objectives.

5.3.A Individual Course Assessment

At core of the General Education curriculum are the individual courses, and therefore, the lowest level of the General Education's method of assessment is the individual course assessment. At the conclusion of a course, all students are issued a Student Rating of Teacher Effectiveness (SRTE) form to review their instructor's teaching abilities and provide critical feedback to both the instructor and the instructor's department head. To better assess the effectiveness of General Education courses, SRTEs will have an added Learning Objectives (LO) survey included in the form. This LO survey will include questions engineered to gauge the student's understanding of a LO as a result of the individual course. Students will not be required to fill out SRTEs, as requiring students to fill out the forms may incentivize students to provide noisy data (e.g. select one answer throughout the entire form for quicker completion). Leaving SRTEs as an option serves as a partial noise filter; only students who wish to provide meaningful feedback will take the time to fill out the SRTE, whereas students who would only provide noisy feedback will not fill out the form.

Similar to the student LO survey, instructors and their assistants (TA's, LA's, etc.) will be required to fill out a similar survey engineered to review their students' understanding of the course LOs at the conclusion of the instruction period. The course instructors handle all of the students' course materials (papers, exams, etc.) and based upon their experience with the class's materials, the instructors should be able to gauge the students' effectiveness at completing the course LOs. All of the aforementioned surveys will be written and designed by the General Education Institute. The LOs will be specified and designed by the course's department faculty.

The addition of a learning objective survey to SRTEs will allow faculty members, department heads, and the General Education Institute another non-grade-based metric to review

student understanding of the course material. Instructor assessment will force instructors and their assistants to review the course's graded materials and reflect on student understanding of the course material from a LO-based reference frame as opposed to an individual assignment-based reference frame. Since grading is anything but uniform, a consistent method of assessing individual LOs is a necessity so that courses can be effectively analyzed by course coordinators and the General Education Institute.

The data collected by the instructor and student surveys will be shared with both the department housing the course's instructor and the General Education Institute. Course grades will be reviewed and recorded, but used minimally in data analysis. The instructor's department will handle ramifications for poor teaching and/or failure by the students to discern the necessary information to complete the course's LOs. If necessary, the General Education Institute may choose to remove a course from the General Education curriculum should the course be deemed ineffective at achieving the course LOs.

The following table summarizes individual course assessment:

Who?	Students	Instructors	
What?	Typical SRTE with LO comprehension survey	Student LO comprehension survey	
When?	Conclusion of course	Conclusion of instruction period	
How?	Survey engineered by General Education Institute with course department input	Survey engineered by General Education Institute with course department input	
Required Survey?	No	Yes	
Data Distribution and Analysis?	General Education Institute and course department	General Education Institute and course department	
Decision Making?	Department manages course LO and professor SRTE feedback. General Education Institute manages course placement as General Education course.		

5.3.B Focus Assessment

At the inception of every focus, the faculty member in charge will be required to submit a set of learning objectives for the specific focus. The faculty members of the General Education Institute will approve these LOs, as well as the courses selected for the focus. As with the course assessment, the learning objectives will be located at the core of the foci's assessment. Similar to the course assessment methods, students will be given surveys engineered to assess their LO comprehension. Unlike the course SRTEs, these focus assessments will only be administered twice during a student's academic career at Penn State. The first assessment will occur at the conclusion of the student's second academic year (fourth semester) and the second assessment will occur in a culminating exit survey (prior to graduation).

Only collecting data at the conclusion of a theme would require the Institute's reviewers to wait until a class of students graduates before implementing change, and this method would

harm current students by preventing them from experiencing the benefits of their feedback. Therefore, it is proposed that foci assessment data be collected halfway through the student's undergraduate career. This will allow members of the General Education Institute to review the foci's effectiveness while students are currently engaged in the system. This will give faculty members the ability to modify and improve a lagging focus's curriculum "on-the-fly," and therefore improve current students' General Education experience. This data will be used by the General Education Institute to ensure the foci's integrity and effectiveness.

The faculty focus assessment methods will differ slightly from their course assessment methods. At the conclusion of any course that may be a part of a focus, the instructor and assistants for that course will fill out a learning objective survey similar to the one that they will fill out for their course. However, this LO survey will ask the instructors about the students' completion of focus-specific LOs. For example, if an instructor's course, let's call it A, falls into foci X and Y, then the instructor will fill out a survey assessing the course's students' LO comprehension for focus X and then fill out a second survey assessing the course's students' LO comprehension for focus Y. The General Education Institute will use this data. If a course fails to fulfill a focus's LOs, the faculty member may be recommended to reform an aspect of their class, or the course's placement within the focus will be reassessed.

The following table summarizes the focus assessment:

Who?	Students	Instructors	
What?	Focus-based LO comprehension survey	Students' focus LO comprehension survey specific to given course	
When?	Fourth semester in college and prior to graduation	Conclusion of every instruction period	
How?	Survey engineered by General Education Institute	Survey engineered by General Education Institute	
Required Survey?	Yes	Yes	
Data Distribution and Analysis?	General Education Institute	General Education Institute	
Decision Making?	If a focus is lagging based upon student feedback, the General Education Institute may choose to give the focus a boost by modifying its LOs or by adding/removing courses from the focus. If a course is lagging within a given focus, the General Education Institute may choose to discuss improvements with the course instructor or select to remove the course from the focus.		

5.3.C General Education Program Assessment

Similar to the foci and courses housed within the General Education curriculum, the General Education program shall have a high-level set of learning objectives. The General Education Institute will develop these LOs and they will reflect the university's goals for all of its degree-seeking undergraduate students. Unlike the assessment of the courses and foci, assessment of the program will occur much less frequently, but it will collect significantly more data. Program assessment will review alumni data alongside student and instructor data.

As mentioned in the focus assessment section, students will receive a mandatory exit survey. This survey will serve to inquire students about their ability to comprehend both their

focus's LO's and the program's LOs. This mandatory survey will serve as the most direct means of student input into the program's overall assessment. Student data from both the course and the focus levels will also be considered at this level of assessment. The General Education institute will only use the data gathered from this survey.

Differing significantly from the former assessment levels is the program's use of alumni data. Approximately five years following a student's graduation, they will receive a survey to assess the University's effectiveness in providing them with crucial life skills (i.e. critical thinking, etc.). Such skills will be at the core of General Education's LOs. This survey will be engineered by the General Education Institute to best assess graduates' comprehension of the material they learned while attending Penn State. This assessment will also analyze the alumni's knowledge retention. Such a survey will be optional to all alumni and all survey data will be used by the General Education Institute and shared with the Faculty Senate.

The purpose of alumni data is to provide the university with 'real world' data – in other words, alumni data provides the University with information regarding the effectiveness of courses in students' lives in the workforce. Such information will be invaluable to the General Education Institute, as it will allow the Institute to analyze the lasting impact of its coursework on students. Furthermore, the alumni survey will provide those in the workforce an avenue to give the University suggestions – such suggestions may allow faculty members to remain educated on topics sought after by various industry niches.

At the conclusion of every academic year, professors teaching General Education courses will be asked to fill out a final survey. Like the other surveys, this survey will inquire the professors about the students' LO completion for the overall program. This survey will also allow professors an avenue to provide direct feedback to the General Education Institute

regarding the General Education program's functionality. This feedback will be collected annually to allow course instructors time to institute new classroom policies that may foster better overall program LO comprehension. Annual surveys will also provide course instructors with the time required to observe the impact of any program revisions that have arisen because of the previous year's feedback. This annual feedback will be collected and analyzed by the General Education Institute.

Every five years, the General Education Institute will review all of the collected data from the former five years (course, focus, and program level data) to assess the status of General Education at the University. This assessment will also include select testimonials from General Education instructors, willing alumni, and students. This required five-year reassessment is designed to force the Institute to review its methods regularly so to prevent the current method of total reform every fifteen to twenty years. Furthermore, this method will allow for a dynamic system that undergoes moderate to small changes annually. In other words, this proposed method will prevent the General Education system from becoming stale. The five year timeframe was selected because it takes approximately five years for one class of students to obtain their degree. Five years takes into account the students who require more time to complete their degrees and those who wish to obtain multiple degrees, but require an extra one to two semesters. All of the findings by the General Education Institute will be presented to the Faculty Senate. Suggested program modifications to the program will also be presented the Senate, who shall ultimately approve of any significant program changes.

The following table summarizes the General Education program assessment:

Who?	Students	Instructors	Alumni	
What?	Program-based LO comprehension survey	Program-based, student LO comprehension survey	Modified LO comprehension survey	
When?	At graduation	Annually	Five years after graduation	
How?	Exit survey engineered by General Education Institute	Survey engineered by General Education Institute	Survey engineered by General Education Institute	
Required Survey?	Yes	Yes	No	
Data Distribution and Analysis?	General Education Institute	General Education Institute	General Education Institute	
Decision Making?	Every five years all of the data from the entire program will be analyzed to assess the program's overall effectiveness. The Institute's findings and program suggestions will be analyzed and presented to the Faculty Senate. The Faculty Senate will approve or disapprove of any major General Education changes.			

5.3.D Summary of Assessment

The goal of assessment in this policy is to allow the General Education Institute a metric of analyzing the effectiveness of the University's General Education program from an overall standpoint, as well as to analyze the program as a sum of its parts. The proposed assessment methods are designed so that the Institute receives feedback from every level of the program as well as everyone involved within the program. Furthermore, this method of near-continuous

assessment will prevent the curriculum from becoming outdated and stale. The ultimate goal of this assessment proposal is to create a dynamic system General Education system that may require more energy to establish, but will ultimately require less energy to maintain. This method will yield perpetual feedback and continuous improvement of General Education.

Chapter VI. Conclusions and Final Remarks

In one sense, General Education is meant to provide a base "literacy," so that students can properly interpret information and communicate their findings. In another sense, General Education is meant to provide breadth in contrast to the very singular depth provided by degree programs, which only grow more specialized as the focus of academic institutions shifts towards research. However, beyond the realm of academia, General Education courses have the potential to sculpt students into educated citizens and active public servants. General Education courses have the obligation to provide an "education for a world lived in common with others" (Knefelkamp & Schneider, 1997). The workings of our current General Education program are in themselves not problematic, but neither are they highly productive. They are, however, marred by a General Education program structure that is disconnected from the goals of the program, a misunderstanding across the students and faculty community as to what the purpose of General Education courses really is, and finally a lack of continuous feedback which can be used to gauge the success of the program. Recognition of these issues led to the realization that the keys areas in need of reform are the structure, communication, and assessment of the General Education program here at Penn State.

The structure of Penn State's "cafeteria style" General Education program was diagnosed to lack rigor and purpose. As such, students view General Education requirements as subordinate and even intrusive to their major coursework. Therefore, the modified structure has a place for academic exploration, interdisciplinary learning, and the attainment of essential skills in communication and quantification. The reallocation of credits and creation of a "focus" which acts as a cluster of General Education courses which provide an interdisciplinary analysis of a socially relevant idea, give General Education a newfound direction and purpose. The University

will not receive the maximum benefit from the reforms to structure, if the purpose of the restructuring and the purpose of the General Education program at large are not communicated properly to both students and faculty. It is impossible to better serve students who "do not share the belief of the universities that General Education is central to their education, a program with serious value to their intellectual development, to the ways in which they will live their lives, and to the quality of civic culture" (The Penn State Symposium on General Education, 2002). The creation of a central body of General Education Institute faculty, advisors, and administrators charged with communicating the purposes of the General Education program, how the program meets these goals, the purposes of the individual courses, and how they are structured, will make them most beneficial to the student. Lastly, as referenced in the diagnostic report on Penn State's General Education program, "Students in a Balance," it will be essential to close the gap between "rhetoric and reality" (The Penn State Symposium on General Education, 2002). By assessing whether the changes to the program are constructive and executed properly, the University can avoid making sweeping changes to the program after every fifteen to twenty years. Issues can be addressed prophylactically rather than waiting for the program to grow ineffective and stagnant. Collecting feedback from students, professors, and alumni will ensure more timely and effective change.

Currently, General Education requirements constitute about 38% of a student's credit load, and because their role is not clearly understood and communicated, these credits seem to simply take up space. The noble and potent goals of General Education must be efficiently executed and communicated. As stated by Dean Milone-Nuzzo, Co-Chair of the Logistics and Implementation Subcommittee, "There's nothing wrong with education, but we can do it better" (personal communication, 4 March, 2013).

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