

## **CHAPTER THREE: ASSESSMENT OF GENERAL EDUCATION**

### *Characteristics of Excellence:*

Through this chapter Trinity will demonstrate compliance with these Middle States standards:

- Standard 1: Mission and Goals
- Standard 6: Integrity
- Standard 7: Institutional Assessment
- Standard 11: Educational Offerings
- Standard 12: General Education
- Standard 14: Assessment of Student Learning

### **I. INTRODUCTION**

General education at Trinity embodies both the fundamental continuities and the ongoing transformations that have defined the university's identity. In keeping with Trinity's traditions, its general education requirements affirm the enduring importance of liberal learning: they encourage broad intellectual exploration, promote synthesis of knowledge, and emphasize the moral and ethical dimensions of learning. Yet general education at Trinity also reflects the paradigm shift in the institution and the students it serves. As a result of this self-study, Trinity will accelerate reform and adaptation of general education to ensure that Trinity students in all programs have the foundation they need for ultimate success.

Because the different student populations in CAS and SPS have distinctively different characteristics and educational needs, the general education programs in each school have differing approaches, but both are rooted in liberal learning. The majority of CAS students attend college full-time and are 24 or younger. Most SPS students are working adults with families who attend college part-time. Identical general education programs in CAS and SPS would not serve these diverse populations equally well. Indeed, Middle States standard 11 calls for educational "practices and policies that reflect the needs of adult learners." Hence, helping students reach comparable intellectual destinations through diverse pathways is the essence of Trinity's approach to general education.

In the College of Arts and Sciences, the Foundation for Leadership Curriculum (FLC) supports Trinity's commitment to the education of women by focusing on preparing women for leadership roles in an increasingly diverse society. In the School of Professional Studies, the Core Curriculum supports Trinity's commitment to lifelong learning by providing adult students with a course of study that grounds professional preparation in liberal arts knowledge and values.

As this chapter will demonstrate, the FLC and the Core curriculum fulfill Middle States standards in many important areas. Trinity's general education programs express the educational philosophy of the University and support its mission. Furthermore, these programs are developed and reviewed by Trinity's faculty, thus fulfilling Middle States requirements for faculty ownership of general education curricula. The design and content of Trinity's general

education curricula reflect the academic standards that Middle States demands. For instance, general education courses emphasize the centrality of academic integrity, as well as respect for diverse backgrounds and perspectives, to the learning process. Additionally, both the FLC and the Core curriculum draw students into new areas of intellectual experience, exposing them to a wide range of disciplinary approaches. Both build proficiencies in the essential skills of communication; scientific and quantitative reasoning and methods; and information literacy. Finally, both curricula emphasize student preparation for advanced study.

In other areas, this chapter will document the need for improvements in curricular design and assessment. Rich findings from student learning assessment at the course and program level should be used to help develop plans for institution-wide assessment and improvement of general education. Perhaps most importantly, Trinity must thoroughly review its general education curricula to ensure that general education is delivered in ways that most effectively promote student learning.

## **II. DESIGN AND GOALS OF GENERAL EDUCATION CURRICULA**

The following sections will analyze the design and goals of Trinity's general education curricula. Analysis will focus on two related questions: First, do the curricular designs of the FLC and the Core curriculum actually serve the goals they are intended to achieve? Secondly, do these two curricular designs fulfill Middle States standards for general education?

### **A. The Foundation for Leadership Curriculum**

#### **1. Design and Goals**

The FLC expresses the mission of the university through its commitment to educate women to be leaders and critical thinkers in every field that their personal and professional aspirations lead them to pursue. Many of the FLC's courses center on women's social and political concerns. In addition, the FLC is designed to enhance students' sense of social justice and civic responsibility. It prepares students to understand the realities of their increasingly globalized world, and empowers them to take on the challenges of confronting injustice where they find it. The FLC also reflects Trinity's grounding in the mission of the Sisters of Notre Dame de Namur, whose charism teaches that education is education for life, and that students need to learn what they need to live. For Trinity, this means providing the foundation necessary for every CAS graduate to be a leader and reflective lifelong learner.

The goals of the FLC flow naturally from its mission and the mission of Trinity. Upon completion of the FLC, students are expected to:

- Read with understanding and critical analysis
- Write clearly, coherently, persuasively and logically
- Speak effectively and confidently
- Understand and apply the methods and techniques of scientific inquiry
- Explore various modes of creative expression
- Use quantitative analysis and reasoning

- Understand and apply the method of scientific inquiry to the societal forces that have shaped - and continue to shape - our world
- Identify and interpret philosophical and religious traditions and examine ethical questions and behaviors in the context of religious and moral knowledge and theory, especially with regard to the search for social justice
- Develop respect for and understanding of cultural, racial, and gender differences; the concept of citizenship; and global diversity

The FLC promotes student achievement of these goals through a curricular design based on three sets of requirements. One requirement is a seminar sequence. All students must complete two seminars, the First Year Seminar and an approved upper-level interdisciplinary seminar. Secondly, students are required to take introductory courses in five curricular areas. Finally, students must complete four upper-level courses in at least two disciplines outside their major, with the additional requirement that at least one of those courses address global or international issues.

The FLC is designed to offer an “integrated and coherent curriculum” that encourages depth as well as breadth of learning. With its seminar sequence and its upper-level requirements, it extends beyond introductory foundations and is completed over the student’s entire four years. The curriculum seeks to promote integration not only across disciplines, but also between the abstract and experiential aspects of learning. Two years ago, faculty incorporated a community based learning (CBL) component into the First Year Seminar. The aim of this initiative was to help students make the connection between academic learning and practical experience in ways that foster social responsibility and civic engagement. All First Year Seminar students now contribute twenty hours of service to a community based organization, and learn to relate their service to the academic themes of the seminar.

## 2. Articulation of Requirements and Expected Learning Outcomes

As Middle States recognizes, it is impossible for students to understand what they are expected to learn, or for faculty to assess whether they have learned it, unless learning objectives are clearly stated. According to Middle States Standard 14, “institutions must articulate statements of expected student learning at the institutional, program, and individual course levels.” Similarly, Middle States Standard 11 calls for “course syllabi that incorporate expected learning outcomes.” In keeping with these standards, the FLC states broad student learning goals, while the individual courses fulfilling FLC requirements express those goals in more detailed, specific form.

The connection between the FLC’s overarching goals, and the individual courses intended to achieve them, is ensured through a curricular approval process. The CAS Curriculum and Academic Policy Committee reviews all courses seeking FLC status. Approved course syllabi must state learning objectives congruent with the relevant FLC goals, and must include measures to assess the achievement of learning objectives. The Committee also asks faculty teaching FLC courses to review their syllabi regularly to confirm their congruence with FLC goals.

The FLC's five areas each incorporate one or more of the curriculum's nine student learning goals:<sup>1</sup>

**AREA I (Communication Skills) Goals:**

1. Read with understanding and critical analysis
2. Write clearly, coherently, persuasively and logically
3. Speak effectively and confidently
9. Develop respect for and understanding of cultural, racial, and gender differences; the concept of citizenship; and global diversity

**AREA II (Traditions and Cultural Expression) Goals:**

1. Read with understanding and critical analysis
5. Explore various modes of creative expression
7. Understand the societal forces that have shaped - and continue to shape - our world

**AREA III (Search for Ultimate Meanings) Goals:**

1. Read with understanding and critical analysis
8. Identify and interpret philosophical and religious traditions and examine ethical questions and behaviors in the context of religious and moral knowledge and theory, especially with regard to the search for social justice

**AREA IV (Scientific and Mathematical Exploration) Goals:**

4. Understand and apply the methods and techniques of scientific inquiry
6. Use quantitative analysis and reasoning

**AREA V (Perspectives on Self and Society) Goals:**

7. Understand the societal forces that have shaped - and continue to shape - our world

An analysis of recent course syllabi provides evidence that FLC courses articulate learning objectives consonant with the goals of general education. In Fall 2004, 100% of syllabi for courses fulfilling FLC Areas I, II, III, and V included one or more learning objectives derived from their respective areas' goals. 94% of courses fulfilling FLC Area IV included one or more learning objective based on the area's goals in their syllabi. Similarly, 100% of syllabi for Spring 2005 courses fulfilling FLC Areas I, II, III, and V included at least one student learning objective derived from their respective areas' goals. 77% of courses fulfilling FLC Area IV included at least one student learning objective based on the area's goals in their syllabi. (See Document Room for detailed data).

These data yield several conclusions about the connections between the broad student learning goals articulated in the FLC, and the specific learning objectives articulated in course syllabi. In most cases, general education course syllabi are strongly aligned with the curricular goals they are intended to serve. Expected student learning outcomes in individual courses match student learning goals for the relevant curricular areas.

However, the data also reveal the need for clearer, more explicit presentation of student learning objectives in course syllabi. Some course syllabi stated student learning objectives in vague or truncated terms. Other syllabi implied learning objectives without stating them explicitly. This problem was particularly evident in some syllabi for FLC Area IV (Math and Science) courses. Students need clear information about their expected learning outcomes in syllabi, and faculty should construct their syllabi around a concrete understanding of what students are expected to

---

<sup>1</sup> For the 2005-6 year, goals 2 and 9 were added to Area II. The following analysis is based on syllabi, and FLC goals, from 2004-5.

learn. For these reasons, Trinity will focus on ensuring that all FLC course syllabi include student learning objectives that connect plainly and precisely to relevant program, general education, and institutional goals.

### 3. Sufficiency, Breadth and Coherence of Curricula

The Middle States Characteristics of Excellence require that a program of general education be “of sufficient scope to enhance students’ intellectual growth,” and therefore must be equivalent to at least 30 semester hours for baccalaureate programs (Standard 12). The FLC meets this standard. It requires 34-48 credit hours, depending upon initial placement in math, writing and language courses.

Middle States also requires that general education programs develop students’ proficiencies in the foundational areas of: “oral and written communication, scientific and quantitative reasoning, technological capabilities appropriate to the discipline, and information literacy” (Standard 12). The FLC is designed to enhance students’ skills in all these areas. Effective oral and written communication, as well as scientific and quantitative reasoning, are explicitly stated as FLC learning goals. Technological capabilities and information literacy are implicitly embedded in the goals of several FLC areas. For example, the goal associated with FLC Area V is to understand the societal forces that shape our world. Area V courses teach students to understand societal forces through developing their research and critical thinking skills: students learn to identify, find, interpret, and apply relevant information resources in a variety of technological media. Thus, in the process of understanding societal forces, students acquire technological capabilities and information literacy skills.

Well-designed general education curricula provide both breadth of study, exposing students to multiple perspectives and fields of inquiry, and synthesis of learning into a coherent body of knowledge. Middle States standard 11 emphasizes the importance of a “coherent student learning experience,” while standard 12 notes that general education programs should “draw students into new areas of intellectual experience, expanding their cultural and global awareness and sensitivity and preparing them to make enlightened judgments outside as well as within their academic specialty.”

The FLC explicitly references breadth and coherence as fundamental design principles of its curriculum. These design goals are fulfilled in the delivery of educational offerings. For instance, the FLC’s area distribution requirements compel students to undertake coursework in a wide variety of disciplines in the social sciences, natural sciences and mathematics, and humanities. As a result, students completing the FLC are guaranteed exposure to a real breadth of disciplinary knowledge and methods of inquiry.

Breadth of educational experience requires the study not only of multiple disciplines and methods but also multiple views and values. Middle States standard 12 states that general education curricula should incorporate “values, ethics, and diverse perspectives.” Similarly, Middle States standard 6 calls for “a climate that fosters respect among students, faculty, staff, and administration for a range of backgrounds, ideas, and perspectives.” In keeping with

Trinity's mission, the FLC strongly emphasizes moral and ethical dimensions of learning as well as the importance of respect for diversity.

Emphasis on exploring values and differing viewpoints is crucial not only to fulfill Trinity's mission, but also to serve Trinity's distinctive student population. A high percentage of Trinity students are members of marginalized groups in terms of sex, race, class, religion and sexual orientation. The fact that so many Trinity students are from non-dominant groups does not mean that they are more likely to agree with each other and respect each others' views. It means that issues that arise in class strike very close to home. Trinity students often bring with them strong beliefs and deeply held values that have sustained them in difficult times. They sometimes express extreme views that one might not expect to hear from a more homogeneous group of students from historically dominant populations.

The problem is compounded by the cultural isolation some Trinity students have experienced, an isolation made more acute by socio-economic circumstances that result in decreased mobility and infrequent contact with other groups. Trinity students often arrive at college with little understanding of the cultural and religious beliefs of other students, and little experience engaging in dialogue with people with very different views. Disagreements in the classroom threaten to compromise students' engagement in the learning process, particularly when they feel that their core values are under attack.

Responding to these challenges, Trinity has made great progress in the last decade in developing curricula that respond to the diversity of the student body. For example, FLC courses increasingly incorporate the study of multiple cultures and traditions, and approach their content from multiple perspectives. These courses seek to provide students with the skills, insights, and information they need to engage respectfully with others' views.

An analysis of syllabi from FLC courses provides evidence of the importance placed upon the study of diverse values and perspectives in Trinity's general education curricula. In Area I (Communication Skills), 75% of courses offered in 2004-5 specifically incorporated the study of values, ethics, and/or diverse perspectives into course content and assignments. 87% of courses fulfilling Area II (Traditions and Cultural Expression) did so, as did 91% of courses fulfilling Area V (Perspectives on Self and Society). Fully 100% of courses offered in Area III (Search for Ultimate Meaning) involved extensive study of values, ethics, and diverse perspectives. Unsurprisingly, only 5% of courses in Area IV (Scientific and Mathematical Exploration) focused on ethical issues or the exploration of multiple perspectives as specific course objectives. While upper-level science courses often emphasize moral and ethical dimensions, general education courses in mathematics and the sciences concentrate on foundational skills.

As noted above, the FLC seeks coherence as well as breadth of student learning. One way the FLC pursues coherence is through its interdisciplinary design, which aims to ensure that students understand the relationships among the various fields of knowledge they study. FLC requirements emphasize achieving goals across disciplines rather than simply within them. For example, the goal of reading with understanding and critical analysis is embedded in three of the five FLC curricular areas, which in turn involve eight disciplines. Furthermore, the FLC's required seminar sequence exposes students to multi-disciplinary approaches to learning and

enquiry. Both the First Year Seminar and the upper-level seminars are interdisciplinary courses that encourage exploration across disciplines and foster the integration of FLC goals.

The FLC's required composition course is typically taken within the first year. Approximately 70% of currently-enrolled students took it as freshman, and 27% as sophomores. A majority of current students also completed the required public speaking course within the first two years, 19% as freshmen and 49% as sophomores. Thus, for students who remain at Trinity through at least their junior year, the FLC provides an early foundation in communication skills.

The only other FLC requirement that is treated as foundational, in practice if not formally, is the quantitative analysis requirement. Sixty-two percent of currently-enrolled students who matriculated in 2004 completed this requirement in their first year. Among students who matriculated in 2003, 75% fulfilled the requirement within their first two years, and among those who entered Trinity in 2002, 92% completed their required quantitative course before starting their senior year.

The FLC foreign language requirement is not regarded as foundational by students or their advisors. Half of the students who reach their senior year at Trinity have still not fulfilled their language requirement. This is not surprising, since only two CAS majors require students to acquire foreign language proficiency (Language and Cultural Studies and International Affairs). For most students, little incentive exists for early completion of a language requirement which does not build skills required for the major course of study.

The FLC's Area II requirements (one course each in fine arts, history, and literature) are also not treated as foundational. Instead, these courses are spread over students' academic careers. For example, among students who are still enrolled at Trinity, 96% who matriculated in 2002 completed at least one of the three Area II course requirements by the end of their junior year, but only 40% had completed all three courses by that time. Similarly, 83% of currently-enrolled students who matriculated in 2003 completed at least one of the three course requirements by the end of their sophomore year, but only 11% completed all three courses during their first two years at Trinity. 37% of students who enrolled in 2004 took at least one Area II course during their first year, but only 3% fulfilled the entire requirement in that year.

Trends are similar in FLC Area III, which requires students to take one philosophy and one religious studies/theology course. Very few students complete these requirements in their first two years. Instead, students generally defer these courses until later. This trend reflects, in part, the fact that neither religious studies nor philosophy offers a major, so students feel no need to complete these courses early as part of their major requirements. Eighty-one percent of students who matriculated in 2002 and are still at Trinity have completed at least one of their Area III courses, but only 29% have completed both. Among students who entered Trinity in 2003, 36% have taken one course, and only 15% both. Sixteen percent of students who started in 2004 have taken one course, and only one percent have completed both courses.

Completion patterns for FLC science requirements are related to students' majors. Not surprisingly, declared math and science majors complete their general education science

requirements early in their academic careers. On the other hand, non-science majors delay fulfillment of the laboratory science requirement.

Finally, most students take at least one of their three required social science courses in their first year. Introduction to Sociology (SOCY 100) and Introduction to Psychology (PSYC 101) are particularly popular first year courses. Over half of currently-enrolled students who matriculated in 2004 took the introductory psychology course in their first year, and nearly 40% completed the sociology course that year. Students take political science and economics courses later, often in their sophomore and junior years.

Students' tendency to spread the completion of their FLC requirements over their course of study is consistent with the FLC's learning goals. According to the FLC goal statement, "All goals are equally important, yet each is emphasized at different points throughout the undergraduate program of study. This goal-based structure gives each student a unique opportunity to build an integrated and coherent curriculum, with an emphasis on individual aspirations and goals."

Thus, the FLC aims for coherence not through uniformity but flexibility. Rather than prescribing a particular timing or sequence of required courses, the FLC assumes that the student will fit requirements into her schedule in a way which creates a coherent, integrated progression of courses tailored to her individual academic interests and priorities. Whether the FLC achieves this integration, and whether the FLC is the right general education program for today's Trinity students, is a topic that this self-study has identified for analysis and further faculty discussion as curriculum reform proceeds.

## B. The Core Curriculum in the School of Professional Studies

### 1. Design and Goals

The Core Curriculum in SPS expresses the mission of Trinity by providing adult students with a strong foundation in the liberal arts while promoting their professional development through a focus on applied learning. Like the FLC, the Core emphasizes building the essential skills and values that promote life-long learning, critical thinking, and social responsibility. But unlike the FLC, the Core does not state explicit student learning goals. Its goals are framed in terms of what the curriculum will deliver rather than in terms of what students will learn. Nevertheless, student learning expectations are implicit in these goals. The Core aims to:

- Promote breadth of study, exposure to a broad range of liberal arts disciplines, and understanding of interdisciplinary relationships;
- Provide a foundation for specialized study in a major;
- Ensure a common body of knowledge to which students and faculty can relate subsequent studies;
- Develop essential skills for advanced study and lifelong learning.

The Core pursues these goals through a curricular design intended to meet the educational needs of adult working students. The design is both straightforward and flexible. It requires coursework in five areas: languages and literature, social sciences, natural sciences and

mathematics, humanities, and fine arts. Students chose from a menu of course options in each area. This menu approach both provides choice and ensures exposure to a wide range of disciplines and methods of inquiry. All courses are at the introductory level, since the Core focuses on foundational skills and knowledge, and is intended to be completed within students' first two years.

The uncomplicated design of the Core curriculum facilitates the evaluation and application of transfer credits. Many SPS students bring prior college credits with them, and the Core curriculum, with its extensive menu of approved courses, is structured to accept a wide range of transfer coursework. Depending on the curricular area, between one third and two thirds of SPS students transfer in the credits required to fulfill each of the Core's five area requirements (detailed data is available in the Document Room). The Core curriculum is also structured to allow students to take advantage of experiential learning through the Trinity Experiential Lifelong Learning (TELL) program, which awards credit based on documented prior experience.

## 2. Articulation of Requirements and Expected Learning Outcomes

As noted above, the Core curriculum does not state its goals in terms of student learning expectations. However, the learning goals associated with the FLC generally apply to the Core as well. Furthermore, specific learning objectives linked to those goals are explicitly stated in most Core course syllabi. This is because most Core courses also fulfill FLC requirements (See Document Room for a comparison of which courses meet FLC and Core requirements). Therefore, the syllabi for these "shared" general education courses include learning objectives that fulfill both the stated learning goals of the FLC and the implicit learning goals of the Core.

The Core curriculum includes five areas: [1] Languages and Literature, [2] Social Sciences, [3] Natural Sciences and Mathematics, [4] Humanities, and [5] Fine Arts. As noted above, there is extensive overlap between the courses that fulfill the FLC and the Core Curriculum in each of the five areas.<sup>2</sup> An analysis of recent syllabi provides evidence that Core courses articulate student learning objectives in keeping with the goals of the Core. In Fall 2004, 100% of syllabi for courses fulfilling Core Areas 1, 2, 4, and 5 included one or more student learning objectives drawn from the relevant areas' goals, while 90% of Core 3 syllabi did so. Similarly, 100% of syllabi for Spring 2005 courses fulfilling Core Areas 1, 2, 4, and 5 included one or more student learning objectives drawn from the appropriate areas' goals, while 88% of Core 3 syllabi did so (See Document Room for detailed data on 2004-5 course syllabi).

## 3. Sufficiency, Breadth and Coherence of Curricula

The Core curriculum meets the Middle States standard for sufficiency in that it requires more than 30 semester hours of general education coursework. Specifically, it requires 36-41 credit hours, depending upon initial placement in math, writing and language courses. Middle States standards also require that general education programs develop students' proficiencies in

---

<sup>2</sup> Courses that fulfill Core Area 1 generally fulfill FLC Areas I or II, depending on the discipline; courses that fulfill Core Area 2 generally fulfill FLC Area V; courses that fulfill Core Area 3 generally fulfill FLC Area IV; courses that fulfill Core Area 4 generally fulfill FLC Areas II or III, depending on the discipline; and courses that fulfill Core Area 5 generally fulfill FLC Area II.

oral and written communication, scientific and quantitative reasoning, technological capabilities appropriate to the discipline, and information literacy. Most of these competencies are embedded in the Core curriculum's discipline-based areas. For instance, scientific and quantitative reasoning skills are developed through Core Area 3 (Natural Sciences and Mathematics), while written communication skills are addressed in Core Area 1 (Languages and Literature). However, the Core curriculum lacks an oral communication requirement, and this gap will be addressed in the upcoming general education curricular reform process.

As noted previously, Middle States expects general education curricula to provide breadth of study, exposing students to multiple perspectives and fields of inquiry. Transcript analysis reveals that the Core curriculum's distribution requirements do steer students to complete coursework in a wide variety of disciplines. In this sense, the Core curriculum effectively promotes exposure to breadth of knowledge. It is true that SPS students, when given a choice of disciplines in which to complete general education requirements, do avoid certain fields. For example, students must take courses in two social science disciplines. Students overwhelmingly choose courses in psychology and sociology over courses in economics and political science. This choice reflects the fact that the Core psychology and sociology courses are also required courses for the largest major in SPS, Human Relations. Thus, many students choose psychology and sociology courses because this allows them to fulfill major requirements and Core requirements simultaneously. (See Document Room for details on how students complete Core requirements).

Middle States also expects general education curricula to provide a "coherent student learning experience." The Core curriculum defines coherence in terms of a foundational knowledge base. The Core is intended to ensure a "body of knowledge to which students and faculty can relate subsequent studies," and students are supposed to complete the bulk of their Core courses within their first two years. Transcript analysis reveals that these intentions are not fully realized in practice. The writing requirement is the only requirement that is completed as a "foundational" course by the majority of SPS students. Between 2000 and 2005, more than 90% of students completed their writing requirement within their first 64 credits (partly because 2/3 of students transferred in credits to fulfill this requirement). By contrast, the majority of students completed Core requirements in math, science, history, and fine arts after earning more than 64 credits. Significant numbers of students completed their math and science requirements near the end of their academic careers. This is not surprising, since few SPS majors involve advanced work in math or science. None of the three largest majors (Human Relations, Business Administration, and Communication) require math or science courses beyond the Core level. Thus, little incentive exists to complete math and science requirements as a prerequisite to advanced study in the major (see Document Room for more detailed data on requirement completion patterns).

While the Core is not coherent in the sense of providing a foundational experience that precedes advanced study, it could be considered coherent in the sense that most students who fulfill Core requirements at Trinity take the same courses. For example, all SPS students fulfill their science requirements by taking Biology 101 or Environmental Science 101. Similarly, two thirds of recent SPS graduates fulfilled their literature requirement by taking either "Women in Fiction" or "African American Women Writers." (See Document Room for more detailed data).

While not inherent to the Core's design, the limited range of course offerings points to a possible model for a reformed SPS general education curriculum. By paring down the curriculum to a carefully-selected group of courses, each of which is regularly offered as part of a planned rotation, students would receive a truly common basis for study. They would also benefit from the predictability and ease of scheduling that comes with a set rotation of courses.

Furthermore, re-examination of which courses are suitable to fulfill general education requirements might help eliminate courses of limited applicability to the educational aspirations of SPS students. It might also enhance the coherence of the curriculum, by providing a selection of courses whose themes are connected by their relevance to the interests and needs of working adult learners.

### C. Core and FLC Design and Delivery: Comparable Rigor

Generally, CAS students fulfill FLC requirements through day classes, while SPS students fulfill Core requirements through evening and weekend classes. Middle States standard 11 stresses that "educational expectations, rigor, and student learning within accelerated programs" must be "comparable to those that characterize more traditional program formats." Given this standard, Trinity must demonstrate that the differences in contact hours between general education courses that meet during the day and those that meet on evenings and weekends do not lead to differences in rigor, expectations, or outcomes.

At Trinity, a 4-credit science course delivered during the day involves 77 contact hours, comprising 35 hours of lecture and 42 hours of laboratory instruction. By contrast, a 4-credit science course delivered in the weekend format involves 49 contact hours: each class meets for fourteen 3.5 hour sessions incorporating both lecture and lab. For 3-credit courses, the number of contact hours is 28 for courses delivered in evening and weekend formats, and 35 for courses delivered in the day. Classes that meet for fewer contact hours involve additional out-of-class work in the expectation that students will engage in substantial independent learning.

A comparison of syllabi for courses that fulfill both Core and FLC requirements, and that meet both in the day and evening/weekend formats, indicates that course requirements are generally comparable across formats (see analysis in Document Room). Comparing final exams for the same courses in different formats reveals that learning expectations are also the same regardless of format. In all the classes assessed, professors deliver the same course and expect students to learn comparable material. Differences lie not in substance, but in the pedagogical adjustments faculty make to save time. In many cases, evening and weekend courses had fewer exams, and in some cases, the exam was take-home. In classes whose requirements include laboratory work, professors spend additional time preparing the laboratory for students for whom time is particularly scarce. Many faculty hold homework sessions and study groups outside of class in an effort to save class time. In general, both faculty and students appreciate the special demands of accelerated class delivery, and the adjustments to those special demands are made in form rather than in substance.

### **III. ASSESSING STUDENT LEARNING IN GENERAL EDUCATION CURRICULA**

Ultimately, the test of curricular soundness is student outcomes. Trinity needs to know whether its students are learning what its general education curricula are designed to teach. Currently, student learning data is being collected and analyzed at the course and program levels, through student evaluations, course-embedded assessments, and the program review process.

Course and program-level assessments provide valuable information about what students are learning in particular courses and disciplines, and this information helps guide course and programmatic changes geared to improve learning outcomes. But assessment at the course and program level, while valuable and necessary, is not sufficient. Student performance in an individual general education course cannot demonstrate the integrity and effectiveness of the overall general education curriculum. Furthermore, while Trinity celebrates improvements in student learning in specific courses and programs, the university aspires to strengthen student success across the curriculum. This aspiration can only be fulfilled through university-wide initiatives to pull together course and program-level data, evaluate the aggregated data, and use the results to inform curricular reforms. Looking forward, Trinity needs an institutionalized and ongoing process for student learning assessment, as articulated in Chapter 2.

#### **A. Student Evaluations of General Education Learning Outcomes**

Course evaluations allow Trinity to collect standardized data on student perceptions of learning outcomes. Identical evaluation forms are administered throughout the university, permitting comparisons across courses, programs, schools, and delivery formats. The faculty recently decided to add questions on general education learning outcomes to the course evaluation form. The new questions asked students to gauge the extent to which the course increased their ability in each of the areas that the FLC specified as a learning goal. The faculty originally intended to include these questions only in evaluations for FLC courses, but ultimately decided to include the questions in all course evaluations. This would allow students' learning perceptions in FLC courses to be compared with their perceptions of what they had learned in other courses, including Core courses and non-general education courses.

The questions were added to Trinity's course evaluation form in the spring semester of 2005. Student responses from the spring 2005 evaluations have been analyzed in three areas that Trinity has designated as the foci for its institutional learning assessment plan: writing, quantitative skills, and information literacy. The analysis reveals that students perceive major gains in their abilities in all three areas, not only in courses that fulfill FLC requirements, but also in other classes at upper levels in the curriculum. (The analysis is presented in greater detail in Chapter 2).

Taken alone, the course evaluation data do not demonstrate successful student learning outcomes in general education courses. But they do reveal students' growing confidence in their abilities. Furthermore, the data indicate significant continuities and cumulative learning effects in students' academic careers. Middle States Standard 12 calls for "a program of general education where the skills and abilities developed in general education are applied in the major or study in depth." Trinity students clearly feel that the skills they develop in general education courses are

also utilized and improved in upper level coursework. To demonstrate fully that general education curricula build skills that are applied in the major program of study, more analysis of students' senior portfolio and capstone course work is needed. But the course evaluation data provide important signs that students are using and honing their foundational skills in their advanced coursework.

### B. Course-Embedded Assessment of General Education Learning Outcomes

Trinity's most valuable resource for assessing and improving student learning outcomes is its faculty. Trinity faculty members are sensitive to students' learning needs, and dedicated to revising their pedagogy to meet those needs. As teaching scholars, faculty members strive to make course content meaningful and accessible to students without diluting curricular rigor. Because faculty members care deeply about how and what students learn, course-embedded assessment is integral to most courses at Trinity. Indeed, course-embedded assessment has proven to be the most powerful and effective method for improving student learning.

Faculty in general education courses make use of multiple course-embedded assessment instruments. Formal rubrics and grading scales are increasingly common. Many instructors link assignments and test questions to specific learning objectives, structuring their exams and assignments to measure student achievement of those objectives. Pre- and post-tests are frequently employed to measure gains in student knowledge and skills. Instructors also monitor student performance in less formal ways as the semester progresses, and make adjustments to course delivery, readings, and assignments.

Review of course-embedded assessment reports also reveals that faculty members have responded to student learning challenges in many innovative ways. Not every innovation has been successful, but several approaches have proven so effective that they have been widely adopted in general education courses. Four recurring insights into student learning emerge from course-embedded assessment reports. First, clarifying student learning expectations is crucial to improving student learning outcomes. Secondly, instructional techniques that focus on developing students' study and academic preparation skills are vital components of general education courses. Thirdly, students learn best when they can connect with the material—and interactive, collaborative, and experiential learning techniques have proven effective in encouraging student engagement. Finally, general education courses provide the most powerful learning experiences when they integrate the development of multiple skills in mutually-reinforcing ways.

#### 1. Clarifying Learning Expectations

Instructors in general education courses have found that students learn best when they understand what it is that they are expected to learn. Instructors have used various methods to clarify learning expectations. Many have revised their syllabi to more clearly specify the general education learning goals that the course aims to achieve. As a philosophy professor explained, "I revised the syllabus to reflect the FLC goals the course addresses. I felt this had been implicit in the course delivery but needed to be made more explicit."

In addition, faculty members increasingly employ rubrics to communicate learning expectations in clear and concrete ways. They share their grading rubrics with students, distributing them in advance to help students prepare their assignments. According to a psychology professor, “I’ve included a rubric on the syllabus regarding how oral presentations will be graded, at the suggestion of former students. So from the very start of class students have a clear idea of the presentation expectations.”

Sharing specific expectations, instructions, and feedback with students in every phase of the learning process gives students structured guidance as they work to improve their performance. Many instructors find this method effective in developing basic skills such as essay organization, source citation, or hypothesis formulation. For example, the history program uses rubrics to help students learn how to state a thesis in their essays: “The rubrics are used primarily as a tool for improving student performance. Students are encouraged to rewrite all papers, concentrating specifically on areas identified by the rubrics as particularly weak. Moreover, the rubric grading criteria (thesis, organization, evidence, etc.) remain constant throughout the semester. Students are encouraged to track improvement in their performance in these areas over the course of the semester. Analysis of student outcomes indicates that student writing does improve over the course of the semester in the areas measured by the rubrics.”

## 2. Developing Study Skills

Many Trinity students have not had the advantage of a high school education that built effective study skills, or have been out of school so long that preexisting study skills have become rusty. As a result, students often need help strengthening their academic preparation skills in order to succeed in general education courses. Instructors have adjusted their pedagogy and course design to accommodate this need. For example, science, language, and mathematics instructors have incorporated more-frequent quizzes to help students pace themselves academically and develop habits of regular preparation and review.

Trinity instructors see self-directed learning as a key study skill, and push students to assume more responsibility for their own learning. This can be unfamiliar terrain for students who have previously been encouraged to keep quiet and not cause trouble in the classroom. Some professors, noting that students who are confused by a concept often fail to speak up and ask for an explanation, have introduced in-class mini-essays in which students write brief analyses of the concept under discussion. Similarly, some instructors promote active learning in pre-exam study sessions by requiring students to bring specific questions to the session, rather than passively receiving review materials. Other instructors encourage students to prepare for final exams by giving them input into the design of exam essay topics. The collaboratively-designed essay topics are shared with students prior to the exam. Instructors find that when students are invited to participate in developing their exams, they prepare more thoroughly and write more thoughtful, well-reasoned essays.

## 3. Promoting Student Engagement

As the previous section suggests, faculty find that one of the most important factors affecting students’ performance is their level of engagement. General education course

instructors have experimented with many ways of drawing students into the material. One approach involves creating more collaborative classroom environments. As a sociology professor explained:

*“In a traditional classroom, the professor has the power position as the holder of knowledge and is in control of what and how students learn. In a collaborative classroom, the instructor plays the role of facilitator and knowledge synthesizer. Knowledge is collaboratively produced during the process of reflecting on course materials. Students are no longer passive recipients of information but instead become active learners.”*

More inclusive pedagogy entails tradeoffs, and some faculty members initially felt trepidation about the shift. As one economics professor explained:

*“As much as I wanted to transition from a lecture-driven, fast-paced classroom to a less authoritative one, one that would accommodate a variety of methods of student-centered learning, I feared I would have to sacrifice theoretical content for a slower pace. The transition would be worth it only if it was really valuable, and by that I mean that students would have to benefit notably.”*

As this instructor and others found, changing classroom dynamics can have a dramatic impact on students’ motivation and performance. For example, many instructors confirm the value of group projects. As one faculty member noted after adding in-class projects to her class:

*“I was stunned by the results. Students did much, much better when they were allowed to process the information in groups, and they responded enthusiastically to the new learning environment.”*

Other professors note that students feel encouraged to improve their work when it is submitted to “peer review” in the form of group drafting and critiquing sessions. For instance, the biology program strengthens students’ lab report writing skills by having groups review and revise each others’ draft reports. Group peer review, instructors find, allows students to participate in the evaluation of their own work and thereby develop skills in self-assessment.

Another inclusive learning approach involves student-faculty collaboration on coursework. For example, students often struggle to understand complex, advanced texts. Rather than choosing simpler readings, some faculty members encourage students to grapple with tough texts through active class discussions:

*“There is a lot of very difficult reading in this course. We read together, exegete the material, discuss, chain arguments together. It is a dance.”*

Another professor has responded to student difficulties with homework assignments by offering pre-class and in-class homework sessions, in which instructor and students work together on solving problems. The sessions evidently helped students grasp the material; a comparison of students’ exam grades before and after adding the homework sessions revealed significant improvement.

In sum, professors who have engaged students through inclusive and collaborative pedagogy have found their reduced control amply offset by increased student motivation and learning. As the economics professor who had expressed earlier concerns put it:

*“The introductory economics classroom runs very differently. Perhaps my students are not exposed to as many economic details as they were in years past, but they certainly learn more economics than their earlier counterparts ever did.”*

Perhaps the most innovative methods for engaging students in general education courses involve experiential learning. For example, a sociology professor explained how she experimented for years in search of a way to reach students and bring the course material to life:

*“Sociological concepts and theories seemed too abstract and far removed from the life-world of our students. So as our student population changed, I began to experiment with service learning to improve students’ academic performance. I began requiring students to volunteer in homeless shelters, rape crisis centers, soup kitchens, and so on. The goal was to help students think in terms of the broader social issues that underlie their volunteer experiences. I had hoped that students would understand, for example, that volunteering in a soup kitchen can help solve the problem of a few hungry people, but it does not contribute to the elimination of the need for the soup kitchen. However, I found that these experiences did not adequately challenge students’ hidden assumptions. Their experiences often only confirmed their prejudices about the people they served. The issues of social inequality, racism, and other forms of structural inequality were not coming to life.*

*As a result, I started to experiment with using community-based research (CBR) in my classes. In community-based research projects, students are required to conduct systematic research with the goal of solving a community problem. Because students see how CBR results will be used, they are more motivated and engaged in the learning process. For example, last semester a project on food stamps gave our students opportunities to develop survey research instruments and conduct interviews with retail managers of food stores in D.C. to discover which accepted food stamps, and to find if other relevant assistance for homeless persons existed. The information gained was shared with local authorities to be disseminated to DC’s local homeless population so that they may use it to make healthier and safer food choices. Knowledge generated through this collaborative process is more academically relevant than charity-oriented coursework. CBR is a powerful strategy for teaching sociological concepts to college students who are more likely to have an individualistic explanation for social problems.”*

Similarly, in philosophy general education courses, students had trouble relating abstract concepts presented in challenging texts (such as Plato’s *Gorgias*) to their own experiences and concerns. So the instructor “added a community based learning component to the course to help students make connection between the material and their own lives.” Recently, the faculty decided that community-based learning held such promise that it should be incorporated into the First Year Seminar required for all CAS students.

Students' responses to their experiences confirm the value of community-based learning as a means to promote student engagement in general education courses. Surveys of students who have participated in community-based learning indicate that they perceive a wide range of benefits from linking their course work to community service. For example, 76%-79% of student survey respondents who took general education courses with community-based learning components in the 2004-5 academic year stated that community-based learning helped them develop their critical thinking skills. 81-86% of these students founded that the community work enhanced their academic experience, and 74-79% believed that the community-based learning helped them understand course readings and content.

A common theme in student responses was a feeling of efficacy and a sense that they had done something to help those around them: "I like the help that I gave to the children because I felt I was using my education [to help] them to understand their homework." As they helped others, students also experienced gains in their own knowledge and academic success: "It enabled me to tie together what I had been learning in class with my observations at the school. I liked this because I was not only able to learn out of the book, but I learned from my own experiences."

Across disciplines, professors have found experiential learning to be a powerful tool in FLC courses. It cannot by itself overcome basic skill deficits, but it can motivate students to value learning. In the words of one experienced professor:

*"After twelve years I have concluded that, while service learning cannot consistently improve students' academic skills, it can engage and motivate students to learn about the complexity of cause and effect in the discussion of social problems. In other words, service learning is not a panacea to raise unprepared students' skill levels, but it does make the text and class discussions more relevant and accessible to them."*

#### 4. Mutually-Reinforcing Skill Development

The FLC states the goals of general education in terms of nine separate skills and abilities. Yet faculty members have found that these skills and abilities are often best learned together. In many ways, they are complementary. It is difficult to master one without developing another. In particular, gaining foundational skills in writing and information literacy is essential to building more abstract abilities such as understanding the societal forces that shape the world, or interpreting religious and philosophical traditions.

Accordingly, Trinity faculty members have incorporated foundational skill development into many general education courses whose disciplinary content requires more complex and abstract skills as well. For example, the primary purpose of history general education courses is not to teach students how to write. Yet by treating writing skills as central to historical analysis, students learn not only how to become better historians, but also better writers. For the same reason, the development of information literacy skills is a significant component of general education history courses. As an instructor explained, "For each essay, students are asked to develop an independent historical interpretation of primary sources, showing that they have explored and distilled these materials and have formed their own conclusions about their meaning and significance."

Mutually-reinforcing skill development is pursued in most other general education disciplines as well. For instance, biology general education courses aim to help students understand and apply the scientific method of analysis. To achieve this aim, biology courses focus on the relationship between effective writing and strong scientific analysis. Effective writing is an explicit course objective, and students learn to express their scientific findings clearly and cogently in written reports. Similarly, fine arts general education courses aim to help students explore various modes of creative expression. To achieve this aim, students must be able to express their explorations in writing. Therefore, fine arts course goals include developing students' abilities to compose well-organized and analytically-sophisticated concert listening reports.

At the same time that general education courses in various disciplines are focusing on writing skills, general education composition courses are being revised to better prepare students for discipline-based writing and research. For instance, composition courses increasingly emphasize critical thinking skills. Instructors found that simple, descriptive writing assignments were not preparing students for the critical and analytical writing required in upper-level courses. So they modified their writing assignments to incorporate progressively more rigorous analytical elements. Information literacy skills are also being integrated into composition courses. Instructors assign research projects that develop skills in accessing information via technology, critically evaluating sources, and documenting sources properly.

This brief review of lessons learned from course-embedded assessments helps demonstrate the critical role that course-level assessment plays in evaluating and improving student learning at Trinity. Course-level assessment has an impact far beyond the individual class in which it is conducted. As mentioned above, successful curricular innovations are disseminated from one course to another. Faculty members often share rubrics and other assessment tools. In addition, faculty members who introduce new pedagogies (such as service learning) have organized faculty development workshops for other colleagues, promoting the spread of the new pedagogies into a variety of courses and disciplines. Course-level assessment also generates most of the data and analysis for the next level of assessment: the program review process.

### C. Program Reviews and General Education Learning

Every Trinity program that contributes courses to the general education curricula participates in the program review process. Program reviews occur every five years, in a three-year cycle followed by two years for implementation. The first year of the cycle is devoted to establishing program goals and developing a data collection plan. The second year is spent implementing the data collection plan, and the third year involves analyzing the data and making recommendations for improvement to better meet the goals set in the first year. Programs then have two years to implement changes before recommencing the assessment cycle. (See Chapter Four, Assessment of Educational Offerings, for additional details on program assessments).

As part of their assessment, programs are not explicitly required to set goals, or evaluate outcomes, related to their general education courses. In the initial years of Trinity's program assessment process (program reviews were institutionalized in the late 1990s), few programs set out to measure student learning in general education courses. But in recent years, assessment of

general education has become an increasingly important aspect of the program review process. This is particularly true for programs, such as History and Fine Arts, whose missions highlight service to the general education curricula.

All of the programs that contribute courses to the general education curricula, and that completed their first year assessment reports in 2005, set student learning objectives associated with the general education goals relevant to their programs' offerings. These programs will collect data, and assess student learning outcomes, over the next two years. Meanwhile, 80% of the programs that contribute courses to the general education curricula, and that completed their second year of assessment in 2005, collected data on student learning outcomes associated with the general education goals relevant to their programs' offerings. The two programs that completed third year assessment reports in 2005 also collected data on student learning outcomes, but are still in the process of analyzing the data and making recommendations.

Because of the relatively recent focus on general education courses as part of the program review process, few programs have made formal program-wide changes to their general education offerings as a result of their reviews. That may change as assessing student performance in general education courses becomes a more prominent and institutionalized aspect of program review. Even so, program reviews can only provide partial insight into the effectiveness of general education curricula. Each program can document how well students perform in the general education courses it offers. But no single program can determine whether general education curricula as a whole are "purposeful, coherent, engaging, and rigorous" (Middle States Standard 12). This is a task which must be undertaken through school- and university-wide assessment efforts.

### **CONCLUSION AND RECOMMENDATIONS**

As a result of this self-study, Trinity will undertake a reform of the general education programs and assessment processes in both the College of Arts and Sciences and the School of Professional Studies in order to achieve these objectives:

- As indicated in Chapter 2, general education in the College of Arts and Sciences must be reformed. The underlying assumption of the FLC is that the student is the designer of her own coherent, integrated academic program. While well-intentioned, this assumption does not work for today's first generation students who come to college with poor high school preparation.
  - In line with general education reform in CAS, the First Year Experience needs reconsideration. The first year is crucial, and one seminar alone is not enough to prepare students for long-term academic success. Foundational course work in skills development (writing, numeracy, information literacy, critical analysis, communication) and essential knowledge requires considerable time and focus in the first year, and perhaps into the second year. Prescriptive sequencing of the general education curriculum can significantly enhance success by making certain that students do not avoid courses that they need the most to develop as scholars in upper division major programs.

- Intermediate and Senior Year assessment processes are necessary to ensure that the foundations laid in the general education program are integrated and synthesized with major program outcomes. Major programs should identify specific, measurable objectives that articulate major program outcomes with general education goals, e.g., writing, language proficiency, research and quantitative analysis, and related skill sets.
- For the School of Professional Studies, the general education curriculum must be more coherently designed and delivered to meet the needs of adult learners.
  - Adult learners need predictability in their course offerings and a standardized general education curriculum with routine sequencing would address this need.
  - Greater emphasis needs to be placed on completion of general education requirements within students' first two years in order to ensure key academic skills development for success in their majors.
  - Oversights such as the lack of an oral communication requirement need to be addressed.
  - The use of accelerated delivery formats should be assessed with respect to accomplishment of desired student learning outcomes. While appropriate for major courses, these formats may not be appropriate for general education.
  - As with CAS, the general education assessment processes should be progressive through intermediate and advanced levels, and the Senior Assessment conducted by the majors should articulate to general education goals as well as to discipline-specific goals.
- Trinity faculty must continue the explicit presentation of student learning objectives in all course syllabi to ensure student learning as well as effective measurement of student learning.
- Faculty insights into student learning and best practices in general education should be routinely shared with colleagues through programming by the Center for Teaching Excellence recommended in Chapter One.
- Under the leadership of the vice president for academic affairs, the deans and CAP Committees of each school are responsible for establishing the framework and timetable for general education reform in the timeliest manner possible. Additionally, the CAP committees are responsible for overseeing the implementation of a true general education assessment program that will track student performance and outcomes throughout the student's academic career at Trinity.