

UNIVERSITY of PENNSYLVANIA

PHILADELPHIA 19104

*The Student Committee
on Undergraduate Education*

First Floor Houston Hall/CM
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To Members of the University Community:

Two decades ago it was not expected that undergraduate students would devote great energy and time to producing a comprehensive report on education at the University. Yet, today we take for granted the essential programs whose foundations were laid by the 1965 SCUE Report. Co-educational living, individualized study, study abroad, pass-fail options, and freshman seminars, all of which are integral to the current Pennsylvania education, each had their basis in that first SCUE report. In 1971, a second SCUE report called for innovative outlooks on undergraduate programs and encouraged such initiatives as the creation of a single Vice Provost to coordinate undergraduate programs, which has evolved into the Vice Provost for University Life, and the creation of a system of College Houses.

Progressive ideas, however, are not always met with warm responses. In 1965, SCUE was considered politically naive and overly idealistic for being the first organization to call for the merging of the College and the College for Women. Today, the centralization of the Arts and Sciences faculty is considered a crucial development in the University's history. Our current report, The SCUE White Paper on Undergraduate Education, hopes to achieve similar reform. In this report, we lay the foundations for new programs in curriculum, advising, residences, and admissions. Each program comprehensively describes the changes that are necessary, but more importantly, our proposals outline the educational themes which should characterize the undergraduate experience at Pennsylvania.

Educational reform can only occur in a vibrant environment which greets new ideas as necessary components of continuing challenging discussion. This report provides a wealth of material which can inspire such fresh exchange. We look forward to its discussion.



Lou Schachter
Chair

THE SCUE WHITE PAPER ON UNDERGRADUATE EDUCATION



*The Student Committee
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-1985-*

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INTRODUCTION

The University has intensified its commitment to shape the most appropriate and cohesive education for the Pennsylvania undergraduate. But commitment can be effective only when there is something to commit to; it must be focused on a unified concept of the program including definitions and goals which allow reformers to reason from ideal to action. Within the large structure of the University, change can be most constructive when it is understood in the context of the world. For each reform we must ask "Why?", and we must answer from our store of basic educational values. Here we have set the goals and begun to examine how they may be realized. We have built a framework for the development of programs which will enhance the undergraduate experience.

The Student Committee on Undergraduate Education is the principal University student group charged with stimulating undergraduate educational reform. In this White Paper on Undergraduate Education, SCUE seeks to initiate discussion on critical areas of undergraduate education. The report combines an assesment of pressing educational questions with creative suggestions for maintaining excellence in the Pennsylvania education.

Education represents a principal catalyst for societal development. Through education members of a civilization become intellectually and socially mature; through education the civilization itself advances.

This thought is the inspiration for the two themes which underlie our report:

Knowledge of the vital system of ideas of our time characterizes the educated person. Education must provide an understanding of our basic cultural heritage in order to convey to the student the ideals and values which have markedly influenced the development of our culture. No Pennsylvania student should be graduated without extended study of the best that has been said, thought, written and otherwise expressed about the human experience. Beyond providing cultural literacy are two other needs. First, we must develop each student's ability to think critically and analytically and to communicate effectively. Second, we must familiarize students with the chief methods of scientific inquiry, including established patterns of social and cultural analysis, the customary forms of investigation into the biological and behavioral nature of humankind and the physical nature of our universe.

The University can only fulfil its educational and academic responsibility in a vibrant intellectual atmosphere. Meaningful interaction between faculty members and students must be the keystone of the undergraduate experience at Pennsylvania. To ensure this intellectual environment, selection of prospective students and faculty members should be guided by our commitment to scholarly investigation, personal growth, and societal development.

Principally this report explores the operations of the four undergraduate schools and the central divisions which serve all undergraduates. Specific areas discussed include curriculum, advising, teaching, residential life, and admissions. Three types of suggestions can be loosely categorized: (1) specific program changes or additions, (2) the identification of areas which deserve extended study by the University, and (3) comprehensive proposals for the development or transformation of large programs.

TRANSMITTING KNOWLEDGE AND FOSTERING UNDERSTANDING

Knowledge of the vital system of ideas of our time characterizes the educated person. Education must provide an understanding of our basic cultural heritage in order to convey to the student the ideals and values which have markedly influenced the development of our culture. No Pennsylvania student shall be graduated without extended study of the best that has been said, written, and otherwise expressed about the human experience. Beyond providing cultural literacy there are two other needs. First, we must develop each student's ability to think critically and analytically and to communicate effectively. Second, we must familiarize students with the chief methods of scientific inquiry, including established patterns of social and cultural analysis and the customary forms of investigation into the biological and behavioral nature of humankind and the physical nature of our universe.

Students often begin college with only a vague notion of the purposes of their undergraduate education. Before undertaking the improvement of the Penn undergraduate program, we need to firmly establish for ourselves an institutional philosophy which articulates the goals of an undergraduate education. From sound guidelines, we can develop a more coherent undergraduate experience which promotes rational approaches rather than rigidity or uniformity. This philosophy must not only emphasize the importance of educational goals but also underscore the consequences of failing to strive for them. The goals of each of our undergraduate schools must stem from our objectives as a single University.

Penn students are among the future leaders of our society. They will be expected to make decisions which require creativity, analytic thought, and articulate expression. These are tools an education must provide. It must also offer a conception of the individual and of society, and more significantly, the interaction of the two. The philosophies of the four undergraduate schools each acknowledge this necessity. Only with the fullest knowledge of our cultural legacy can the individual make reasoned and responsible judgements.

At Penn today, we see a tendency toward overspecialization in part due to the real and imagined requirements of graduate and professional study. The danger of this phenomenon is that it leads to a fragmented and restricted knowledge of the world and its inhabitants. Therefore, our mission is the integration of Penn's wealth of resources in a curricular structure which provides both breadth and depth and achieves our most basic educational objectives.

A strong curriculum, however, is not in itself sufficient for fulfilling these objectives. Effective academic advising is central to intellectual growth and scholarly investigation. We must create an advising network which helps students develop educational goals and guides them in the attainment of these goals. A sound advising system must reconcile the needs of the student with the resources of the University.

Penn professors are often among the most respected scholars in their fields. Yet, when their commitment to scholarly pursuits is not synonymous with the effective communication of the discipline, we lose both the benefit of preeminence and the value of their knowledge.

EPOCHS: GREAT PERIODS OF CIVILIZATION

A knowledge and understanding of the past is as necessary as is an awareness of our present culture. The basic ideas that make up civilization have evolved from a progression of smaller traditions. When we can see ourselves as part of this progression, then will we be able to better understand contemporary civilization, and be more prepared to accept change and move forward. We cannot escape the necessity of cultural literacy, either as individuals or as denizens of the world.

To facilitate cultural understanding, we propose a program consisting of four semester-long courses concentrating on a single past society, each of which will give greater insight into individual components of that society. The program is designed so that each individual course builds upon the knowledge and understanding of the previous ones in the sequence, thereby providing a cohesive course structure. After completion of this continuum, having studied all aspects of a society from both an historical and humanistic perspective, the student will have the foundations necessary for a greater understanding of both our present culture and other past societies.

Examples of such epochs are: Classical Greece, Ancient Rome, the Medieval Period, the Italian Renaissance, the Reformation, the Elizabethan Era, and the Enlightenment. During the first semester, the student will study the history of the period. This will provide the context for subsequent discussion. Building upon the understanding of that history, the second semester will focus on the ideas and philosophies which were integral to that society. In the third semester, literature will be read and analyzed in terms of the prevalent ideas and historical context within which they were written. During the final semester, the art and music of the epoch will be studied to further exemplify the humanistic expression of that age.

To summarize:

First Semester: History of the Epoch
Second Semester: Philosophy of the Epoch
Third Semester: Literature of the Epoch
Fourth Semester: Art and Music of the Epoch

Such a program achieves many of the objectives outlined in the recent report on undergraduate education from the Study Group on the Conditions of Excellence in American Undergraduate Education and the report on the teaching of the humanities from the National Endowment for the Humanities.

A council of interested faculty members should be established to formulate and oversee these courses. It must be understood that all of these courses should be optional: the intriguing and unconventional nature of the course material should ensure its appeal. The courses should be taught in seminars and be closely coordinated. We recommend, however, that the student be required to adhere to the established sequence for those courses he or she wishes to pursue. Such adherence is necessitated by the cumulative nature of the sequence.

The necessity of formulating a cohesive program in the humanities which has both breadth and depth and from which a student

could gain a broad understanding of humanistic endeavors throughout history should be of primary importance to this and all universities. Our tendency towards the often arbitrary compartmentalization of disciplines is counteracted as students understand that no single facet of society exists in isolation. This comprehensive program examines the flux of ideas and reactions that are indicative of reality outside Academia. When examining the merits of this proposal, the consistency of this objective and our program to achieve this goal should be considered. The study of one civilization will provide the understanding of the general tenets by which all societies, past and present, operate; thereby helping the student to appreciate the philosophies that underlie our modern world.

THE ROLE OF ARTS AND SCIENCES DISTRIBUTIONAL GUIDELINES

Each of our undergraduate schools has expressed its belief in the centrality of the Arts and Sciences within a quality undergraduate education. Arts and Sciences are the foundation of all undergraduate study. The university must ensure that students do not merely satisfy requirements, but rather, explore and experience the intellectual breadth that the Arts and Sciences offer.

Currently, each of the four schools has distributional requirements in the Arts and Sciences. Additionally, all four schools have approximately the same number of courses devoted to these general educational objectives. It is evident that these requirements are all meant to achieve similar objectives--the goals which form the traditional foundations of liberal study.

Distributional requirements in the Arts and Sciences should be the same for all four undergraduate programs. The distributional system we propose seeks to strengthen the liberal arts foundation of all students' coursework while not detracting from the rigorous programs of the four undergraduate schools.

Unified guidelines for Arts and Sciences study have additional advantages. First, they will help students to identify not with their particular school, as they now do, but with the University as a whole. Second, they provide a further opportunity for students from all four schools to interact on an intellectual and scholarly level. Finally, they help to make the Penn education a more coherent learning experience.

Guidelines for study, we believe, should not be legalistic declarations. The purposes of distributional requirements must be evident within their formulation. These themes underlie our recommendations for unified Arts and Sciences guidelines, based on the highest standards of educational philosophy.

The educated person is able to think critically and logically and to communicate such thoughts in an effective manner. An intensive study of the English language is essential to the development of such abilities. Words are the elementary pieces of analytical thinking. The definition and development of ideas can only occur when the intricacies of the thought process are fully understood. For these reasons, we propose that each student complete one semester of a writing-intensive English course. While "Writing Across the University" courses do help to improve written communication throughout the curriculum, we do not feel they alone possess the necessary focus on the English language as the object of study to fulfill this requirement.

The educated person faces no greater challenge than to overcome cultural provincialism. The problems and opportunities which characterize the modern world require a broad and humanistic outlook. Such a perspective is best facilitated through the study of a foreign language.

Each Penn student, should understand, speak, read, and write a foreign language and become familiar with both the literature and culture of which that language is part. The study of a foreign

language has intellectual as well as social benefits. Intensive study of a foreign language helps sharpen one's ability to understand the intricacies of one's own language. The benefits of foreign language study transcend school lines, and, as with our other suggestions, we feel that a foreign language requirement is necessary for all four schools. Thus we propose that all students demonstrate proficiency in a foreign language through the completion of four credit units of study of a single language.

The educated person must also understand the vital system of ideas of our time. Such understanding is accomplished through the study of various disciplines. It is difficult if not impossible, to construct a set of guidelines which insure an understanding of our civilization. However, it is necessary to try. Though there are infinite permutations of the various academic disciplines possible, we have settled on one which has great benefits. First, our plan recognizes the need for study in both the humanities and in the social sciences as do current requirements in all four schools. Second, it recognizes the necessary distinction between humanities and social sciences which some of the schools currently do not do. Finally, it eliminates a long standing problem in the natural science requirements by differentiating the physical from the life sciences, both of which must be studied to understand ourselves and our universe.

Our guidelines for Arts and Sciences study are based on the philosophy that there are four areas of knowledge which all students should understand:

The Nature of the Human Legacy (traditionally the humanities)
The Nature of the Physical Universe (Physical Sciences and Mathematics)
The Nature of Human Life (Biological and Behavioral Sciences)
The Nature of Society and Culture (Social Sciences)

We suggest a simple distributional plan which would require each student to complete two courses in each of three of these areas. Since courses which are part of the major program would overlap at least one area entirely, students would be exempt from one, but only one, of these four areas. In the other areas, they would not be able to double-count courses which are also required by the major. This stipulation is intended to ensure that there is a substantial component of the education that is not major related. In addition, minors should be completed within the framework of these distributional requirements. Those pursuing minors should not be freed from any of these requirements.

The final component of our distributional system is a requirement that the student complete four additional free electives in intermediate-level courses within the Arts and Sciences. This guideline would provide further breadth while ensuring that students pursue coursework above the introductory level. Four courses are necessary for this component because essential to the notion of a liberal educational foundation is the ability to explore one's interests beyond the major course of study.

To summarize:

Requirements:

Two courses in each of three of the following four areas:

The Nature of the Human Legacy (Humanities)
The Nature of the Physical Universe (Physical Sciences)
The Nature of Human Life (Biological and Behavioral Sciences)
The Nature of Society and Culture (Social Sciences)

= 6 c.u.

Four Foreign Language courses = 4 c.u.
One English Course (writing intensive) = 1 c.u.
Four Free Electives Above Introductory Level = 4 c.u.

Total number of Arts and Sciences Distributional Courses=
= 15 c.u.

Suggestions for interpretation of the Guidelines:

--If a student elects to pursue the proposed humanities program, the first two courses in the sequence should fulfill the "Nature of the Human Legacy" requirement, and courses in the sequence beyond the first two should count as part of the four free electives above the introductory level.

--Students in the School of Engineering and Applied Science should be treated as having majors which cover the "Nature of the Physical Universe" and therefore should complete the other three areas. School of Nursing students should similarly fulfill all areas other than the "Nature of Human Life," and Wharton school students should complete all areas other than the "Nature of Society and Culture". In each of these cases, the major requirements ensure adequate study in the Arts and Sciences in the fourth area.

We suggest that guidelines be incorporated into the full curricula of the four schools as outlined in the respective sections below.

CURRICULUM IN THE COLLEGE OF ARTS AND SCIENCES

One goal common to all aspects of undergraduate curriculum is the active involvement of students in the organization of their education. An undergraduate should not be allowed to slip through four years of school without ever feeling personally connected to his or her curriculum.

Academic departments should organize coursework in a way which does not allow students to passively float through an arbitrary and disjuncted body of knowledge. They can inspire students to be involved in their curriculum through major programs that are structured around specific themes within the discipline. In order to unify the major, departments should structure their programs to include specific thematic emphases. Each department and interdisciplinary major should create major track options focussed on more detailed areas of the discipline. Such an organization of the major coursework, as is currently employed in the English and History departments, brings concentrated unity to the broader academic majors by encouraging students to take courses which relate to each other. It achieves a crucial objective of the depth component of a student's curriculum - that of synthesizing academic material around a single intellectual focus.

Individual investigation of a single area can be promoted by specialized studies such as senior theses, independent study, and seminars. Required senior seminars or theses in each major will integrate the four years of undergraduate study of the major area into a coherent whole and add a sense of completion and unity.

Departments should encourage students to take as many seminars as possible. Seminar classes allow students to work with course material in groups and express ideas in a manner less formal than through examinations and papers. Seminars foster close interaction between students and professors, as well as among students themselves. The very nature of the small class prompts a student to become more active in what he or she is learning.

Distributional coursework links with the major program of study to comprise the essence of a liberal education. The fifteen credit distributional plan fits in well with college majors, varying from 12 to 18 credits. Non-major related courses make up a great proportion of each student's chosen curriculum, whether requirements or free electives. The care used in choosing them should be equivalent to the care used in choosing courses in the major field, and they should be comprised of courses in a broad range of fields.

CURRICULUM IN THE WHARTON SCHOOL

The undergraduate curriculum of the Wharton School is based on the Arts and Sciences as the foundation for all study of business management. Three suggestions for the Wharton undergraduate program clarify the relationship between the general educational foundation and the business portion of a student's studies. First, we suggest a clarification of the true role of the Arts and Sciences coursework within the curriculum. Second, we propose a curricular revision which discourages the pursuit of a second Business Concentration (the entire Wharton business program is considered the major; the student chooses an area of concentration which composes four credit units) at the expense of the Arts and Sciences coursework. Finally, we point out the tendency of the Wharton student to concentrate his or her coursework in the first rather than the last two years of study.

Currently, only nine of the Arts and Sciences courses that a Wharton student must take are not related to the business major. This is an unhealthy situation which does not challenge the Wharton student to avoid overspecialization. The unified distributional guidelines for study in the Arts and Sciences which we have outlined above can be merged with the Wharton curriculum as follows:

Two courses in each of the following three Arts and Sciences areas:

The Nature of the Human Legacy
 The Nature of the Physical Universe
 The Nature of Human Life

	= 6 c.u.
Four Foreign Language Courses	4 c.u.
One English Course(writing-intensive)	1 c.u.
Four Arts and Sciences Courses Above the Intro Level	4 c.u.
	= 15 c.u.
Economics 1 and 2	2 c.u.
Math 140 and 141 or 150 and 151	2 c.u.
Legal Studies 1	1 c.u.
Accounting 1a and 1b	2 c.u.
Finance 1 (or Economics 4)	1 c.u.
Quantitative Science (Statistics 1a and 1b plus computer science)	3 c.u.
Business Area Distribution	4 c.u.
Business Concentration	4 c.u.
	= 34 c.u.
Free Electives	2 c.u.
	= 36 c.u.

This program has several ramifications for the Wharton curriculum. It should be noted that while increasing the required number of Arts and Sciences courses, it does not change the business component of the program at all. The plan is meant to alter the role of Arts and Sciences courses, not weaken the business study.

The advantages of the our program are several. First, it makes the necessary distinction between those courses in the Arts and Sciences which are necessary for the major and those which exist to achieve the traditional goals of higher education. The differentiation is necessary to ensure breadth in the Arts and Sciences coursework. Secondly, it fulfills the goals of our unified distributional guidelines for the Arts and Sciences study by coordinating Wharton requirements in the Arts and Sciences with those in all three other schools. Finally, it employs simple requirements which are educationally sound and for which the purposes are evident.

Our second proposal modifies the curriculum's policy on electives. We have transformed the existing four non-business and four free electives into four intermediate Arts and Sciences electives and two free electives. This change achieves two important objectives. First, it specifies that a set number of electives be in the Arts and Sciences rather than within any school. Second, by limiting the free electives required for the degree to two, we maintain a 36 c.u. program and discourage students from pursuing two concentrations in Wharton. Such discouragement is necessary in view of the fact that the second Wharton concentration usually takes the place of further Arts and Sciences or broader Wharton study. Of course, the student could pursue the second concentration if he or she is willing to go beyond the degree requirements and take two additional courses.

The final objective of our curricular revision is to encourage students to focus on Arts and Sciences coursework during their first two years of study and more on business coursework during the final two years. Traditionally, this procedure is how a major is pursued. Yet, we have observed in Wharton a marked tendency to complete the bulk of business study before the senior year. Such early concentration distracts from the overall education. Arts and Sciences distributional study should occur in the first two years to (1) provide the student with the proper educational background for informed academic choices, (2) promote the role of Arts and Sciences as a foundation for business coursework, and (3) encourage the student to shift his or her major courses closer to graduate study or employment.

To clarify our suggestions for reordering the Arts and Sciences and business coursework, we present below a generalized schematic plan of the current and proposed Wharton schedule.

Generalized Wharton Schedule:

A&S Course = distributional course in the Arts and Sciences
 Bus. Course = one of the required four courses in specified business areas

CURRENT

Freshman Year		Sophomore Year	
<u>Fall</u>	<u>Spring</u>	<u>Fall</u>	<u>Spring</u>
Econ 1	Econ 2	Stat 1a	Stat 1b
Math	Math	Acct 1a	Acct 1b
Freshman Sem.	Legal Studies	Finance 1	Computer or
A&S Course	A&S Course	Bus. Course	Decision Science
		A&S Course	A&S Course
			A&S Course
Junior Year		Senior Year	
<u>Fall</u>	<u>Spring</u>	<u>Fall</u>	<u>Spring</u>
Major Course	Major Course	Major Course	Major Course
Bus. Course	Bus. Course	Bus. Course	A&S Course
A&S Course	A&S Course	A&S Course	A&S Course
A&S Course	A&S Course	A&S Course	A&S Course
A&S Course	A&S Course		



PROPOSED

Freshman Year		Sophomore Year	
<u>Fall</u>	<u>Spring</u>	<u>Fall</u>	<u>Spring</u>
Econ 1	Econ 2	Stat 1a	Stat 1b
Math	Math	Acct 1a	Acct 1b
A&S Course	A&S Course	Finance 1	A&S Course
A&S Course	A&S Course	A&S Course	A&S Course
	A&S Course	A&S Course	Bus. Course
Junior Year		Senior Year	
<u>Fall</u>	<u>Spring</u>	<u>Fall</u>	<u>Spring</u>
Bus. Course	Legal Studies	Major Course	Major Course
Bus. Course	Major Course	Bus. Course	Major Course
A&S Course	A&S Course	Computer Sci.	A&S Course
A&S Course	A&S Course	A&S Course	A&S Course
A&S Course			

choice of major would occur
 at midpoint of junior year

Of course, we do not intend to proscribe a single schedule for all Wharton students. Our aim is to utilize the curriculum and advising to indicate to students how they might better plan their coursework.

CURRICULUM IN THE SCHOOL OF ENGINEERING AND APPLIED SCIENCE

The engineer is the innovator of technological change. Engineers must first understand the moving forces of society before they can participate in its technological advancement. The current Engineering curriculum provides the engineer with a strong technological education. However, the Engineering curriculum does not acknowledge the role which the Arts and Sciences must play in the education of the engineer. With this in mind, we propose the following integration of major requirements and the Arts and Sciences curriculum.

Our proposal distinguishes between major related Arts and Sciences courses and the coursework necessary to achieve the breadth characteristic of a quality education. Unified distributional guidelines connect the experiences of undergraduate Engineering students with those of their peers in the other schools. In many cases, the engineering-related courses must be reduced by one or two credits to allow for a more extensive study of Arts and Sciences. Maintenance of the basic structure of the various engineering programs is necessary to ensure their competitiveness among other four year programs. Therefore we propose the reasoned integration of major requirements with a comprehensive Arts and Sciences curriculum as follows:

Two courses in each of the following three Arts and Sciences areas:

The Nature of the Human Legacy
The Nature of Human Life
The Nature of Society and Culture

	=6 c.u.
Four Foreign Language Courses	4 c.u.
One English Course (writing-intensive)	1 c.u.
Four Arts and Sciences Courses Above the Introductory Level	4 c.u.
	=15 c.u.

Increasing the number of Arts and Sciences courses required will ensure breadth in Arts and Sciences study, in keeping with the traditional goals of higher education.

As detailed above, students in each area of study are required to take fifteen Arts and Sciences courses. Our proposal makes the important distinction between Social Sciences and Humanities, which the current program does not do. In the math, science and engineering areas, we recognize that the specifically titled required courses form the basis of the program. Treating them as essential, we eliminated in most cases those courses which were not part of the directed curriculum and those which simply placed an added burden upon the student. In almost all cases, one math course becomes an elective, as it is shifted into the "others" category. The required natural science courses remain intact, as they are integral to engineering. Again, those engineering courses which remain are those which have been designated by course number; in most cases, few, if any, have been eliminated. Between 1.5 and 4.5 "other" course units remain to

be chosen from math, science, or engineering offerings to enhance or diversify the particular discipline. The exceptions to this are Systems Science and Engineering and Bioengineering, which cannot include any "others," due to the their special interdisciplinary natures.

Our recommendations are summarized in the following chart:

Proposed Major Requirements

Chemical

15 A&S
4 Math
7 Natural Sciences
11 Engineering
3 Other
40 credit units

Civil

15 A&S
4 Math
4.5 Natural Sciences
12 Engineering
4.5 Other
40 credit units

Electrical

15 A&S
4 Math
4.5 Natural Sciences
12 Engineering
4.5 Other
40 credit units

Material Sciences

15 A&S
4 Math
7.5 Natural Sciences
12 Engineering
1.5 Other
40 credit units

M.E.A.M.

15 A&S
4 Math
4.5 Natural Sciences
13 Engineering
3.5 Other
40 credit units

Systems Science

15 A&S—includes application
oriented focus
6 Math
5 Natural Sciences
14 Engineering
40 credit units

Bio-Engineering

15 A&S
4 Math
7.5 Natural Sciences
14 Engineering
40.5 credit units

Sample Course Planning Sheet
Chemical Engineering Student

A&S Course = distributional course in the Arts and Sciences
SSH = Social Science or Humanities Course

CURRENT

Freshman Year

<u>Fall</u>	<u>Spring</u>
Math 140	Math 141
Che 100(Other)	Chem 2, 52
Chem 1, 51	Physics 150
SSH	SSH
SSH	

Sophomore Year

<u>Fall</u>	<u>Spring</u>
Math 240	Math 241
Physics 151	Che 231
Che 200	Organic 145
SSH	SSH
Other	Math

Junior Year

<u>Fall</u>	<u>Spring</u>
Che 332	Che 351
Che 350	Che 371
Che 352	SSH
SSH	Other
Other	Other

Senior Year

<u>Fall</u>	<u>Spring</u>
Che 400	Che 459
Che 410	Other
Che 451	Other
Other	Elective
Elective	Elective



PROPOSED

Freshman Year

<u>Fall</u>	<u>Spring</u>
Math 140	Math 141
Che 100(Other)	Chem 2, 52
Chem 1, 51	Physics 150
English	Foreign Lang.
(Writing)	
Foreign Lang.	

Sophomore Year

<u>Fall</u>	<u>Spring</u>
Math 240	Math 241
Che 200	Che 231
Physics 151	Organic 145
Foreign Lang.	Foreign Lang.
Other	A&S Course

Junior Year

<u>Fall</u>	<u>Spring</u>
Che 332	Che 351
Che 350	Che 371
Che 352	A&S Course
A&S Course	A&S Course
Other	

Senior Year

<u>Fall</u>	<u>Spring</u>
Che 400	Che 459
Che 410	A&S Course
Che 451	A&S Course
A&S Course	A&S Course
A&S Course	

CURRICULUM IN THE SCHOOL OF NURSING

The foundation of the School of Nursing curriculum is the delicate balance among clinical, non-clinical, and Arts and Sciences coursework. As the philosophy of the School of Nursing states, a person and the environment are open systems engaged in continuing dynamic interaction which involve the individual, the family, the group, the community, and society. The understanding of such complex interactions requires a rigorous background in the Arts and Sciences and thorough study of the nursing discipline. Two revisions address the lack of non-major related Arts and Sciences courses in the nursing curriculum.

First, the School of Nursing should adopt the unified guidelines for distributional study in the Arts and Sciences that have been suggested above. Our program has several advantages. First it makes the necessary distinction between those courses in the Arts and Sciences which are necessary for the major and those which exist to achieve the traditional goals of higher education. Second, it further enhances the nurse's position as a University rather than a Nursing student and more systematically organizes a nurse's Arts and Sciences coursework. Finally, it strengthens the emphasis given to Arts and Sciences coursework that is not related to the major.

To achieve a better balance with Arts and Sciences courses, nursing requirements should be somewhat condensed. Currently, the Nursing curriculum requires fourteen courses in the Arts and Sciences. However, five of these are specifically related to the Nursing major, and an additional three are within the departments of Psychology, Sociology, and Anthropology, which relate closely to the major. The breadth which distributional guidelines exist to ensure is specifically breadth beyond the major course of study. The current Arts and Sciences guidelines do not allow a diverse general education background.

Two modifications of the Nursing curriculum are necessary to allow room for our distributional guidelines. Nursing 230 (Statistics) and Nursing 260 (Research) should be taught as a single course in one semester because the content of the courses is closely related. Second, the option of pursuing the required Nursing Elective during the January break should be made a part of the curricular structure, so that students will not face semesters with more than five and a half credit units at any time.

Our recommendations are summarized in the following chart:

Generalized Nursing Schedule

CURRENT

Freshman Year

<u>Fall</u>	<u>Spring</u>
Nur 40 (Inorganic Chem)	Nur 40 (Organic Chem)
Psych 1	Nur 50 (Intro to Nursing) - 0.5 c.u.
Sociology Elective	Educ 360 (Human Development)
Anthro Elective	Elective
English 1 (Craft of Prose)	English Elective

Sophomore Year

<u>Fall</u>	<u>Spring</u>
Nur 131a (Anatomy & Physiology)	Nur 131b (Anatomy & Physiology)
Nur 100 (Family & Community)	Nur 170 (Intro to Nursing & Health Care) - 2 c.u.
Nur 54 (Nutrition)	Bio 203 (Microbiology)
Elective	Elective
Elective	

Junior Year

<u>Fall</u>	<u>Spring</u>
Nur 200 (Nursing Care of Childbearing) - 3 c.u.	Nur 250 (Care of the Ill Adult) - 3 c.u.
Nur 142 (Pharmacology)	Nur 260 (Research Methodology)
Nur 230 (Statistics)	Elective

Senior Year

<u>Fall</u>	<u>Spring</u>
Nur 300 (Care of the Chronically ill) - 3 c.u.	Nur 350 (Advanced Clinical Practice) - 3 c.u.
Nur Elective	Nur 380 (Professional Issues) - 0.5 c.u.
Elective	Elective
	Elective

PROPOSED

Freshman Year

<u>Fall</u>	<u>Spring</u>
Nur 40	Nur 41
A&S Course	Nur 50 -
A&S Course	0.5 c.u.
A&S Course	A&S Course
A&S Course	A&S Course
	A&S Course

Sophomore Year

<u>Fall</u>	<u>Spring</u>
Nur 131a	Nur 131b
Nur 100	Nur 170 - 2 c.u.
Nur 54	Bio 203
A&S Course	A&S Course
A&S Course	

intersession
nursing elective

Junior Year

<u>Fall</u>	<u>Spring</u>
Nur 200 - 3 c.u.	Nur 250 -
Nur 142	3 c.u.
A&S Course	Nur (Research/ Stat)
	A&S Course

Senior Year

<u>Fall</u>	<u>Spring</u>
Nur 300 - 3 c.u.	Nur 350 - 3 c.u.
A&S Course	Nur 380 -.5 c.u.
A&S Course	A&S Course
	A&S Course

CREATING A NEW ADVISING SYSTEM

Advising should be an accessible, individual process that is not so much instructive as reflective. Both advisor and student need to ask questions, and both should give answers. The advisor should not tell the student what to do. Rather, he or she should act as a catalyst, initiating discussion, asking questions, and explaining options which cause the student to think carefully about educational goals. The advisor must stimulate students to think actively about their academic decisions, must lead them to spheres of choice they might consider, and must help them manipulate their choices into reality.

In order to investigate the creation of an ideal system of advising based on the specific academic concerns of Penn undergraduates and the resources that should be made available to them, we first need to define its responsibilities in view of the broader scope of educational values.

The advising system must allow each student adequate time for self-definition. By verbally clarifying needs and interests in the advising situation, providing sufficient access to all available resources, and guiding the student to course choices that further aid such clarification, advising can better equip students to find and take full advantage of the academic path that best fits these interests. Because the development of attitudes and interests which influence decision-making are reflected in changes in students' chosen curricular, academic, and career goals, advising must be prepared to deal with all stages of redefinition and choice the student might encounter in four years at Penn.

Individual advising is successful when students understand why they make the choices they do, are encouraged to clarify needs and interests upon which they can base their decision and feel free to redefine their goals if necessary. Students do not go to an advisor to hear them read the catalog; it takes responsive encouragement to guide students as they turn their ideas into realities.

At present the advising system does not meet these purposes. In an informal survey, for example, when asked how satisfied students were with the help they had received from the College advising office, the mean rating was only 2.61 (on a scale of 1-5 with 5 being the highest). This represents a decrease in satisfaction with the SAS Advising Office since 1981, when the same question was asked in a more widely distributed survey and the mean was 3.11. If we are to facilitate our theories coherently, we must devise an advising system which is consistent in purpose and emphasis. We therefore propose the Penn Advising Network, a group of well-defined component resources which each serve a specific function, yet adhere to common goals and acknowledge, refer to, and communicate with the other parts of the system. The system takes advantage of the established advising programs in each of the four schools while providing central advising support for students from any of the schools.

Committee to Create a New Advising System: Procedure

SCUE began to design an advising system by defining advising itself. In discussion, we determined concerns specific to each of the four undergraduate years. By seeking possible solutions to different advising needs we discovered five resources which have become the backbone of our system: the advising office, faculty advisors, peer/residential advisors, the Career Planning and Placement Service, and advising publications.

Our Advising Chart systematically orders this information. Read horizontally, the chart shows how the responsibility of advising students could be divided up among the five resources. Read vertically, the chart shows how the student uses each resource as he or she progresses through the four years, and how that resource's role, purpose, and utility change as the student's needs change.

This chart became the official map of our network, as we used it to determine where services overlapped and how they could work together as a system. The result is this proposal, where we are able to take into account the total advising experience in terms of the constant series of resources which operate in a network.

Horizontal Summary of the Advising Needs Chart: The Needs, Goals, Emphases, and Trends of Each Year

The Freshman Year:

Freshman year is a time for intellectual and social adjustment, development, and discovery. It is also the year in which the student's ideas about his or her own education are most vague. It is the responsibility of effective advising to help the freshmen recognize intelligently his or her academic ideas and goals. The freshman should be greeted by an advising system which is supportive, informative, and responsive to his or her needs.

In the summer before the freshman year, the freshman would use the advising handbook for selecting courses and tentative academic planning, and would be introduced to Penn and the purposes of education through it. If the individual was able to visit the campus, he or she would also be able to meet with the appropriate academic advisor, who would be the main advising resource for the freshman once he or she arrives at Penn. The advisor's work would be supplemented by the special faculty advising program for freshman.

The goal of the advising system in the freshman year is to help the student actively and enthusiastically create a meaningful yet flexible academic plan. The freshman should not feel pressured to find a major early on or to rush to get rid of requirements. Once aware that the many academic options available at Penn are there to be indulged in and enjoyed, he or she has valid criteria for deciding which will afford the richest academic experiences, and take a variety of courses to supply a firm basis for the major decision or exciting follow-up courses.

	Advising Office	Faculty Advising	Peer/RA Advising	Career Planning and Placement	Advising Publications
Freshman	<ul style="list-style-type: none"> -make all options of course types known -help develop academic plan, emphasizing its flexibility -don't scare students into hasty major choices -same advisor through all four years -several meetings during freshman year -should meet: before school begins (if possible) and first month of semester 	<ul style="list-style-type: none"> -encourage experimentation -point out skills courses -provide and encourage students to develop a variety of these skills -should be randomly assigned 	<ul style="list-style-type: none"> -help adjust to college and anxiety of being away from home 	<ul style="list-style-type: none"> -encourage academic experimentation as best way to begin search for eventual career -emphasize that this is a facility for everyone 	<ul style="list-style-type: none"> -temporary academic planning sheets and planning guides -help students understand relationship between major and career -better advising/course selection manual for the summer -guide to resources, Q and A's -statement of purpose of education
Sophomore	<ul style="list-style-type: none"> -don't drop students after freshman year -identify and contact problem students -emphasize ability to change freshman choices -should meet: at beginning of year to point out choices of sophomore year -should recommend faculty to interested students 	<ul style="list-style-type: none"> -questions about prospective majors; students should talk to someone about each possible major (skills involved, types of careers) before declaring -talk over general questions re: new majors -suggest internships in time for students to make academic changes junior year 	<ul style="list-style-type: none"> -stop student from feeling lost after much support during freshman year -encourage extra-curricular activities 	<ul style="list-style-type: none"> -encourage alternative educational choices such as internships and study abroad 	<ul style="list-style-type: none"> -remind students of what they don't know about Penn -transfer publication(s) -repeat some freshman things to ease transition -emphasize importance of defining interests as students start to look forward to choices to be made this year -emphasize experimentation
Junior	<ul style="list-style-type: none"> -stress that it is still not too late for curricular change -emphasize better choices because there is less time left -should meet: before sophomore summer or at beginning of junior year, to examine the previous two years and to decide how the next two would be best used 	<ul style="list-style-type: none"> -encourage students to get to know faculty for recommendation purposes -help students narrow academic concerns within the major -suggest internships, career possibilities to start thinking about 	<ul style="list-style-type: none"> -"mid-life crisis", time to question relationships of last two years 	<ul style="list-style-type: none"> -adult considerations: career/grad school questions answered through workshops, publications -recommend that students start to think about the options, make sure that a variety of information is available about conventional and unconventional choices 	<ul style="list-style-type: none"> -career planning guide: <ul style="list-style-type: none"> -stress important time to know CPPS -list resources available and how to use them -internship opportunities -importance of getting to know faculty for recommendations
Senior	<ul style="list-style-type: none"> -make sure all requirements will be completed 	<ul style="list-style-type: none"> -encourage senior "tying four years together" -curriculum (theses, senior seminars, independent study) -discuss career and graduate school opportunities especially best programs in corresponding fields, which professors should know best 	<ul style="list-style-type: none"> -students serving as Peer/RA advisors themselves 	<ul style="list-style-type: none"> -help alleviate career/grad school frenzy by making information about many options available <ul style="list-style-type: none"> -values clarification, alumni networks -make sure student understands search methods -suggest non-traditional options 	<ul style="list-style-type: none"> -senior worksheet to make sure all requirements are met -grad school/job hunt guide, including timetable and worksheets

The Sophomore Year:

Although the sophomore may return to campus thinking that he or she knows everything about Penn, decisions that he or she must make during the year will require active investigation. The advising system must provide the full availability resources to help the sophomore decide on a major and keep informed about the declaration process. Networking comes into play as the parts of the system start to work together to help guide the undecided student toward the right department.

In our overall effort to establish continuity within the system, it is important that the support offered to students as freshmen is maintained as they enter sophomore year. Advising should afford sophomores the opportunity to look back at their freshman year as well as forward to the upcoming year. Students should follow up on courses that interested them to see how an interest may turn into a possible major.

The goal of advising in the sophomore year is to make the major decision an informed one. Academic advisors must have access to information about departments for the prospective major, know what types of interest may lead to particular fields, and know of professors and students to contact for more information in each department.

Sophomores should be encouraged to explore the options available to them, and to familiarize themselves with specific majors through publications, faculty, and academic advisors. Advisors must stress that it is not too late to change short or long term academic goals formulated during the freshman year. At this time, advisors might mention the possibilities available for internships and overseas study.

Sophomores take advantage of the academic advisors to help them narrow the interests they pursued their freshman year into one major field of study. Faculty advising through departments becomes important, as academic advisors begin to refer undecided students to one or more departments to find out more about each possible discipline. When the sophomore declares his or her major, a member of the faculty of his or her chosen department becomes that student's major advisor for the remainder of the college career. Thus, a transition slowly occurs as the major advisor becomes the prevalent source of information when the student begins to specialize in a major.

The Junior Year:

The junior may be going through the "mid-life crisis" of his or her college career, questioning the accomplishments of freshman and sophomore years while beginning to think about the future. Just as freshman experimentation prepares the student for the major decision in the sophomore year, the junior must take steps which will enable him or her to go through another decision-making process in the senior year.

Advising should emphasize to juniors that they should begin to use their time carefully. They should be reminded that college is a time to satisfy curiosity, and choose electives which interest them. As they proceed into the major they will require

closer relationships with faculty and departmental advisors who may also be sources of recommendations. And they may begin to further define post-college plans.

Information about possible careers and graduate school options should be available, and juniors must be informed about how these resources can be used. They may need adequate advising to help them sort out their interests if they are unsure of what to do after graduation.

Although the advising office is still available to help out the junior in this look back at the two previous years and make sure he or she understands what the next two years should entail, the major advisors are the main academic information source. Juniors also begin to look to the Career Planning and Placement Service. When he or she understands what the next two years should entail, the major advisors are the main academic information source. Juniors should also begin to look to the Career Planning and Placement Service. When the student enters the senior year, he or she should become familiar with the process of choosing and preparing for a career or graduate school.

The Senior Year:

The senior must complete his or her college goals while beginning to set postgraduate goals. The goal of the advising system is to lessen the frenzy of worrying about the future by helping seniors to find out about and apply for jobs and graduate schools. Emphasis is on options; information about conventional and unconventional opportunities should be available, and advisors should have access to resources such as the alumni networks which will help them find special programs.

Once again, all decisions should be informed ones. Seniors should explore options, think carefully about their future, and be selective enough to make plans with which they will be happy.

The Career Planning and Placement Service will be of the most use to the senior, although the academic advisor must make sure that all graduation requirements are fulfilled. Major advisors help seniors by referring them to alumni, and may be knowledgeable about good programs for those who wish to continue in their major field of study.

Vertical Summary of the Advising Needs Chart: Turning the Theoretical into the Practical

Academic Advising and the Advising Center:

The ideal academic advising facility would integrate advising for all four schools in a central location. Because of the sheer size of a physical structure which allows for most advising needs to be met in one place, the advising program itself must be structured to maintain unity for all undergraduates while catering to specific needs, programs, and problems.

Three types of advisors located in the advising center cater to three types of student needs:

1. The graduate student advising assistants, available in the reception area if the advising, screen students to guide them to the appropriate resources, schedule appointments tailored to the student's needs with advisors, and answer quick, general information questions. This will draw students to the advising center no matter how small their problem may seem as well as allow appointments to occur in adequate time slots with the advisor most familiar with the problem. To use an advisor's and student's time effectively, scheduling must take into account the number and type of questions the student has.

2. Four-Year academic advisors are assigned to each entering student and remain with their charges for all four years, although their involvement lessens as department affiliation grows. With a wide knowledge of academic issues, throughout each undergraduate's college career they act as both guides and watchdogs by encouraging the student to think about his or her academic experiences and find a niche while ensuring that all requirements are met, appropriate goals are set, and trouble does not set in. At certain checkpoints, meetings with this advisor are mandatory. Advisors must keep records of their advisee's previous appointments and what had been discussed. Ideally, the student will develop a good relationship with this advisor, and feel comfortable coming in to see him or her for guidance or on an informal basis. Initially, advisors should be assigned to freshmen who live in the same residential unit, and interact in the lives of their advisees by their affiliation with this unit as well as in the advising situation. Aside from the more regular interaction this promotes, it makes the residence seem more of an academic community and allows for a convenient evaluation of the advisor's effectiveness within the freshman residential system.

3. School Advisors are more specialized, able to answer students' and four year advisors' questions specific to each of the undergraduate schools. With extensive knowledge of and close contact with their school's departments, they should know faculty members to whom they can refer students who have a tentative plan for a major decision or a transfer of school.

The advising facility must be spatially arranged in a comfortable and attractive environment which invites open discussion between students and advisors on equal terms, reflecting warm interaction, not sterile instruction.

The student enters a large reception area which also serves as an academic information library. Tables and comfortable chairs are provided for reading publications from all academic sectors of the university, both graduate and undergraduate. Also included are videotapes about programs and computers which access information such as syllabi and research interests of faculty. Departments and schools explain themselves, as do resources on requirements.

The relaxed and congenial spirit should continue into the appointments, as advisors are encouraged to hold meetings in

more informal settings than behind their desks, such as on sofas or around a table. On equal footing with their advisor, students will feel more comfortable asking questions, asserting their own ideas, or refuting an advisor's suggestion.

About twenty-four advisors would fill the needs of the new system, each taking about four hundred advisees. Five school advisors would include two representatives of the College, and one from each of the other schools. Both four-year and school advisors might also hold adjunct faculty positions and teach at least one course a year. This would not only keep them in touch with the workings of the University, but add variety which may induce fresh approaches to their advising responsibilities. At least one advising assistant should always be on duty, with more if necessary. A Director of Advising, who would also act as a four-year advisor, is needed to administer the center and coordinate all facets of the system. He or she would operate under the auspices of the Vice Provost for University Life, to ensure constant communication between the Advising Office and student services it works with, such as Residential Living. The offices and administrators of other parts of the system should also be headquartered here in the general resource area. This central advising program would effectively replace the academic advising offices of the College and the Wharton School. It would supplement the faculty advising system in use in the Engineering and Nursing Schools.

During the summer before freshman year, an advising assistant will be available to acquaint new students with the advising system and help them with the details of beginning their academic careers at Penn. The initial meeting with the four-year advisor should occur in the summer or early fall and use the general questionnaire as a reference point, so the advisor can begin the advising relationship with questions pointed toward the student's individual concerns. Nothing in the questionnaires would be binding, of course, just as no decisions made in the session are. Several meetings during the semester would inspire the student to evaluate his or her academic situation and assume a more active role in planning it. At the end of the session, the advisor should encourage the freshman to maintain contact with him or her by suggesting another meeting in the near future and reiterating his or her role. The advisor should keep a record of this and all appointments which can be reviewed when the student comes for the next meeting, in order to give informed advice and not waste appointment time reiterating basic concerns.

In the sophomore year, continued support might entail a meeting with the academic advisor as the fall semester begins to discuss how to build on freshman year in deciding subsequent courses. Academic advisors should identify and assist problem students in the sophomore year.

Juniors are often shipped out to ministrations of their various departments, but should meet with academic advisors at the end of the sophomore or beginning of the junior year to examine the first two years and decide how the next two would be best put to use, both in and out of the major department.

Academic advisors play a more limited role for the senior, making sure that all requirements for graduation have been

completed.

Faculty Advising:

Faculty members, as advisors, mentors, and friends, should be a key resource for students. Interaction will build as students discover their interests and benefit from faculty who share them. To ensure comfortable relations between faculty and students in advising, informal, and classroom situations, freshmen should be introduced to Penn as a place where faculty/student interaction is an established part of the freshman experience.

Under the Faculty Mentors Program, fifteen to twenty freshmen would be randomly assigned, as informal advisees, to a faculty or academic staff member. Both faculty and students benefit, as mentors who do not often have a chance to work with undergraduates will use this program to keep involved with the workings of the University outside of their departments, and students get to know other students in a more intellectual atmosphere. We believe that on their own, and through the use of appropriate incentives, the requisite number of faculty members will agree to participate in this program.

Beginning New Student Week with a dinner for the whole group, the mentor and group's ongoing relationship would be maintained through functions such as meals or cultural events through the year. Faculty/student interaction is thus promoted while mentors get to know students well enough to prove effective resources in more conventional advising situations. Each freshman has an accessible advocate and supporter on campus who has a basis for dealing with concerns specific to the individual, and it is easier to turn with a problem to a familiar face for advice. Mentor's advising would be more informal and less fact-oriented than that sought from the four-year advisors, geared towards clarifying values and commitment rather than academic career goals.

This program would be administered through the advising center by a coordinator who would be responsible for assigning groups planning activities, and training faculty and staff.

Freshmen who have had a good experience with their mentors may wish to continue their relationship into their sophomore year, adding continuity to their academic and advising experiences while establishing a valuable contact. A reunion with the mentors and the group would reinforce the goals of the freshman program while encouraging sophomores to maintain their freshman relationships.

Academic advising should help the sophomore in his or her search for a major by referring the sophomore to faculty members in departments of his or her tentative interest. Students should have a clear understanding of a major before committing themselves to it, and by discussing their academic interests with a professor they may learn more about the discipline and the departmental requirements. To declare a major a meeting with the departmental advisor is required. An advisor is then assigned to help develop programs which ensure the best possible major experience for each individual.

During the first semester of the junior year, the student must meet with the advisor to develop an academic plan. The advisor should be able to refer the student to other resources such as the Career Planning and Placement Service. Departmental advisors should encourage seniors to tie their four years together through the senior seminars, departmental honors, or independent study. Departments should maintain a network of alumni who are available to talk to students about the relationship between their major or chosen career.

Peer/Residential Advising:

Residential or peer advising should enhance the efforts of the advising system within the context of the residences. In the freshman year, the student needs strong residential support to make the most comfortable adjustment to possible to college life. But the residential advising must continue on into the upperclass years with similar support. Residential advisors must not only be trained to deal with social matters, but must have a clear idea of where to guide students with academic concerns. Training in academic advising should be accomplished in coordination with the Director of Advising.

Better financial incentives which define the role of residential advisor as academic advisor and the use of graduate students may help to ensure the quality of academic advising in the residences. Especially in freshman residences, graduate students with a background in common freshman subjects may be able to not only tutor freshmen, but be hired as TA/GF's who teach sections of freshman seminars and recitations of popular freshman courses in the residential context. This would not distract from their essential function as personal advisors, and compensation could include not only room and board but tuition credits and stipends.

The Career Planning and Placement Service:

The Career Planning and Placement Service works with the rest of the advising system to make the most information possible about opportunities available to students. It should be located in the same facility as the advising center, and operate under a philosophy consistent with other advising resources. To be most effective, CPPS offices should be located within the central advising office.

While the CPPS plays a subdued role in the freshman year, it must begin to make itself known. By encouraging academic and experiential experimentation as an effective way to begin a search for an eventual career and/or graduate school, it can enhance the work of other advising agencies. A letter reiterating this will be included with other freshman information to alleviate career pressure felt even before the student enters college.

In the junior and senior years, the CPPS begins to take on a more traditional role as career and graduate school questions requiring more adept answers begin to be posed. Each student who requires a CPPS advisor will be assigned one, who will remain

consistent, offering more personal service to the student. Sessions with the advisor as well as CPPS workshops and publications should be part of the upperclassman's decision-making and application processes.

In the senior year, the CPPS should do whatever possible to alleviate career or graduate school frenzy or problems by helping students to make the most informed choices possible. Once again, advising is not just about opportunities, but about individuals. Career counseling must be provided which helps students discover for themselves how their interests can be transformed into careers. It must be stressed that a job is not just something to "get"; individuals must explore what they are happy doing, for it may be something they will be doing for a long time.

Publications:

A series of academic reference manuals, distributed at the beginning of each year, are not substitutes for advisors, but encourage full use of the advising system by educating students about available resources. They will offer good ideas and information presented in an attractive and easygoing way; it is up to the advisor to help the individual consolidate these ideas into reality. Both advisors and students will benefit, as these publications free their time to discuss personal needs in greater depth.

Each successive publication should repeat some of the information of the previous year in a similar format, to maintain continuity and emphasize each year equally as a time with unique concerns. The books will be effective as reflections of academic growth, following the progression of advising needs. Each should include timetables of important dates, such as when majors should be declared or when meetings with advisors are recommended, students' essays, questions and answers, and features.

The publication sent to freshmen before their arrival may be their first contact with academics at Penn. Inviting, informative, and fun, not overwhelming, misleading, and uninspiring, it should make freshmen excited about starting their educations.

Philosophically, the booklet should define the goals and purposes of an education. Practically, the booklet should guide freshmen toward applying this philosophy to themselves by raising questions that lead them to define their own needs and interests. Descriptions of different departments and disciplines, as well as the structure of courses and degree requirements, further acquaint the freshman with academic life.

The sophomore guidebook should reiterate some important elements of the freshman book to ease the transition while acquainting sophomores with the process of finding and declaring a major. Along with the details of where to seek information and advice, it could familiarize them with specific majors--the philosophy of each discipline, what skills it helps to develop, and how it relates to other disciplines and careers.

The junior year publication should deal with the sudden imminence of graduation by encouraging students to use their time to explore a field in depth, and take advantage of honors,

seminars, and outside "real-world" experience. While fulfilling goals is becoming more important, it is not the exclusive objective of the junior's education over the next two years.

Much of the book should be devoted to explaining the function of the Career Planning and Placement Service. A guide to getting a CPPS advisor and how CPPS can be used to the student's best advantage should accompany a timetable with suggestions and deadlines to start thinking about.

A guide to the job and graduate school hunt in the senior handbook should include worksheets and a calendar of important deadlines that arise during the year, replete with helpful hints about graduate school and job-hunting. For those unsure about their post-graduate plans, it may recommend a return to both major and four-year advisors to find out about fulfilling remaining requirements, and emphasize options such as seminars and independent study.

Conclusion

All components of a cohesive system of academic information and resources must operate together in non-contradictory understanding of their own function and the functions of the other parts. While one office and various independent attempts at serving advising needs can founder or remain stagnant, a network is alive, respected, responsive, and able to grow.

A central advising center overseeing an array of resources provides necessary unity and continuity. Basic information that stems from one main source is more reliable; myths will be replaced by facts; and students in all four schools will receive similar information and be able to learn about programs in other schools. The big parts of the system will stimulate the small parts to action, as departments organize and formalize advising and link with the center to train faculty and attract students to their programs. Training for advisors from various agencies is centralized, so facts and emphasis are shared and all sources are equally valid.

But facts can only be of use once the student knows what he or she wants to do with them. While continuity of emphasis is achieved through consolidation and communication of resources, continuity of advising staff is essential to advise individuals, and advantageous to both advisor and student.

When students have someone familiar to turn to, they not only feel more comfortable in their advising situation, but do not have to completely reiterate their concerns and previous experience. Advisors can do a better job of tailoring advice to a student they are familiar with, are not faced with having to come up with immediate advice with only superficial knowledge of each faceless student's background, and are able to see the results of their work. Even if an advisor only sees a student a few times, personal interaction and the prospect of follow-up visits make the advisor's job more fulfilling and encourage students to continue to benefit from the advising system.

The Penn Advising Network calls for stronger involvement of the advising system in the progress of each undergraduate. Yet while students may seem to receive more guidance, they are not

directed specifically towards goals, as the current system and prevalent educational ideas seem to do, rather they discover their own direction, a means for finding and starting towards goals. The system is not complete guidance as much as complete access to effective resources. Continually answered questions leave greater time for contemplating answers, not whether or not there are answers.

When the availability and importance of advising is an established part of Penn's academic experience, students begin to think more carefully about themselves and their educational options. The Penn Advising Network provides all undergraduates with support that is consistent yet progressive, strict in structure yet flexible in emphasis; it will be attractive, useful, and used.

TEACHING: THE PRESERVATION AND ADVANCEMENT OF KNOWLEDGE

The duties of a University and its faculty to preserve and advance knowledge have traditionally been seen as competing obligations. Each professor is provided with two contexts in which to work, and often perceives a divided responsibility. Yet expanding the frontiers of knowledge through research and deepening the understanding of that knowledge through education requires a single commitment to the furthering of knowledge.

The learning process is hindered by a view of teaching as a straightforward action rather than a composite task. For a student to gain knowledge, he or she must be stimulated, motivated, and involved. The teacher must guide the student in coordinating meanings, questioning concepts, and developing conclusions.

We propose a major university conference on the effective communication of knowledge. This conference should focus on learning as an intellectual process rather than teaching as a structured procedure. The best teaching results from a thorough understanding of how students learn. Therefore such a conference must touch on the following themes:

The challenging teacher incites the student to actively respond to the information being communicated. Learning therefore is the internal questioning of assimilated concepts. Lectures must include mental challenges for the students, including explicit questions, fresh perspectives, and stimulating presentations.

The challenging course acknowledges the range of intellectual experiences necessary within it. First, the student requires a substantial grasp of the breadth of the subject area. Second, the student must gain an understanding of the central facts, concepts, and issues which compose the discipline. Finally, each student needs to master at least one significant component of the course content.

Course readings necessarily define the principal range of ideas on which the course will focus. Thoughtful consideration must then be given to the careful selection of the most appropriate sources of ideas. Primary readings cannot be replaced as the essential means by which influential ideas are preserved. Interpretive works by leading thinkers provide individual perspectives which foster critical analysis. The use of a series of works looking at one discipline from a variety of perspectives not only renews central intellectual conflicts but makes the student integrate several viewpoints into a single personal conception of what was presented.

CREATING A COMMUNITY OF SCHOLARS

The University can only fulfill its educational and academic responsibility in a vibrant intellectual atmosphere. Meaningful interaction between faculty members and students must be the keystone of the undergraduate experience at Pennsylvania. To ensure this intellectual environment, selection of prospective students and faculty members should be guided by our commitment to scholarly investigation, personal growth, and societal development.

The quest for knowledge should not end upon leaving the classroom. A complete education can only be possible when living environment complements academic standards. To create a community of scholars and not merely students, we must provide the undergraduate with an intellectually stimulating society by initiating living programs that do more than just house students.

Several options will allow undergraduates to expand their intellectual horizons beyond ordinary curricula. Positive interaction between faculty and students cannot be overlooked. Meaningful exchange with students is an outgrowth of teaching. Everyone should be involved in establishing a vibrant undergraduate program.

This community of scholars must constantly renew itself. The students we invite to join this community must face the challenge of a demanding educational system while creatively and effectively shaping their University. The admissions process must reflect this ideal.

A COHESIVE RESIDENTIAL PROGRAM FOR PENNSYLVANIA

Nothing is more central to the undergraduate experience than the effective integration of the classroom and the residence. We are only shortchanging ourselves when we fail to reconcile our various residential options with our educational mission. Thus we propose a conceptual shift in the way we view our housing program to unify all existing residential options: the Freshman Academy Option, the Collegiate Option, the Community Option, and the Neighborhood Option.

The Freshman Academy Option

The Freshman Academy option is based on our belief that meaningful exchange between students and faculty is a component of the successful undergraduate experience. We propose that Hill House, Kings Court/English House, and the houses of the Quadrangle be considered Freshman Academies. Each Academy would have close ties and would utilize direct faculty participation.

For our proposal we recommend the division of the Quad (other than Ware College House) into communities of approximately 145 people. Such communities should roughly correspond to the thirty-odd houses that compose the Quad.

Our plan centers on the creation of communities of 125 freshmen. These communities, or Freshman Academies, will be formed from existing Quad houses, either singly or in groups of two or three. Each community would have four Graduate Associates and sixteen upperclassmen or UCBs (for Upperclass Board). Approximately thirty-one freshmen (varying as individual floors necessitate) would be directly assigned to one Graduate Fellow and four UCBs. In addition, each community would have a non-resident faculty affiliate, and every two adjacent communities would share a Faculty Resident Fellow.

Discussions with administrators at Stanford and Princeton, which have recently implemented modifications of their residential systems, indicate that 125 is about the ideal size for community living in college type experiences. A group of 125 (145 including GAs and UCBs) allows the student to recognize all the faces and know many of their housemates' names. Although they may not know everyone well, their familiarity with the students will allow them to comfortably converse with any of them.

The choice of Graduate Associates over Resident Advisors was made because they will be better educational role models as they are significantly older and more experienced with the pressures of college life. Their maturity makes them better counselors. In addition, graduate examination calendars differ from those of undergraduates; thus, they are less likely to be particularly busy during students' exam periods, when stress and academic tension tend to be at a high level. The semantic choice of calling these students Graduate Associates rather than

graduate student Residential Advisors reflects our conception of each Academy as a place for scholarly interchange rather than a center for developmental guidance.

The role of the UCB on the floor will be both to aid the GA in programming and organizing events and to serve as student role models, helping freshmen adjust to college life, and lending their own experience. They will serve both as informal academic advisors and promoters of a healthy social environment. All UCBs will apply for their positions through an interview with current UCBs and GAs, to ensure that each applicant is motivated and interested in the community and realizes that he or she is expected to be supportive to members of the community.

To further the integration of classroom and living experiences, each community should have a Faculty Affiliate and every two adjacent communities should have a Faculty Resident Fellow. Such a structure ensures the exchange of ideas which is so essential to education and an intellectual environment. Ideally, freshmen will realize that education is an interactive process, that a faculty presence in residences can complement the classroom through informal interaction. The Faculty Affiliates would attend various functions such as brunches and discussion groups. In addition, these faculty would serve as spokespeople and as administrative liaisons. Our goal is to make the community and educational experience as well as a social one.

Each community would be an autonomous body; house policy and budget decisions would be made by a board of the GAs, the students and the Faculty Resident Fellow in a similar fashion to the structure that is currently in place in the College Houses. We feel that such an administrative system is preferable to professional staff administration of the communities because it both promotes self-determination of programming and fosters the educational themes on which the houses are based.

While the efforts of the Faculty Resident Fellow, the GA's, and the UCB's are the most important factor in the development of a community there are physical implementations which would further facilitate this development. Examples include painting the walls or doors of each community a different color, creating community t-shirts, encouraging participation in community sports activities, and the provision of lounges for relaxing and conversing with other community members.

We recommend that all members of a community purchase meal contracts, and that weekend brunches within each house be recognized as an important element in the community's programming. Again, according to our proposal, Hill House and King's Court/English House would be considered Freshman Academies. Both are successful as freshman residences, and we feel that their basic structures should remain unchanged. However, they should be administered according to our proposal, rather than as College Houses or as residence halls. For the Quad, the renovations as planned do not drastically alter the architectural divisions which keep the smaller houses distinct. Our proposal, therefore, is compatible with a renovated Quad.

The Community Option

The high rise residences pose Penn's greatest residential challenge. We attempt to meet this challenge by integrating the students' desire to live with large groups of friends and the educational values which we feel must exist within all facets of our residential system.

Under our Community Option plan, students would have the choice of either signing up for high rise rooms according to the current system (two, three, or four at a time) or signing up for one third of a floor as a larger group. The high rises are T-shaped and can conveniently be divided into thirds. Under our plan, students could get together in groups large enough to fill a section of the T and register as a single group in the room lottery. This would not significantly alter the lottery procedure as Residential Living would know exactly how many groups were interested in the Community Option well before the Grand Arena room draw. Based on the plan's popularity, the Option would be implemented on selected floors as demand necessitates. Preference should be given to groups who propose a theme or are sponsored by a faculty member.

The benefits of this plan are twofold. First, the Option would provide groups of friends the opportunity to live together without having to move off-campus. Second, because everyone in the section of the "T" would know each other, doors would probably be left open, thereby reducing the feelings of alienation which have been attributed to the high rises.

The population that fills the high rises is made up almost entirely of upperclass students. We feel that the pressures that upperclassmen face are best dealt with by graduate students rather than other undergraduates as Resident Advisors. Graduate students tend to be more aware of diverse social options, community issues, and postgraduate educational options, all of which increasingly concern upperclass students.

Additionally, we propose that informal ties be created between the high rise residences and our formal curriculum. Non-resident Faculty Affiliates should be recruited to develop a relationship with the members of a group of high rise floors. The role of the Faculty Affiliate would parallel the same position in the Freshman Academies as discussed above, although we foresee a larger student-to-faculty ratio in the high rises where the involvement is not designed to be as intense.

Existing Living/Learning programs in the high rises work well, and thus, we feel that they should not be replaced or displaced by Community Option floors. Another dimension of student housing is the issue of how to best serve transfer students. Based on the unique needs of this group we propose two alternatives. First, the large groups who pursue the Community Option plan in the high rises might choose to leave a space open for (or fill an extra spot with) a transfer student. The transfer student would be living with a group of individuals unified by their common interests. Second, a transfer program would be established on the upper two floors of Low Rise North, and appropriate programming could support the experiences of

transfers, if they should choose to live there.

The Collegiate Option

College Houses are a unique aspect of the Penn education that allow students to fully integrate their educations inside and outside the classroom. The College Houses are a crucial facet of the cohesive residential system we propose. Thus, we feel that they should remain essentially unchanged, except for the proposals for Hill House and King's Court/English House as detailed previously.

The Neighborhood Option

Approximately one quarter of all undergraduates opt for off-campus living. Life as a resident of University City has become an important aspect of many students' experiences at Penn. Yet, despite the large number of students choosing not to live in residence halls, the University fails to consider off-campus students in its residential programming. The final element of our residential system proposal is the Neighborhood Option, which calls for the University to create and implement support systems for off-campus living which go beyond general real estate concerns.

To anchor the off-campus experience of students we suggest the creation of a Neighborhood Center, a union for members of the University Community who live in the University City area. We feel that the Divinity School building on 42nd street between Spruce and Locust streets is an ideal site for this off-campus center. The property, which is owned by the University, is situated centrally to most off-campus residents, and the land around the existing buildings can serve as playing fields for intramural and spontaneously-organized sports events.

As a gathering place for both students and faculty, the Neighborhood Center would serve as an intellectual and social focal point. Not only would off-campus services be consolidated in such a center, but the building could also be used to hold Career Planning and Placement seminars (an area of special concern to upperclass students, many of whom live off-campus) and crime-prevention workshops. The building should be accessible twenty-four hours a day as a study center. Ideally, snack food as well as laundry facilities would be available as well.

The Neighborhood Center would be beneficial to off-campus students by making them a more unified group, by facilitating their integration with the community, and by bringing social and educational services closer to their lives.

USING THE ADMISSIONS PROCESS TO STIMULATE A VIBRANT INTELLECTUAL COMMUNITY

Introduction

When administrators try to reform undergraduate education, they often overlook the role of the admissions office in creating the community of undergraduates. Rather than improve the raw materials, they work on the next-to-finished product. A student body that can meet the challenges and tests of a rigorous education creatively and actively is a prerequisite for the success of any undergraduate program.

The time has come to reorganize the admissions process, to seek out diverse applicants and give greater weight to possible non-academic contributions to the University. Students should be here not only to become educated, but to help educate fellow members of their adopted community by making a distinct contribution to the social and intellectual atmosphere of their university.

The potential Pennsylvania student is committed, concerned, and eager: Committed- to education as a means of achieving personal growth. Concerned- about how he or she can help advance our community, society, and civilization. Eager- to partake in the advancement of knowledge through systematic intellectual inquiry. To bring these students to Pennsylvania, we must reconceptualize the admissions decision in a way that corresponds with this vision, with the specific goals of increasing minority presence at the University, and broadening the geographical and socioeconomical background of our student body.

Within the large pool of applicants who possess the qualities of our potential Pennsylvania student, we propose a structure of the admissions process which gives due emphasis to 1) the need for a student body racially, ethnically, culturally, and geographically varied; 2) the University's obligation as a social institution to accelerate the advancement of those groups which have historically been subject to discrimination; 3) the need for a student body composed of individuals with a wide range of economic backgrounds.

McGill Component Admissions

The admissions process designed by the McGill committee in 1967 does not adequately synthesize admissions philosophy with institutional philosophy. The "Component Process," the present admissions process, tends to concentrate on one aspect of each student, rather than on the whole person. The November 1983, Report on Reenrollment and Attrition cites the three groups into which applicants are divided by the component admissions measures:

Top Quarter admits are the strongest academic admits in the institution; Diversity Admits comprise the vast bulk of matriculating

students . . . and Special Admits, students admitted to a series of five special categories are [Special Interest, Athletic, Socioeconomic Disadvantaged, Alumni, and Faculty/Staff] those students most academically at risk, although the Admissions Committee feels them capable of success at Pennsylvania.

Component Admissions, as thus described, seems to adhere to a quota-filling procedure, creating unnecessary rifts between students. The groups into which applications are divided tend to remain after the students matriculate. Titles such as Athlete, West coast student, and Benjamin Franklin Scholar seem to correlate too obviously to the Special Admits, Diversity Admits, and Top Quarter Admits categories, respectively. These delineations created by the Admissions Committee set up walls which impede the vision of the University as a single community.

We propose an admissions plan which eliminates these boundaries by incorporating our vision of the Penn student into the admissions philosophy. Admissions must attempt to attain a complete evaluation of each applicant, rather than judge him or her according to component potential. Our plan, however, follows the fundamentals of the component process--special emphasis is given to special applicant groups. Therefore, we propose that a University committee be formed to reevaluate the McGill Component Admissions process.

Recruitment

We must counteract the lack of diversity in a student body predominantly from the northeastern U.S. by continuing to strive to attract applicants from states currently underrepresented at Penn. Besides making information about Penn available to high school students in areas targeted for increase, we must increase the number of potential applicants who may not consider schools in the northeast because of traveling expenses or the anticipated difficulty of adjusting to a new environment far from home. Once we have encouraged students to consider schools in the northeast in general by focusing admission material on the genuine ease of adjusting to college life and the novelty and good experience of a change of surroundings, we can successfully increase the dissemination of information about the University itself.

A recruitment program developed with a consortium of other East Coast universities would save individual school expenses and provide students with a cohesive overview of the benefits of attending school in the east, assuaging fears while spreading information which allows each student to easily compare the benefits of each school and see the great amount of choice tied in with the intimidating words "East Coast." Penn can profit from its own categorization within the presentation of a consortium of eastern colleges, each serving different needs.

Recruitment in target areas should be a four-year effort. High school freshmen, sophomores, juniors, as well as seniors and their parents should be gradually acquainted with the college admissions process. Better prepared students may be better able to make a bigger decision, one involving universities outside

their immediate geographical areas. Following a general presentation, individual school workshops or meetings could be held.

On-campus programs must also be expanded to cater specifically to students hesitant to venture out of familiar surroundings. Special weekends similar to those already implemented for minority applicants and prospective nursing students would introduce applicants to life at Penn, academic options, and Philadelphia through current students from their hometowns. Many prospective students make one trip to the east coast and see a variety of colleges. The consortium of colleges should arrange tours to several colleges to make it easier for students to look at schools. Through contacting one school the student could find out about several they might not have otherwise considered. Information about transportation between schools and programs for prospective freshmen who wish to visit several schools should be made easily available.

Letters from current Penn students to applicants from target areas, providing information and inviting them to visit the campus, would add an important element of personal contact to the often frustrating application process. Finding that it is easy to form links and seeing the availability of friendly support systems may convince applicants of a comfortable atmosphere of which they otherwise may have no concept. Such a program would either be established independently or as a part of an already existing student organization. Additionally, programs organized by local alumni and involving current Penn students could be held in accessible locations outside the Philadelphia area.

Ignorance and proximity may account for not attracting a geographically diverse applicant pool, but the reasons for why our applicant pool is not ethnically diverse are inherent in the University itself. While problems in attracting and keeping minority students may be more difficult to pinpoint and cure, it is imperative that the University address itself to this issue.

In order to effectively recruit minority students, Penn must offer an attractive environment that is effective in dealing with minority concerns. Not only must admissions material reflect the University's commitment to its minority constituency, it must make real changes in policy which see these claims reach fruition. When the University truly is a place where minority students feel part of a unified community committed to everyone's well-being, we will be able to attract these students and keep them here for four years.

To determine where to focus changes in recruitment, the University must conduct a detailed survey of its potential and actual applicant pool and the decision-making process of eventual matriculants. Such a study could include a survey of a sample of applicants with varying backgrounds and interests, including their reasons for applying to Penn and their motivations for their final choice, whether it is Penn or not. In addition, a small group of students should be followed through their four years at Penn to see how closely their applications reflect their actual activity during their college career. This group could include applicants accepted for both conventional and non-conventional reasons. Such a study may have an effect on how

certain aspects of the application are weighed against others in the selection process.

We have a general idea of who we want to attract to Penn. However, we just seem unclear how to go about it. Only by understanding the practical reasons underlying student's decisions, can we come to any conclusions on attracting individuals.

Selection

The final admissions decision for each applicant is made by committee. Currently this committee has no student representation. The perspective of someone who has experienced the admissions procedure and is now a member of the community that that process has created would provide valuable input to the committee. Therefore, we propose that the admissions selection committee be expanded to include student representation.

The crucial part of the selection process is the review of the student's Slate Summary Report - the quantitative summary of a student's application in terms of secondary school performance, standardized test scores, essays and recommendations. Among other information, the Slate Summary Report includes subjective ratings of the candidate's application in several areas: academics, non-academic activities, the secondary school report, the teacher report, personal potential, the admissions interview, the alumni interview, and the application essay. This information is supported by a breakdown of standardized test scores, class rank, an academic index which combines all standardized testing, and the high school grade-point average. Additionally, the likely freshman grade-point average of the student, derived from high school and standardized test performance, is supplied at the far right of the Slate Summary Report. This number is known as the Predictive Index (PI).

Modifications of the slate Summary Report, which is over seven years old, will allow it to focus even closer on our admissions priorities and educational philosophy. First we propose a regrouping of the data on the Slate Summary Report that emphasizes the role of each piece of information. Second, we propose a clear means of evaluating non-academic performance. Finally, we suggest the removal of the PI value from the Slate Summary Report, as it distorts the decision process and all information within it is contained elsewhere on the report.

The regrouping of the data on the Slate Summary Report should appear as follows:

After personal information such as address and social security number, and information on which school the applicant is applying to, should be information on alumni ties, potential admit categories, and the application reader's recommended action.

Next should come three distinct categories. The first is a summary of the student's academic abilities. This will aid in the evaluation of the candidate's commitment to education as a means for personal growth. It will contain SAT verbal and math scores, the Test of Standard Written English score, and Achievement Test scores. It will also include class rank, high school GPA, and the Academic Index composite rating of standardized test scores.

This category will also include a rating of the candidate's essay on his or her educational goals and the reader's evaluation of the total academic portion of the student's application.

The second category evaluates the student's eagerness to engage in the intellectual and scholarly pursuits that make Penn a major research university. The category should be a combination of the secondary school report, teacher reports, and personal potential ratings. Also considered should be an assessment of the candidate's response to the following question:

Describe your most memorable intellectual experience and why it had an impact on you.

The final category of the Slate Summary Report should assist in the evaluation of the candidate's non-academic commitments. Such an evaluation should place emphasis on our concern for how students can help advance our community, society, and civilization. Within this category would be included the reader's rating of non-academic activities, the admissions or alumni interview rating, and evaluation of the candidate's response to the major creative essay and the following questions:

1) What is your definition of success and how do you hope to achieve it?

2) Describe the extra-curricular activity most important to you and why.

cc

The revisions of the Slate Summary Report we have outlined will aid in the selection of a student body which is academically qualified, intellectually committed, and socially concerned.

Conclusion

A successful student body cannot rely only on the simple academic achievement of its members. It must be capable of learning from itself. For a community to bloom and not stagnate, it must be made up of various constituents. Ethnic and geographic diversity should be a priority of the University's admissions officers. Attracting a community of students with diverse interests and backgrounds, and thereby instilling vitality into fixed tradition, is a task that is inherently confined by heavy emphasis on Scholastic Aptitude Tests and purely academic, required accomplishments.