

VIRGINIA ASSOCIATION OF SCHOLARS

THE TROUBLING STATE OF
GENERAL EDUCATION:
A STUDY OF SIX VIRGINIA
PUBLIC COLLEGES AND UNIVERSITIES

REVISED EDITION
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With a Foreword

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FOREWORD

The purpose of general education requirements is to provide a fund of common knowledge and essential skills for the educated citizen. All students, regardless of their majors, should be required to study such basic subjects as English, a foreign language, history, philosophy, mathematics, and science. These subjects form a basis for what educated Americans should know. They are the essential ingredients for an informed and thoughtful life.

Studies, however, point to a staggering deficit in what undergraduates really know, and what colleges expect them to know. In 1989, the National Endowment for the Humanities and the Gallup Organization conducted a survey on what college seniors knew. One-fourth of undergraduates surveyed could not locate Columbus' discovery in the correct half-century, and more than 44 percent did not know when the Civil War took place. Roughly 25 percent thought that Karl Marx's statement—"from each according to his ability, to each according to his need . . ."—was from the U.S. Constitution. The majority could not identify the major works of Plato, Dante, Milton, Jane Austen, and Dostoevsky.

This paucity of undergraduate knowledge led to the 1989 report, *50 Hours: A Core Curriculum for College Students*, wherein the NEH makes recommendations for a model general education program. The report noted that college educators throughout the 1980s spoke of increasing fragmentation of undergraduate curricula, and a need for more structure and coherence.

The NEH report further noted that at 78 percent of the colleges and universities surveyed, students could graduate without taking a course in the history of Western civilization, while 38 percent of them allowed students to avoid *any* history course. Forty-five percent of schools permitted students to graduate without taking a single literature course and 77 percent did not require a foreign language. Forty-one percent had no mathematics requirements, while one-third did not demand a science course for graduation.

Nor was NEH the only body to identify curricular decline. In a widely-acclaimed report, *Integrity in the College Curriculum*, the Association of American Colleges condemned the decay in the college course of study and cited additional evidence of decline and devaluation in undergraduate general education. The report concludes, "As far as what passes as a college curriculum, almost anything goes."

In Spring 1996, the National Association of Scholars published the *Dissolution of General Education: 1914–1993*. The study found a progressive disintegration of structure, content, and rigor in the general education requirements at fifty of America's best colleges and universities over the course of the twentieth century. The NAS found that there was a marked decline in the number of core requirements and a steep increase in the number of courses available to fulfill those that remained. By 1993 most of the colleges and universities in the report permitted exemptions from all or part of general education and some schools simply did not have any general education requirements.

Summary of the Findings for the Four Schools with University-Wide Requirements

1. **There are no common, state-mandated general education requirements that apply to all of these public colleges and universities.** The number of individual requirements for graduation varied from a low of four at George Mason and Virginia State, to six at Virginia Tech, to eleven at William and Mary.
2. **Students may fulfill the few general education requirements they do have from an often overwhelming smorgasbord of course options.** While the number of courses available to fulfill general education requirements varied greatly among the institutions studied, they were always high. The mere four requirements at George Mason and Virginia State can be satisfied with 419 and 52 courses, respectively. Virginia Tech, with six requirements, allows a choice from among 288 courses; and William and Mary's eleven requirements may be picked from 360 courses. The more courses there are available, the greater the opportunity for the student to "hit or miss" core subjects. This problem is especially acute in the humanities, social science, and natural science distribution requirements.
3. **The absence of meaningful writing requirements shows an alarming abandonment of basic skills essential to an educated person.** Virginia State requires no English composition at all. English composition is still required at William and Mary, Virginia Tech and George Mason, but no individual course is mandatory—and students can gain ready exemption through SAT scores and the like. Moreover, once exempt from the basic course, the student does not have to take a more advanced English writing course. And, George Mason gives full composition credit to a remedial "English as a Second Language" (ESL) class for non-native speakers.
4. **In an age where there is a heightened awareness of multiculturalism, the very requirement that affords students the best understanding of another culture, the study of a foreign language, is no longer seriously mandated.** George Mason and Virginia Tech have no foreign language requirements at all. William and Mary and Virginia State do require the equivalent of two years of foreign language study of all undergraduates. If, however, a student can show proficiency by examination or high school course completion, no further language study is demanded.
5. **In today's world, inadequate mathematics skills are a prescription for failure.** While mathematics requirements are found at William and Mary and at Virginia Tech, George Mason and Virginia State have no such requirements. The level of competency in math is often different for science and non-science majors, who can often take "math-lite" courses. Again, exemption via prior course work or examination is possible.
6. **Virtually no school assures that general education requirements fulfill their purpose by offering courses that are broad-based introductions to core subject.** When the topics studied are wildly varied in focus, the grounding that students get in the humanities is unclear. At George Mason and at Virginia Tech, only 23 percent and 31 percent, respectively, of the courses from which requirements

Part II. General Education, 1964–1997

Part I of this study is a snapshot. It does not tell us whether Virginians' tax dollars once delivered a better, or a worse, general education. Part II examines this question by comparing the general education offered at these six schools in the 1997–98 academic year with that furnished in 1964–65. The latter year was chosen because it was one of the benchmark years examined in the National Association of Scholars' 1996 report, the *Dissolution of General Education: 1914–1993*, a study that also included the College of William and Mary and the University of Virginia in its examination of the curricular changes at America's top fifty institutions of higher education.**

Part II documents a distinct decline in the quality of general education in the Old Dominion, at least at these six public colleges and universities. Among its findings:

- The total number of available courses at the schools studied now averages 1516, as compared with 623 in 1964. From 1964 to 1997, the number of courses an undergraduate could take *without any prerequisite* jumped from an average of 76 to an average of 275—a 262 percent increase. Clearly, it is far more likely that an undergrad will select a slapdash, even incoherent smorgasbord of courses today than it was thirty-three years ago.
- In 1964, each of the six institutions required English composition, emphasizing grammar, rhetoric, and expository writing based on prescribed reading assignments drawn from English literature. By 1997, English composition had evolved into a writing requirement that might or might not be administered in the English department, and from which liberal exemption was available.
- In 1964, a foreign language was required at all Virginia colleges and universities examined. Today, full exemption is possible at those schools that still maintain a vestige of a foreign language requirement.
- In 1964, history courses were part of the general education requirement at all the schools studied. By 1997, only the University of Virginia (for its B.A. students) and Virginia Commonwealth still had a specific history requirement.
- Despite the significance of science and technology to modern civilization, in these fields, the requirements have fallen an average of 6 percent since 1964. On the other hand, there has been a 9 percent *increase* in the number of general education requirements in the humanities since 1964. Diversity requirements, which span the humanities and social sciences, were not found in 1964.
- The amount of time students and faculty spend in the classroom has undergone a substantial decline. By consulting the academic calendars and counting the number of days undergraduate classes were in session, including reading and examination days, but excluding summer programs, orientation days, holidays, and breaks, a clear difference is evident. In 1964, the average was 194 days. In 1997, it is only 158, a decrease of 19 percent.

**As reported by *U.S. News & World Report*, October 1987.

PART I

The Disjointed

General Education Requirements, 1996 – 97

General Education Requirements, 1996–97

Lack of a Common Core

Each public institution in Virginia is remarkably distinctive in the type of general education program it requires of its undergraduates. Indeed, at some public universities the requirements are not demanded uniformly of *all* students as a condition for graduation. Instead, there is an array of general education programs designated to suit the needs of a specific college or professional program within the institution. This is especially true for the University of Virginia and Virginia Commonwealth University where, for example, in the schools of commerce, engineering, and education each have their own prescription for general education. As such, these two institutions have no across-the-board general education requirements at all. (Virginia Commonwealth, however, is introducing a new set of general education requirements that will apply to all undergraduates. These will go into effect in the 1997-98 academic year, but too late for inclusion here).

On the other hand, George Mason, Virginia State, Virginia Tech, and William and Mary have general education requirements that are common to all undergraduate students no matter what their major or professional program. Therefore, our most thorough discussion in this part of the study will be devoted to these four institutions whose general requirements are truly general to all undergraduates. Their requirements are organized around broad distribution categories that offer students a cafeteria of approved courses. These four public institutions vary greatly in the number of requirements and the number of course alternatives available to satisfy the requirements (see Table 1).

Table 1. Number of Courses Required to Fulfill General Education at Institutions that Demand that All Students Complete the Same Set of Requirements—Regardless of Their Major or Professional Concentration.

INSTITUTION	ENGLISH COMPOSITION	FOREIGN LANGUAGE	HUMANITIES	SOCIAL SCIENCE	MATH	NATURAL SCIENCES			DIVERSITY
						BIOLOGICAL SCIENCE	PHYSICAL SCIENCE	EITHER	
GEORGE MASON	1	—	2	2	—			2	—
VIRGINIA STATE	—	2 YRS.	6	4	—			4	—
VIRGINIA TECH	2	—	2	2	2			2	1
WILLIAM & MARY	1	2 YRS.	3*	2	1	1	1		2**

*William and Mary requires one course in each field: "History and Culture in the European Tradition"; "Literature and History of the Arts"; and "Philosophical, Religious, and Social Thought."

** William and Mary requires one course in "History and Culture Outside the European Tradition" and one in "Cross-Cultural Issues" or a second history course in the European tradition or outside the European tradition.

General Education Requirements at Virginia Commonwealth University

In 1996 Virginia Commonwealth had no general education requirements that were common to all undergraduates. New requirements have been instituted that are applicable to *all* students entering beginning in the 1997-98 academic year. Nonetheless, the university's 1996 undergraduate bulletin, which was available for this study, states that it "is dedicated to educating . . . students . . . in an atmosphere of free inquiry and scholarship, so that they may realize their full potential as informed productive citizens with a lifelong commitment to learning and service." The university believes the best way to achieve these goals is to immerse students "in the arts, the humanities, the sciences, and their myriad applications."² It distinguishes seven areas critical to a general education: communication, ethics, quantity and form, science and technology, interdependence, the visual and performing arts, and the humanities and social sciences.

In Virginia Commonwealth's vision of diversity requirements, under the category "interdependence," students must "demonstrate an awareness of the cultural, economic, informational and social interdependencies that exist among nations and cultures today." Interestingly, an appreciation of Western civilization is not deemed a goal. Indeed, the West is not mentioned at all in the two pages of commentary on general education.³

The variations of the general education requirements at Virginia Commonwealth from their last undergraduate bulletin—applicable through the class of 1999—are shown below (see table 3).

Table 3. General Education Requirements for Each Division and Professional Program at Virginia Commonwealth University.

DEGREE	ENGLISH COMPOSITION AND RHETORIC	WRITING REQ. OUTSIDE ENGLISH DEPT.	SPEECH	FOREIGN LANGUAGE	HISTORY	PHILOSOPHY (CRITICAL THINKING)	ECONOMICS	HUMANITIES	SOCIAL SCIENCE	HUMANITIES OR SOCIAL SCIENCE	MATH	NATURAL SCIENCE
B.A.	2	2		4	2	1		4	2		2	2
B.S.	2	2		2						4	3	2
B. OF BUSINESS	2		1				2	2	3		2	2
B.S. DENTAL HYGIENE	2		1					2	2	2	1	4
EDUCATION PROGRAMS	2							4	4		2	4
B.S. ENGINEERING	2								1	2	4	4

Table 4. Comprehensiveness of General Education Courses at Institutions that Demand that All Students Complete the Same Set of Requirements—Regardless of Their Major or Professional Concentration.

INSTITUTION	INTRODUCTORY	SUBFIELD	NARROW	APPLIED	N/S
GEORGE MASON	31%	36%	32%	0.2%	419
VIRGINIA STATE	69%	4%	2%	25%	52
VIRGINIA TECH	23%	40%	22%	15%	288
WILLIAM & MARY	44%	29%	26%	—	360

The total number of coded courses is 1,119.

Note: Percentages may not equal 100 percent due to rounding.

The content of general education courses at Virginia State is the broadest of the schools we studied. Courses at Virginia State meeting general education requirements are, on the whole, comprehensive in scope, and more than two out of three of them are introductory courses.⁴ Four percent of the courses are subfield and only 2 percent are narrow in scope.

Virginia Tech's list of approved general education courses generally lacks both scope and breadth. Subfield courses at Virginia Tech account for 40 percent of all available courses, but narrow courses and applied courses that may fulfill general education requirements together outnumber introductory level courses.

William and Mary with 44 percent, devotes the greatest portion of its general education courses to those that are introductory in nature. Students, however, may also select from subfield courses that comprise 29 percent of all available general education courses; or they can readily choose a narrow course since one in four courses is so defined.

The next section examines in greater detail the content of general education requirements. We focus first on the skills required for all undergraduates: English composition, foreign language, and mathematics. We then look at humanities, social science, natural science, and diversity requirements.

Basic Skills Requirements: Low Expectations, Low Skills

In this section, we consider three important skills that have been traditionally part of a liberal arts education: English composition, foreign language, and mathematics. We will discuss distribution requirements in the subsequent section.

Foreign Language

The National Endowment for the Humanities states that a native speaker of English typically requires more than 700 hours of French or Spanish to reach a level of proficiency necessary for routine social interaction and limited work requirements. The hours required for proficiency in languages such as Russian or Japanese is longer. The typical two-year college language sequence provides roughly 300 hours of study—clearly insufficient for acquiring basic mastery of another language.⁶

This stringent view of appropriate foreign language requirements is not uniformly shared. For example, the Association of American Colleges does not consider mastery of a foreign language to be a necessary component of a liberal arts education.⁷

Virginia State and William and Mary have the most stringent requirements, but they do not, according to the NEH, provide for functional foreign language proficiency. Each requires the equivalent of two years of foreign language study.

George Mason and Virginia Tech fail to demand *any* foreign language proficiency. George Mason has low foreign language admissions standards and low general education requirements in the foreign languages. High school students applying to George Mason's colleges of arts and science, music, and fine arts or entering as undeclared majors are required to have two years of high school study in one foreign language. Applicants intending to major in business, engineering, or the physical sciences, however, are not required to have any background in foreign language, nor must they take foreign languages to graduate.

Not surprisingly, George Mason has no separate foreign language general education requirement for all students. It allows all foreign language courses, even at the 100-level, to count toward fulfilling the two-course humanities requirement.

Virginia Tech, like George Mason, has no foreign language requirement to graduate, but also no foreign language courses required for freshman admission (two high school courses in one foreign language, however, are recommended). Ten French, German, and Spanish literature-culture courses, with prerequisites of two years of foreign language study, are options under Virginia Tech's two-course humanities requirement.

Mathematics

As with the other general education skills, mathematics requirements vary greatly at the schools examined, and often special "quantitative" courses for the non-science major replace the real thing. George Mason and Virginia State make no demands of their students regarding mathematics. Neither has a separate mathematics requirement; instead, courses from the mathematics department may be selected to fulfill the natural science requirement.

Students at Virginia State may take a one-year basic mathematics sequence toward fulfilling the natural science requirement. The prerequisites for the course are two semesters of high school math. Second (possibly first) year algebra and geometry would presumably suffice.

Distribution Requirements: The Humanities

Our major questions regarding the humanities requirement are the following. How comprehensive are the approved courses for the humanities requirement? How well do the approved courses introduce undergraduates to the Western tradition? How many diversity or multicultural courses are available to fulfill the humanities requirement?

All courses in the study were coded in terms of the comprehensiveness of their content. Course numbers are neither necessary nor sufficient indicators of a course's breadth. Courses at the 100-level may be as narrow as any 300- or 400-level course.

A course coded as "introductory" presents students with basic concepts and knowledge. A "subfield" course is one that introduces students to the concepts, concerns, and more specialized knowledge of a specific subfield, as defined by the appropriate department. These subfield courses provide the background and serve as prerequisites for upper-division courses. Often, but not always, these are 200-level courses. A course is classified as narrow if it provides no background or is not a prerequisite for two or more courses. Narrow courses may have any course number; in some cases, they have appeared as 100-level courses.

For example, a course titled "Introduction to Philosophy" would be classified as an introductory course, while one on existentialism would be classified as a subfield course, even if it was listed as a 100-level course. A course on Sartre that claims to fulfill a general education requirement in the humanities is coded as narrow, assuming it was not a prerequisite for other upper division courses in the philosophy department (see Table 5).

Table 5. Comprehensiveness of General Education Courses in the Humanities at Institutions that Demand that All Students Complete the Same Set of Requirements—Regardless of Their Major or Professional Concentration.

INSTITUTION	INTRODUCTORY	SUBFIELD	NARROW	APPLIED	N/S
GEORGE MASON	33%	32%	34%	1%	229
VIRGINIA STATE	75%	—	25%	—	12
VIRGINIA TECH	21%	47%	24%	8%	154
WILLIAM & MARY	16%	48%	36%	—	96

studies and courses on “neglected traditions” as critical to general education in the humanities. Courses on non-Western cultures are also part of the humanities list, “since we are living in an increasingly global cultural context.”¹²

Virginia Tech believes that fulfilling the humanities requirement begins to “free the student from the superficial fads of the moment and from narrow provincialism.”¹³ To this end, the university offers students 154 courses from which to choose. It is possible to receive a traditional general education in the humanities that introduces students to the best of Western civilization. Students may take a one-year course on European civilization, and may take additional introductory courses in traditional departments. Twenty-one percent of humanities courses are introductory courses in such traditional departments as philosophy, religion, and art history.

Yet, roughly one in four is a narrow course, and eight percent are not in the arts and sciences. Students may take “History of Landscape Architecture,” “Engineering Cultures,” or “Introduction to Appalachian Studies,” and skip the basic courses in Western civilization. Students may skip the traditional introductory survey courses in art history, and take instead “Basic Floral Design” or “Design Appreciation.” These satisfy the general education requirements in the humanities, making students in the view of Virginia Tech, if of no one else, educated persons.

An overwhelming majority (72 percent) of courses deal with the West, while 12 percent are diversity-neutral. Ten percent of approved courses fulfilling the two humanities requirements deal with groups thought to be discriminated against, while 6 percent deal with a non-Western culture. This is apart from Virginia Tech’s courses available to fulfill the diversity requirement.

Students may skip the year-course on European civilization, and choose from a menu of anti-Western multicultural, feminist, or environmentalist courses. They may take “Postcolonial Cultural Studies,” “Writing of Minorities,” “Studies in Women Writers,” “Introduction To Spanish-American Culture and Civilization,” “Minority Group Relations,” “Introduction to Women’s Studies,” and “Women and Creativity” among others. In addition, students may choose from six courses in the department of humanities, science, and technology, or take an English course, “Literature and Ecology.”

William and Mary. William and Mary has a Western civilization requirement, a literature and history of the arts requirement, a requirement in “Philosophical, Religious, and Social Thought,” a non-Western culture, and a cross-cultural requirement. We have classified the Western civilization, literature-arts, and philosophy-social thought requirements as William and Mary’s humanities requirements, while classifying the “Cultures outside the European Tradition” and “Cross-Cultural Issues” as diversity requirements, to be discussed below.

The humanities requirements lack structure and cohesion, mostly because students must take a total of only three courses, in three different areas, out of ninety-six choices.

Roughly four in five humanities courses are subfield or narrow courses. Nevertheless, 72 percent of subfield courses and 69 percent of the narrow courses have **no prerequisites**.

The Western History Requirement. Students must choose one course from a selection of 35 in the history and culture of “the European tradition.” Students cannot get a general introduction to Western

Table 6. Comprehensiveness of General Education Courses in the Social Sciences at Institutions that Demand that All Students Complete the Same Set of Requirements—Regardless of Their Major or Professional Concentration.

INSTITUTION	INTRODUCTORY	SUBFIELD	NARROW	APPLIED	N/S
GEORGE MASON	15%	49%	35%	1%	136
VIRGINIA STATE	76%	7%	—	15%	13
VIRGINIA TECH	25%	52%	10%	13%	48
WILLIAM & MARY	24%	32%	43%	—	37

Note: Percentages may not equal 100 percent due to rounding.

George Mason. George Mason has the least comprehensive social science requirement, although it is mitigated to some extent by the large percentage of social science courses with prerequisites.

George Mason's list of approved courses has the smallest proportion of introductory courses, and the largest number of alternatives. All students must select two courses from 136 alternatives. Only 15 percent of the social science choices are introductory courses, but 74 percent of George Mason's non-introductory social science courses have prerequisites. Students may take such traditional courses as "Cultural Anthropology" or "Introduction to Psychology" but may also take "The Geography of Virginia," "Collective Bargaining in the Public Sector," or "The History of Metropolitan Washington."

Sixty-three percent—almost two-thirds—of George Mason's social science courses have a diversity, multicultural, or non-Western theme. Students may take such diverse courses as "Peoples and Cultures of Island Asia," "Ethnic Groups in America," or "Sex Roles."

Virginia State. As it does in the humanities, Virginia State has the most demanding social science requirements. It requires students to take the largest number of courses (four), from the fewest choices (thirteen). Almost all of the courses from which a student may choose are introductory in nature, including a one-year sequence in world history and a one-year sequence in U.S. history.

Virginia Tech. Students must take two courses in the social sciences (labeled "Area 3: Society and Human Behavior"), out of forty-eight choices at Virginia Tech. The social science courses are fragmented. Only 25 percent of the approved courses are introductory in nature, and 72 percent of non-introductory courses have no prerequisites. Students may take a traditional social science course such as "Introduction to Psychology," "Principles of Economics I & II," or a year-long course in the history of

Table 7. General Education Courses for Majors and Non-Science Majors in the Natural Sciences at Institutions that Demand that All Students Complete the Same Set of Requirements—Regardless of Their Major or Professional Concentration.

INSTITUTION	FOR MAJORS	FOR NON-MAJORS	NO SPECIFICATIONS	NS
GEORGE MASON	21%	53%	26%	47
VIRGINIA STATE	—	100%	—	10
VIRGINIA TECH	48%	38%	14%	21
WILLIAM & MARY	29%	65%	6%	17

George Mason. Students must take two courses out of forty-seven possible choices. This includes mathematics as well as the natural sciences. Over half the courses are for non-science majors, who may take courses such as “Human Reproduction and Sexuality,” “Energy and Environment,” or “Meteorology and Climate,” instead of a basic course in biology, physics, geology, or chemistry.

Because they need to take only two courses in the natural and mathematical sciences, students may graduate from George Mason without completing a single course in mathematics. Conversely, students may take two mathematics courses (e.g., “Concepts in Mathematics,” “Calculus for Business,” “Mathematics for Elementary School I & II”) and avoid natural science courses altogether. The lack of rigor is not promising for future teachers. In all, mathematics and natural science requirements are hardly rigorous.

Virginia State. Virginia State requires each student to take four courses from at least two different science departments, including mathematics. Humanities and social science majors may take courses that are specifically designed for the non-science major, and, although they are presented as general introductory courses in the physical sciences, the earth sciences, and the biological sciences, they do not serve as prerequisites for further study in the sciences.

Science majors are exempt from the general science education requirement. They must take the introductory level course in the appropriate sciences as specified by their individual departments. Science majors also have a specific math requirement. Majors in the physical sciences must take calculus; biology and pre-med students must take college algebra and trigonometry or higher.

The purpose of the requirement appears to be ideological. Less than half have a comparative or international focus that is neutral toward the West. Students must choose from courses that focus on several different themes: global interdependence (“[t]he dilemmas and possibilities humankind faces cannot be effectively addressed by any single culture or group of people acting alone”), global environmental decay, global dominance of technology, cross-cultural studies emphasizing Third-World countries, as well as those that focus on purportedly excluded groups. Twenty-six percent focus on the Western culture’s negative impact on excluded groups, while 28 percent deal with environmentalism. Students may take “Third-World Development,” “the Arab-Israeli Dispute,” “Literature and Ecology,” “Postcolonial Cultural Studies,” or “Global Environmental Issues,” among other courses. The requirement consists largely of courses emphasizing a negative view of the West.

Beside the ideological content of these courses, Virginia Tech’s “Critical Issues” courses also suffer from narrowness or superficiality. Thirty-one percent are narrow liberal arts courses, while 44 percent are applied courses outside the traditional arts and sciences. Students may take “Water Supply and Sanitation in Developing Countries” from the college of engineering, “International Agricultural Development and Trade” in the college of agriculture, “International Finance and Management” from the business school, or “Principles of Fisheries and Wildlife Management” from the college of forestry and wildlife resources.

Part I: Summary of Findings

The structure and content of general education requirements vary enormously at the public institutions of higher education that we examined in Virginia. Virginia Commonwealth and the University of Virginia have no general requirements that are demanded of all undergraduates, and each of the other institutions has requirements that are unique to it. The others vary enormously in terms of their rigor, integration, and comprehensiveness. There is no sense that all students graduating from a public college or university in Virginia will have received the same general education.

The requirements at Virginia State lack rigor because students need not take English composition and mathematics, the fundamental tools for the mastery of all other subjects. On the other hand, all students must take two years of French, German, or Spanish. Furthermore, Virginia State’s requirements are the most integrated and comprehensive because they (1) require the largest number of classes to fulfill the humanities, science, and social science requirements, (2) offer students the fewest alternatives to fulfill each requirement, and (3) have the largest proportion of introductory courses in the humanities, sciences, and social sciences available as required courses. The probability is that more students at Virginia State will take such courses than would students elsewhere. There are two drawbacks in terms of integration and comprehensiveness: Virginia State allows humanities and social science students to select special non-science major courses to fulfill their science requirement, and it does not require students to take one or more courses specifically in Western civilization.

Table 8. A Sample of Course Titles under Traditional, Narrow, and Multicultural Categories from which a Student May Select to Fulfill the General Education Requirements at George Mason and Virginia Tech.

SCHOOL	FIELD	TRADITIONAL	NARROW	MULTICULTURAL
GEORGE MASON	HUMANITIES	WESTERN LITERATURE	PHILOSOPHY OF TECHNOLOGY	CULTURAL CONSTRUCTIONS OF SEXUALITY
		INTRODUCTION TO PHILOSOPHY	INTRODUCTION TO MEDIA LITERACY	FEMINISM & PHILOSOPHY
	SOCIAL SCIENCE	WESTERN CIVILIZATION I & II	SOCIAL SERVICES IN SOCIETY	ETHNIC POLITICS
			COLLECTIVE BARGAINING IN THE PUBLIC SECTOR	HISTORY OF AMERICAN RACIAL THOUGHT
VIRGINIA TECH	HUMANITIES	INTRODUCTION TO EUROPEAN CIVILIZATION I & II	INTRODUCTION TO APPALACHIAN STUDIES	POSTCOLONIAL CULTURAL STUDIES
			EVOLUTION OF THE AMERICAN LANDSCAPE	WOMEN & CREATIVITY
	SOCIAL SCIENCE	PRINCIPLES OF ECONOMICS	WORK IN MODERN SOCIETY	MINORITY GROUP RELATIONS
		INTRODUCTION TO PSYCHOLOGY	ECONOMICS OF THE FOOD & FIBER SYSTEM	STRATIFICATION

PART II

General Education, 1964 –1997

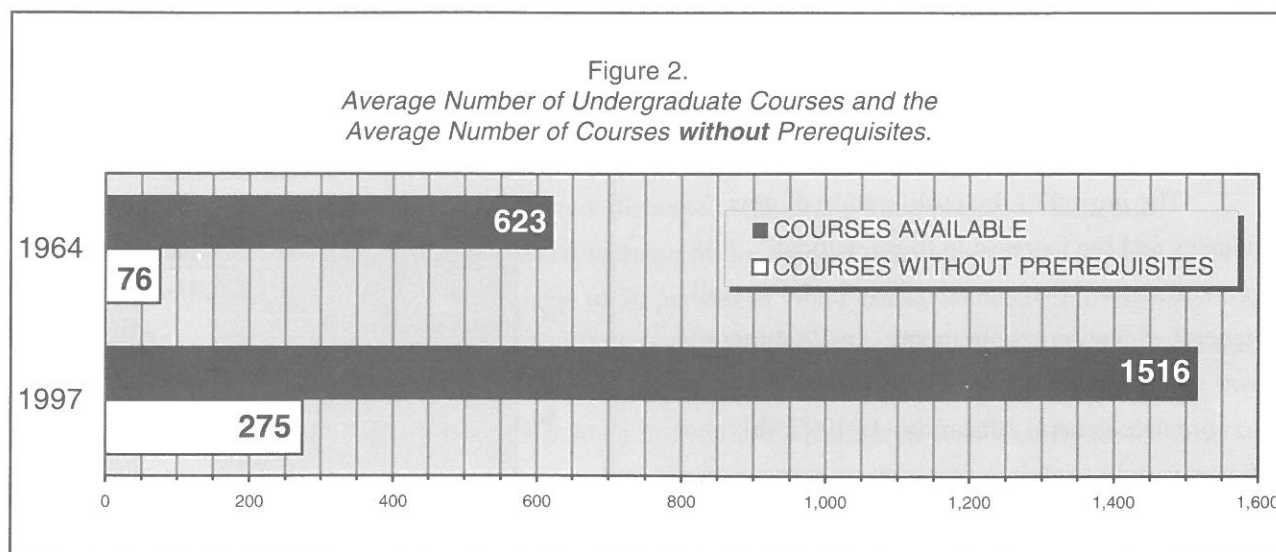
General Education Requirements: Have the Requirements Changed?

Part I of this study has already shown that the rigor, integration, and comprehensiveness of general education requirements at six individual public colleges and universities in Virginia are not what they could be. It leaves unanswered, however, the question of what was the nature of the general education requirements in the past. Should we be troubled that our tax dollars and rising tuition costs no longer deliver the kind of general education they once did. Or, are the current requirements a vast improvement on what went before?

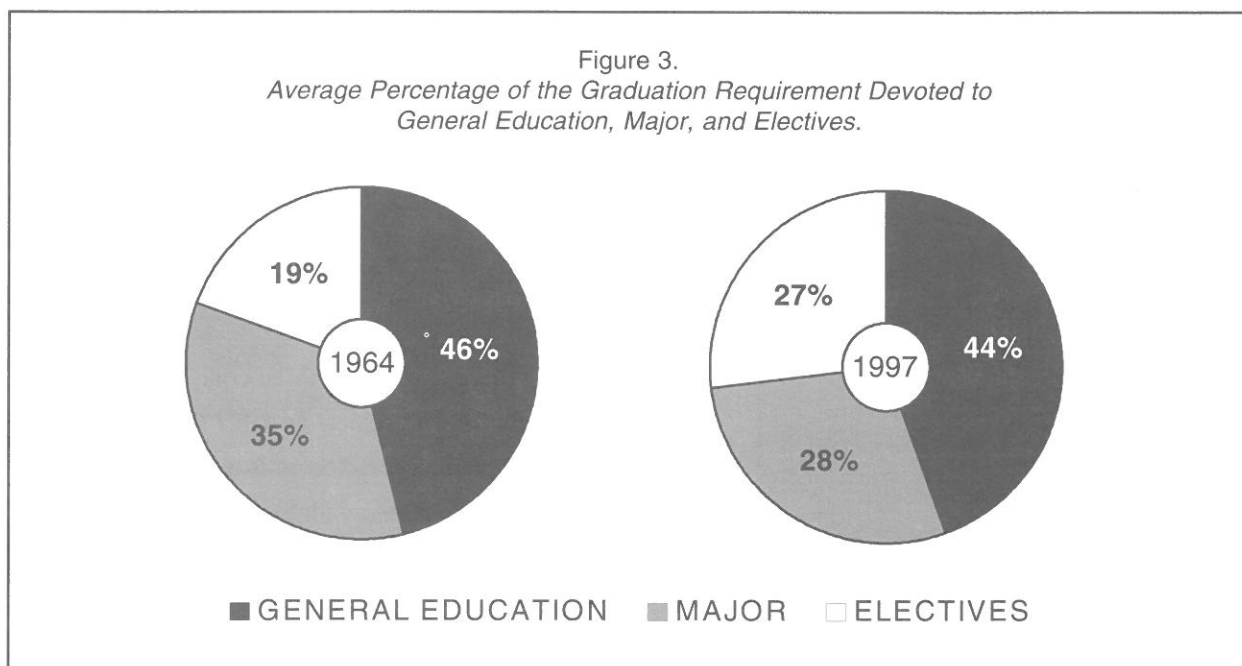
Part II examines the answers to these questions. It will treat the undergraduate general education requirements as a unit and do a longitudinal comparison with those required of an earlier generation of students. In order to make the study current, the most recently available catalogues for the 1997–98 academic year were used and compared to those of 1964–65.¹ The selection of this mid-sixties year was based on the fact that this was one of the twentieth-century's benchmark years examined in the National Association of Scholars' study on the *Dissolution of General Education: 1914–93*. Here it was shown that general education requirements at America's top colleges and universities remained virtually unchanged from 1939 to 1964, but had dropped significantly in their structure, content, and rigor by 1993.² The selection of 1964 is further appropriate because the College of William and Mary and the University of Virginia were included in this list of top schools.³

At first glance, juxtaposing the curricular demands placed upon undergraduates pursuing a bachelors of art degree in 1964 to 1997, there seems to be little change. In 1997 the average minimum credits required to graduate remain at about 122 hours, just as they did in 1964. In 1997 the average percentage of the graduation requirement devoted to general education hovers at 45 percent. In 1964 it stood at 46 percent. In 1997, as in 1964, English composition, foreign language, the humanities, the social sciences, mathematics, and natural science requirements still define the major subject areas of general education requirements. Even the educational goals set forth in the 1997 catalogues echo those of 1964.

The similarities between 1964 and 1997, however, belie the true state of today's general education requirements at six of Virginia's largest public colleges and universities. The virtual elimination of the mandatory course(s), the proliferation of course choice, the steep increase in courses without prerequisite, and the rise of full exemption from general education requirements are all hallmarks of the changes that have taken place in the last third of the twentieth century.

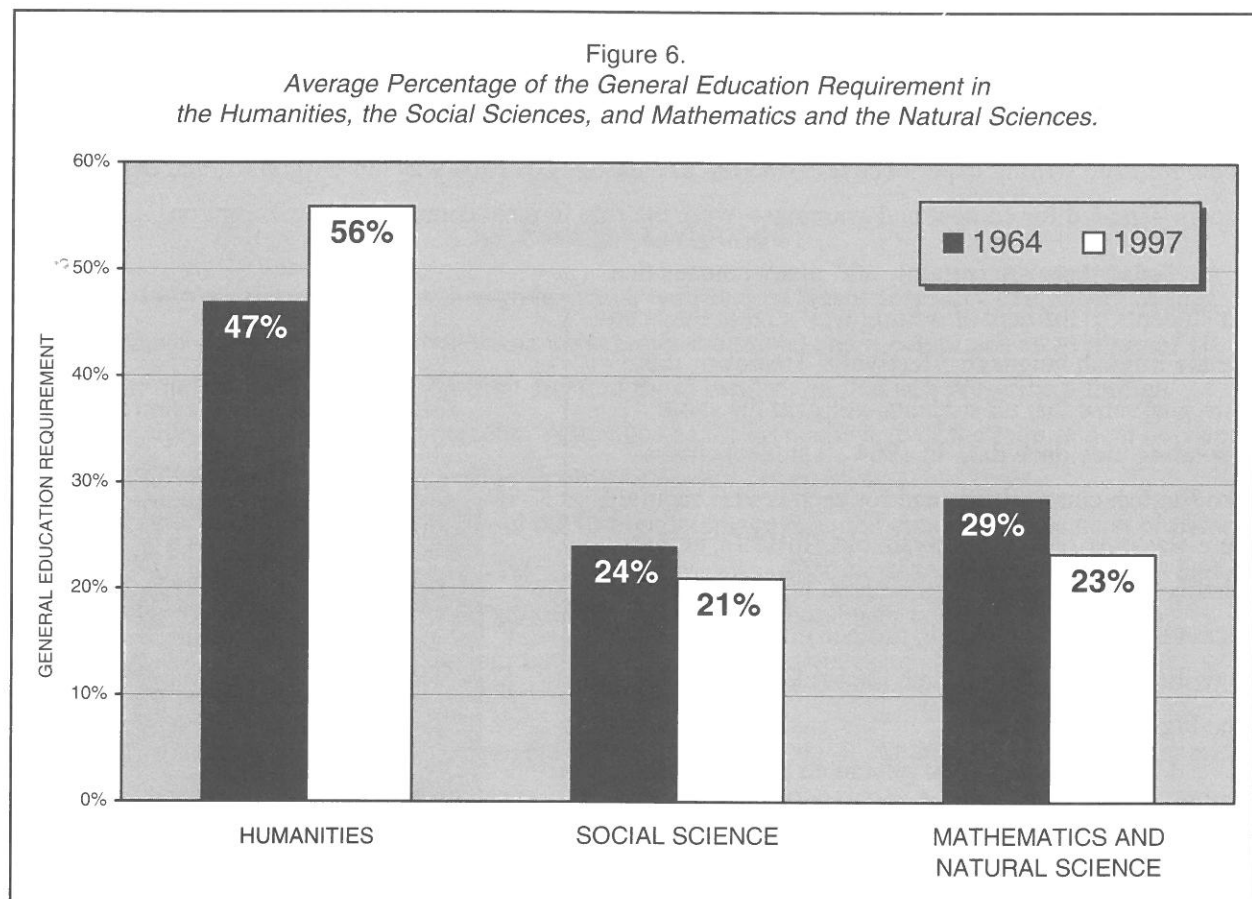


Of course students cannot select only courses without prerequisites; the general education requirements, the major program, and individual departments each impose restrictions. Nonetheless, the increase in the overall number of available undergraduate courses, coupled with an increase in the number of courses without prerequisites, translates into more student choice. Today's students are given further choice when devising their schedules because of the increase in the number of electives they may take. In 1964 electives comprised an average of 19 percent of the entire undergraduate graduation requirement or about six courses. In 1997 they comprise 27 percent or about nine courses (see Figure 3).



***The Humanities, the Social Sciences,
and Mathematics and the Natural Sciences***

Another perspective on the differences in general education between 1964 and 1997 is gained from a comparison of how these requirements are disbursed among the three principal academic disciplines. In the humanities there is a marked increase in the average percentage of the general education requirement, from 47 percent in 1964 to 56 percent in 1997. Social science requirements comprised 24 percent in 1964 and stand at slightly less with 21 percent in 1997. In mathematics and the natural sciences, which have evidenced the greatest leaps of new knowledge, the general education requirements have actually dropped from 29 percent in 1964 to 23 percent in 1997 (see figure 6). The remaining 4 percent of the general education requirements in 1997 is now devoted to diversity requirements, an interdisciplinary subject not found in 1964.



The changes within the specific general education subject requirements—English composition, history, literature, the fine arts, philosophy, mathematics, and the natural sciences—also show important differences between 1964 and 1997 that are not apparent at first perusal.

Remedial English Composition

Today, for the less-than-average student there are special course alternatives that look suspiciously remedial in nature. Although Virginia's public institutions of higher learning are (as are many other top public institutions across the nation) hesitant to admit that some of these English composition/writing alternatives are remedial, the course descriptions tell all. At Virginia Commonwealth, for example, which still retains a traditional and structured composition and rhetoric requirement, there are non-credit courses in "English as a Second Language"⁷ and "Fundamentals of English Composition." The latter is "recommended for students who have not previously studied grammar and composition extensively and will be required for those students whose English placement scores indicate inadequate preparation in grammar and composition." This is surely a remedial course.

At the University of Virginia another course, also labeled "Fundamentals of Writing," also appears to be remedial even though the course description puts a kind spin on its true nature. It emphasizes "basic writing skills, strategies for finding and developing topics, principles of organization . . . [and the course] includes a tutorial on English grammar and syntax." It is for credit/no-credit only and "chargeable against allowable non-College hours." Once this "slower paced" writing course is passed, the student must then take a semester of the standard introductory composition.

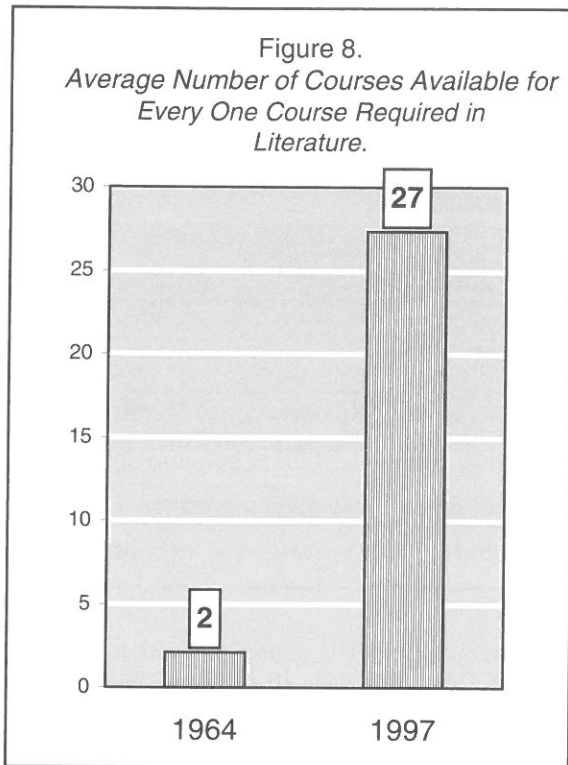
Foreign Language

In 1964 the completion of a foreign language requirement was a necessary component of the baccalaureate degree at all the colleges and universities examined and it comprised an average of 10 percent of the graduation requirement. In 1997, at those institutions that still prescribe a foreign language, this figure stands at 9.5 percent. Although the difference in size of the requirement between 1964 and 1997 is small, the latitude given to today's students is great.

In 1964 it was not possible to avoid the foreign language requirements. Even the most proficient and fluent students were required to take it. At the University of Virginia, for example, students had to complete "a third year course in one of [these] languages or a second year course in each of two: Chinese, French, German, Greek, Italian, Latin, Portuguese, Russian, Spanish; six to twenty-four semester hours."⁸

Of course not all foreign language requirements were this rigid. At the College of William and Mary there was a sliding scale so that greater foreign language proficiency equated with fewer courses necessary to complete the requirement. Thus, the catalogue states that "a student who, upon entrance can demonstrate on a placement test the equivalent of a *four-year* high school knowledge of a foreign language must acquire *six semester hour credits in that same language or fourteen credits in a single new language* [their italics]."⁹

Virginia State College made similar demands in 1964. A student who continued the same language presented for entrance was required to take at least twelve additional semester hours for the A.B. degree. If a new language was begun, fifteen hours were mandated.¹⁰ Likewise, 1964 Virginia



one-course literature requirement at Virginia Commonwealth may be fulfilled only from an approved list of eleven courses on topics such as World, British, and American literature, or Shakespeare's plays, readings in narrative, and women in literature.¹⁶

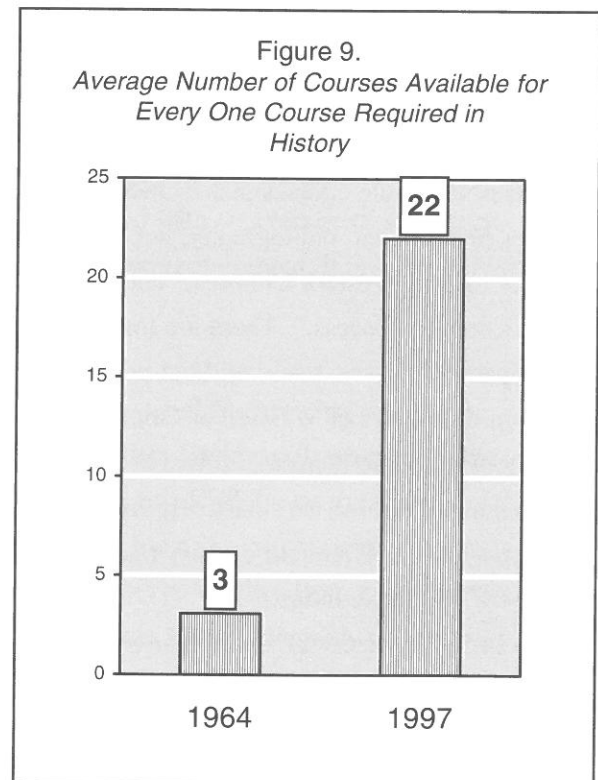
In 1964, as shown in Figure 8, for every one course required in literature for the general education requirement there was an average of two courses available. In 1997 the average is twenty-seven, most without prerequisite (see Figure 8).

History

In 1964, history courses were found as part of the general education requirements at all of Virginia's public colleges and universities examined, and, as in literature, they comprised 4.4 percent of

the graduation requirement. In 1997, only the University of Virginia and Virginia Commonwealth University still have a specific history requirement that comprises an average of 2.5 percent of their graduation requirements. History courses, however, are also available to be taken as part of broader area distribution requirements at the other schools. If the average number of history courses available to fulfill specific courses and area requirements is calculated, there was an average of three courses available for every one course required in 1964. In 1997 there is an average of twenty-two (see Figure 9).

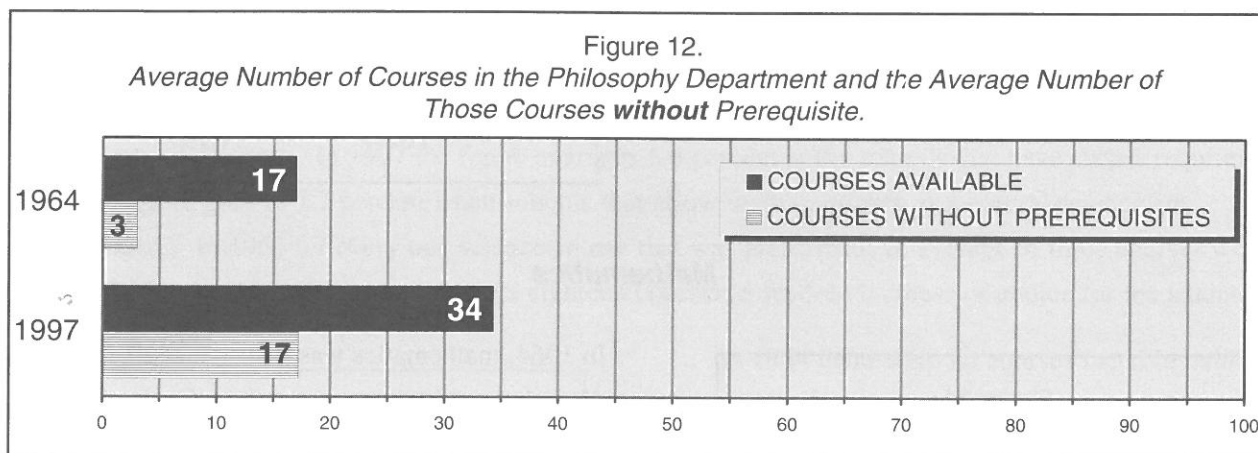
Because history requirements so often are also part of broader distribution areas, it is useful to note what choice is given students if they elect to take a history course. In 1964 the number of courses in the history department averaged thirty-six. In 1997 it averages 100 courses, a 178 percent increase.¹⁷ In 1964, the average number of courses without prerequisites was six. In 1997 the average of such courses is twenty-two, a 267 percent increase (see Figure 10 on following page).



Philosophy

In 1964, the majority of institutions included philosophy courses only as part of a humanities requirement or as part of a limited “elective” in the lower division. Today, if we define the requirement more loosely to include courses that emphasize philosophical ideas, religion, moral, and ethical topics, not necessarily in the philosophy department, half of the schools in the study have a philosophy requirement. For every one course required, there is an average of eighteen courses available, most without prerequisite.

Another way to view the changes in philosophy is to take the philosophy department as a whole to see what the choice is for the student who wants to elect a philosophy course. In 1964 there was an average of seventeen courses in the philosophy department. In 1997, it is thirty-four. In 1964, the average number of courses without prerequisite was three. In 1997 it is seventeen (see Figure 12).



The majority of philosophy courses without prerequisite in 1964 were comprehensive introductory histories of Western philosophy and were prerequisite to further study in the department. Today, those same histories are still available, but, when the student is confronted with an average of seventeen philosophy courses **without** prerequisite to satisfy an elective or area requirement, it is less likely that historical surveys will be chosen.

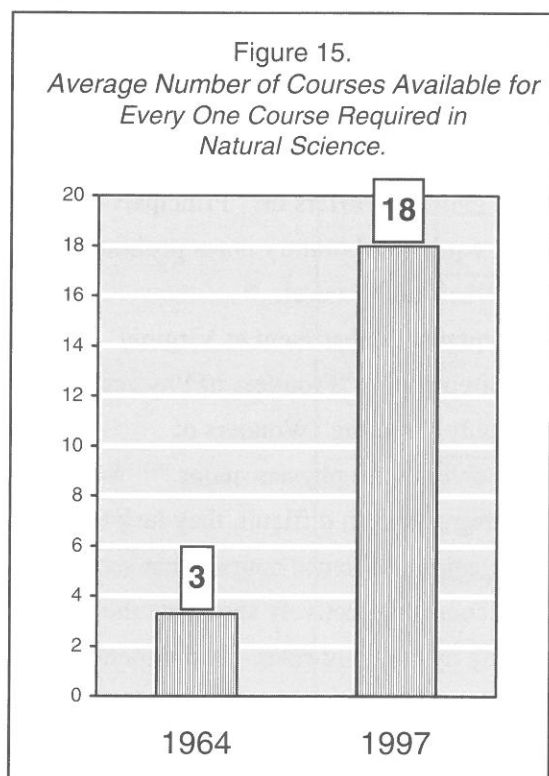
The Social Sciences

The amount of courses required for general education in the social sciences has remained constant. In both 1964 and 1997, the average is three courses. Today, however, in addition to the traditional economics, political science, psychology, anthropology, or sociology courses, new areas of study have been added. At Virginia Commonwealth, for example, the one-course social science requirement may be fulfilled from dozens of selections, including seven courses from the women’s studies department or eight from African-American studies. Virginia Commonwealth also makes available interdisciplinary courses. Likewise, Virginia State University, which includes United States history and world civilization in the social sciences, also makes available a “Travel-Study Seminar” and “Caribbean Studies,” both marked “interdisciplinary.”¹⁹

As in English composition, however, there are special non-credit math courses that bring the ill-prepared student up to par. In 1964 only Virginia Tech offered such a non-credit course review of high school algebra and trigonometry “for students entering in engineering and science curricula who fail to meet the requirements for admission to [the required college level courses],”²⁰ a non-credit math course that paved the way for the required calculus.²¹ In 1997, the University of Virginia, for example, makes available a non-credit pass/fail course in algebra and trigonometry that prepares the student for a pre-calculus course that “does not satisfy College science requirement.” Similarly, Virginia State University offers two non-credit remedial courses, “Introduction to Mathematics” and “Introduction to College Algebra and Trigonometry.” Entrance is based on diagnostic tests and the courses are available only in “Summer Transition.”²²

Natural Science

Fewer requirements, more choice, and easier courses also mark the changes in natural science requirements. In 1964 an average of 8.8 percent of the graduation requirement had to be taken only in the natural sciences. In 1997 the figure averages 6.6 percent at the schools that have such a requirement. (The figure goes to 7.7 percent when schools that allow math to qualify as a natural science are included.) In 1964 for every one science course that was prescribed, an average of three courses were available. In 1997 this figure averages eighteen courses, a six-fold increase of choice for the student (see Figure 15).

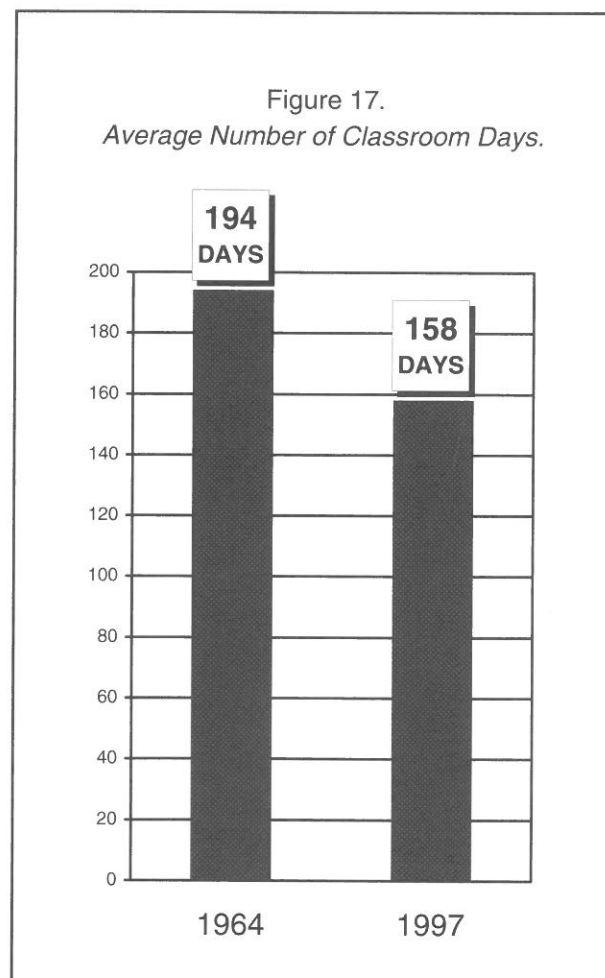


In 1964 there were no courses listed in natural sciences that were remedial in nature. In 1997, this is no longer the case. At Virginia Commonwealth, for example, they offer a three-credit introductory chemistry course, recommended for “students who have a poor high school background in the sciences and who need to take the standard college-level introductory chemistry sequence.” The credits, however, “may not be used to satisfy any chemistry requirement in the College of Humanities and Sciences.”²³

Offering special courses for non-science majors is not a novel concept. Already in 1964 there was an average of about one such course listed in the catalogues of the Virginia public colleges and universities in this study. By 1997, however, that average jumps to ten courses (see Figure 16 on following page).

Fewer Days in the Classroom

Another disturbing change between 1964 and 1965, which affects the entire college curricula, is the amount of actual time spent in the classroom. By consulting the academic calendars for the schools in this study and counting the number of days undergraduate classes were in session—including reading and examination days, but excluding summer programs, orientation days, holidays, and breaks—a clear difference is evident. In the 1964–65 academic year, at the five schools for which there was a calendar, the average number of classroom days was 194. In 1997–98 the average for all six Virginia public colleges and universities in the study is 158.²⁹ This amounts to a decrease of 19 percent, or thirty-six fewer days of class for undergraduate students and faculty (see Figure 17).



Notes to Part II

1. The catalogues of the six schools include the 1997–98 catalogues for the College of William and Mary, the University of Virginia, Virginia Commonwealth, Virginia Polytechnic Institute and State University (Virginia Tech). The Virginia State University catalogue spans the 1995–98 academic years. Virginia Commonwealth University was not established until 1968 and thus was not included in the computation of the 1964 data. Today's Virginia State University was Virginia State College in 1964, and George Mason University was a two-college of the University of Virginia.
2. The four years examined were 1914, 1939, 1964 and 1993. "1914 and the outbreak of the First World War mark the cultural end of the nineteenth century; 1939 . . . the beginning of the Second World War [and] the last year of America's relative isolation from global affairs; . . . 1964 stands at the cusp of the massive cultural change associated with the 1960s, which witnessed those waves of campus protest that so greatly altered the texture of American academic life." See *Dissolution of General Education* (Princeton, N.J.: National Association of Scholars, 1996), 2.
3. The top fifty colleges and universities were taken from *U.S. News & World Report*, October 1987.
4. The 1964 enrollment figures are from the catalogues. The 1997 figures are from a search of information about Virginia public colleges and universities done at the CollegeNet web site, <http://www.collegenet.com>.
5. A prerequisite was defined as anything that restricts entry to a class of the average student. This includes class standing, co-requisites, honors courses, courses listed as "enrollment by permission of instructor," and the completion of a specific course or courses.
6. 1964–65 College of William and Mary Catalogue, 150.
7. Special, no-credit courses for non-native English speaking students were also available in 1964. At Virginia Tech there was "Practical English for Foreign Students," a course offering "instruction in idiomatic spoken and written English." Such courses, of course, did not exempt the foreign-born from taking the standard year-long course in English composition. See 1964–65 Virginia Polytechnic Institute (Virginia Tech) Catalogue, 122-23.
8. 1964–65 University of Virginia Catalogue, 46.
9. 1964–65 College of William and Mary, 85. The general education requirements go on to state: "*No credits will be counted toward the degree for the first semester of an introductory foreign language course unless followed by the successful completion of the second semester of that language* [their italics].
10. 1964–65 Virginia State College Catalogue, 74. Note: B.S. students had to take at least six additional hours if they continued the same language; 12 hours if they started a new one.
11. 1964–65 Virginia Tech, 32.
12. George Mason College, 22.
13. Today, the Latin courses also seem to be less rigorous. The first year's course description in the 1997-98 Virginia Commonwealth University, 123, reads:

101-102 Elementary Latin. First semester: a study of the Latin Language with an emphasis on the Latin elements found in English. Latin Vocabulary. Second semester: Introduction to Latin authors and related aspects of Roman civilization.
14. Literature is a component of a humanities distribution requirement at some schools in 1997 and may or may not be selected. In order to give the benefit of the doubt to the school, such as at the University of Virginia, any requirement that has at least a 67 percent possibility of being selected by the student is considered to be a subject requirement, rather than a broad area requirement.
15. 1997–98 University of Virginia, 56.
16. From "Approved List F-Literature Courses," 66.
17. History departments offer the most courses in all of the catalogues examined. English departments are second in size.
18. 1997–98 Virginia Commonwealth University, 68-69.
19. 1995–98 Virginia State, 26.
20. 1964–65 Virginia Tech, 144.

Appendix
to
Part I

Methodology

How General Education Curricula Can Be Studied

Although the undergraduate curriculum is the subject of an extremely large literature, systematic quantitative study of the curriculum is rare. Our approach uses a detailed examination of college catalogues. These provide an important starting point in the study of the curriculum's foundation, the general education requirements. The catalogues provide indispensable information on the official view of education at any particular institution. The institution's perspective necessarily structures student choices. This is obvious when the general education requirements are prescribed in full, but perhaps less so when academic requirements are minimal. These provide a necessary if not sufficient condition for determining to what content students are exposed, and what they must take in order to graduate.

Other means of studying the general education programs are useful, but beyond the scope of the project attempted here. Three alternative modes of study are (1) study of transcripts, (2) study of syllabi, and (3) analysis of scores on standardized achievement tests.

Transcript studies provide useful measures of what courses were actually taken by students, but specific institutional constraints and guidance (or lack of such) in structuring learning are ignored. Our work in studying catalogues has convinced us that there is striking variability in the details of requirements from institution to institution. Locating transcripts would also require the detailed process of obtaining informed consent to obtain the necessary records.

Examination of individual course syllabi would also be useful, but there are far too many syllabi in existence to perform the kind of systematic survey undertaken here (and sampling would be a problem). Again the problem of consent (and of academic freedom) poses considerable constraints.

A third kind of useful data can be devised from standardized achievement test scores. These would tell us what students have learned, and we would be able better to assess the outcome of particular curricula, although standardized achievement tests would not tell us what is learned in college as opposed to elsewhere, and college graduates do not uniformly take such examinations as the graduate record exam (GRE) or the law school admissions test.

School Selection

We selected six of the largest institutions of higher education in Virginia, based on student enrollment: the University of Virginia, Virginia Commonwealth University, Virginia Polytechnic Institute and State University (Virginia Tech), George Mason University, and the College of William and Mary. We also included Virginia State University, which is the largest of Virginia's historic all-

operational measures of such abstract concepts such as “comprehensiveness,” “rigor,” and “diversity”. For each course approved as satisfying some part of a college’s general education requirement, we collected the following data:

- *The actual course number;*
- *The course title;*
- *The distribution requirement under which the course is found, as described by the college or university.*

Each institution of higher education has its own unique nomenclature for describing its distribution requirements. For example, Virginia Tech, rather than dividing its division requirements into the Humanities, the Social Sciences, and the Sciences, refers to its division requirements as: “Area 2: Ideas, Cultural Traditions, and Values; Area 3: Society and Human Behavior; and Area 4: Scientific Reasoning and Discovery.” William and Mary divides its distribution requirements into seven areas, including “World Cultures and History,” “Literature and History of the Arts,” and “Creative and Performing Arts,” among others.

- *Our own division labels, which allow us to reclassify disparate headings into categories comparable across schools; (i.e., HUM, SS, SCI, OTHER which includes PE and Advanced Composition only necessary for GMU)*
- *The comprehensiveness of a course;*

Courses were classified into one of four categories. (1) Introductory course: A course could be a basic introduction to a subject (usually but not always a 100-level course). (2) A subfield course: A subfield course is one that could be recognized by the department as a recommended course for a major (usually but not always a 200-level course), or in cases where departments have minimal requirements, a course that serves as a background course to two or more upper-division courses. (3) A narrow course: A narrow course is one that is not a prerequisite to any upper division course. In cases where the department has no prerequisites for upper division courses, if the course is related in content to only one or to no upper division course, it is coded as a narrow course. (4) An applied course. A course is coded as an applied course if the department is not traditionally part of the Arts and Sciences, regardless of whether it was an introductory course, a subfield course, or narrow in content.

General education curricula with greater breadth are those with greater proportion of introductory courses offered by traditional arts and science departments. A greater proportion of narrow and/or applied courses indicates a shallower and more fragmented general education curriculum.

- *Courses were coded according to their degree of rigor in two different ways.*

Rigor was defined in terms of courses limited to majors, non-majors, or open to both, especially in mathematics and the sciences. For example, the most rigorous core curriculum requires both majors and non-majors to take the same courses. Alternatively, schools that have only a few approved courses open to majors, but most general education courses open only to non-majors, are not rigorous.

