

Seventh Annual Assessment Report 2000-2001 University of Wisconsin-Stevens Point

2000-2001 Assessment Subcommittee

Rick Wilke
Patricia Holland
Kris Hoffenberger
Kirby Throckmorton, Chair

John Munson
Fredrick Heider
Kaitlyn Julius

Assessment Activities

Assessment Subcommittee

The ACT Critical Thinking Test was administered to 67 students in four different classes in sociology, computer science, communication and interior architecture during the 2001 spring semester. According to ACT, the Critical Thinking test measures skills in clarifying, analyzing, evaluating, and extending arguments. An argument is defined as a sequence of statements that includes a claim that one of the statements, the conclusion, follows from the other statements. Each passage in the test presents a series of subarguments in support of a more general conclusion or conclusions. A variety of formats are used: case studies, debates, dialogues, overlapping positions, statistical arguments, experimental results, or editorials. The test consists of 32 items in a multiple-choice format. This test is one module of ACT's Collegiate Assessment of Academic Proficiency (CAAP) designed to assess general education academic skills. The other modules are writing skills, reading, mathematics, science reasoning, and a writing essay.

The ACT-COMP was administered to 55 seniors in four different classes in art, sociology, soils and natural resources during the 2001 spring semester. The ACT-COMP (College Outcome Measures Program), created by the American College Testing service, is designed to assess general education skills and knowledge in six different areas (descriptions are from ACT):

Functioning Within Social Institutions reflects the ability to identify those activities and institutions which constitute the social aspects of a culture, understand their impact on individuals, and analyze the functioning of yourself and others within social institutions.

Using Science and Technology indicates the ability to identify scientific/technological aspects of a culture, understand their impact on individuals and analyze the consequences of using technological products for yourself and the culture.

Using The Arts reflects the ability to identify those activities and products which constitute the artistic aspects of a culture, understand the impact that art in its various forms has on individuals and analyze the use of works of art by yourself and others.

Communicating measures the ability to send and receive information (including mathematical calculations) in a variety of modes (oral, written, graphic) for a variety of purposes.

Solving Problems reflects the ability to define a variety of problems, select approaches to solve them, generate solutions, collect information, check logical consistency, select a good solution and evaluate the process by which a problem was solved.

Clarifying Values indicates the ability to identify your own values and the values of others, understand how values develop and analyze the implications of decisions made by oneself or others based on those values.

The subcommittee reviewed all department program assessment reports and provided each department with a written response.

Academic Departments

The subcommittee received program assessment reports from 11 departments that opted to submit a report of their 1999-2000 activities. The remaining departments decided to submit a biennial report of their 1999-2001 activities October 2001. Departments used a variety of assessment methods including:

- Local tests
- National exams
- Student survey
- Faculty survey
- National certification exam
- Focus groups
- Gap analysis
- Placement rates
- Comparison of different teaching methods

Student Development

A "Profile of the Freshman Class" and "Stated Wellness Needs of the Freshman Class" were completed for fall 2000 freshmen.

Participants in Freshmen Interest Group program were surveyed to ascertain their opinions of various aspects of these programs.

Institutional

UWSP participated in the National Survey of Student Engagement (NSSE) in the spring of 2001. The survey was distributed in paper and electronic format to a random sample of 700 first-year students and seniors by Indiana University Center for Postsecondary Research & Planning under a contract with UW System. Four hundred and twenty-four surveys were returned for a response rate of 62%. According to George D. Kuh, the NSSE "...is specifically designed to assess the extent to which students are engaged in empirically derived good education practices and what they gain from their college experience."

English and Mathematics Placement Tests were given to samples of second semester sophomores and first semester juniors to assess their verbal and quantitative skills. Three

hundred thirty-nine students were randomly selected and invited to re-take the English Placement Test--4 took the exam. Two hundred fifty-four students who had not taken any math at UWSP and two hundred eighty-seven students who had passed four credits of math were invited to re-take the mathematics tests. Seven students who had taken no mathematics and twelve students who had passed four or more credits of mathematics took the test.

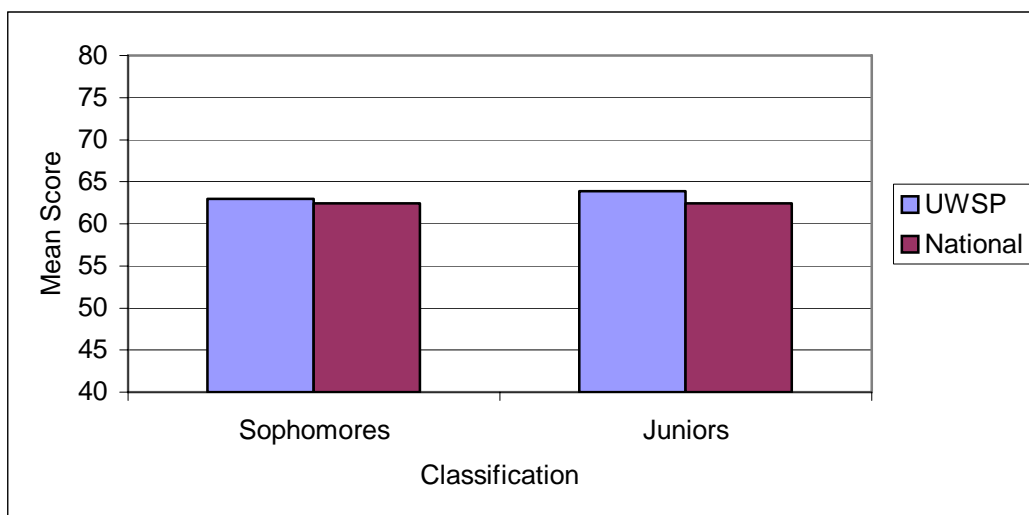
In June of 2000, American College Testing, under a contract with UW System, mailed the ACT Alumni Outcomes Survey to a stratified random sample of 13,000 UW System baccalaureate degree recipients from the graduating classes of 1996, 1997 and 1998. Of the 1,117 surveys mailed to UWSP alumni, 293 were returned for a response rate of 26.6%. The survey collected information about the perceived importance of a variety of personal and professional skills for success in today's world and the impact of the respondent's experience at UWSP on their attainment of each skill. Respondents were also asked to evaluate their overall experiences at UWSP in several different areas.

What We Learned about UWSP Students

Assessment Subcommittee

Chart 1 presents the ACT Critical Thinking Test results for 23 sophomores and 32 juniors. Test scores may range for a low of approximately 40 to high of 80. User norms are based on 14,674 sophomores who have taken the test over the last three years.

Chart 1: Critical Thinking Test



- The mean score for sophomores is 63 and is located at the 54th percentile on the user norms. The mean score for juniors is 63.9 and is located at the 62nd percentile.

Table 1 presents the ACT-COMP results for 55 seniors. Percentile ranks are based on 1995 reference group norms for 12,106 seniors at 45 institutions with sample mean ACT scores of 21.4 or above.

Table 1: ACT-COMP

| Sub-test (highest score possible) | Mean Score | Percentile Rank |
|--------------------------------------|------------|-----------------|
| Functioning Within Social Inst. (80) | 59.6 | 36 |
| Using Science and Technology (80) | 65.9 | 61 |
| Using the Arts (80) | 60.6 | 61 |
| Communicating (72) | 52.9 | 55 |
| Solving Problems (96) | 76.5 | 50 |
| Clarifying Values (72) | 57.8 | 53 |
| Total Score (240) | 186 | 49 |

- The mean total score for UWSP seniors is 186 and is located at the 49th percentile when compared to a user sample of seniors.
- Seniors score at the 50th percentile or above on five of the six subscales.
- ACT calculates the difference between ACT and ACT-COMP scores to estimate the amount of gain or value added between the freshman and senior years. UWSP seniors gained an average of 9.8 points, which exceeds the mean of 9.1 for a comparable user sample.

Institutional

Students participating in the National Survey of Student Engagement were asked, “In your experience at your institution during the current school year, about how often have you done each of the following?” The response categories are very often, often, sometimes, and never and are coded 4, 3, 2, and 1 respectively. Table 2 displays the percentages of first-year students and seniors responding very often or often, means, and number of cases. A ** by the mean indicates that it is significantly different from the NSSE user sample of 71,425 respondents from 321 four-year colleges and universities (independent sample t-tests, two-tailed, $p < .001$).

Table 2: Academic, Intellectual, and Social Experiences
(percent responding very often or often)

| | First-Year | | | Seniors | | |
|---|------------|--------|-----|---------|--------|-----|
| | % | Mean | N | % | Mean | N |
| Asked questions in class or contributed to class discussions | 51 | 2.63 | 201 | 67 | 2.96 | 223 |
| Made a class presentation | 25 | 2.04 | 201 | 64 | 2.86 | 221 |
| Prepared two or more drafts of a paper or assignment before turning it in | 70 | 2.95** | 201 | 53 | 2.61 | 223 |
| Worked on a paper or project that required integrating ideas or information from various sources | 72 | 2.94 | 200 | 87 | 3.28 | 223 |
| Came to class without completing readings or assignments | 20 | 2.06 | 200 | 21 | 2.14 | 222 |
| Worked with other students on projects during class | 47 | 2.50 | 201 | 54 | 2.65 | 223 |
| Worked with classmates outside of class to prepare class assignments | 27 | 2.13** | 201 | 69 | 2.95** | 223 |
| Tutored or taught other students (paid or voluntary) | 6 | 1.34** | 201 | 18 | 1.86 | 222 |
| Participated in a community-based project as part of a regular course | 2 | 1.17** | 201 | 12 | 1.58 | 220 |
| Used an electronic medium (list-serve, chat group, Internet, etc.) to discuss or complete an assignment | 58 | 2.72 | 201 | 57 | 2.77 | 222 |
| Used e-mail to communicate with an instructor | 65 | 2.90 | 200 | 81 | 3.29** | 222 |
| Discussed grades or assignments with an instructor | 34 | 2.27** | 200 | 57 | 2.76 | 222 |
| Talked about career plans with a faculty member or advisor | 27 | 2.20 | 200 | 51 | 2.64** | 223 |
| Discussed ideas from your readings or classes with faculty members outside of class | 12 | 1.51** | 201 | 23 | 1.99 | 223 |
| Received prompt feedback from faculty on your academic performance (written or oral) | 50 | 2.53 | 200 | 64 | 2.74 | 222 |
| Worked harder than you thought you could to meet an instructor’s standards or expectations | 50 | 2.52 | 201 | 56 | 2.61 | 223 |
| Worked with faculty members on activities other than course work (committees, orientation, student life activities, etc.) | 8 | 1.39 | 201 | 25 | 1.98 | 220 |
| Discussed ideas from your readings or classes with others outside of class (students, family members, coworkers, etc.) | 50 | 2.60 | 201 | 68 | 2.94 | 222 |
| Had serious conversations with students of a different race or ethnicity than your own | 31 | 2.14** | 201 | 33 | 2.24** | 223 |
| Had serious conversations with students who differ from you in terms of their religious beliefs, political opinions, or personal values | 58 | 2.76 | 201 | 62 | 2.91 | 223 |

- First-year students are frequently engaged in 9 of the 20 activities. They are most frequently engaged in preparing two or more drafts of a paper; working on projects that

require integrating ideas from various sources; and, using e-mail to communicate with an instructor.

- First-year students are less frequently engaged in 3 activities. Seventy-three percent have never tutored or taught other students; 84% have never participated in a community-based project as part of a regular course; and, 63% have never discussed ideas from their readings or classes with faculty members outside of class.
- First-year students are more likely to have prepared two or more drafts of a paper or assignment before turning it in than the NSSE user sample.
- First-year students are less likely to have worked with classmates outside of class to prepare class assignments; tutored or taught other students; participated in a community-based project as part of a regular course; discussed grades or assignments with an instructor; discussed ideas from their readings or classes with faculty members outside of class; or had serious conversations with students of a different race or ethnicity than the NSSE user sample.
- Seniors are frequently engaged in 14 of the 20 activities. They are most frequently engaged in working on a project that requires integrating ideas from various sources and using e-mail to communicate with instructor.
- Seniors are less frequently engaged in three activities. Forty-two percent have never tutored or taught other students. Sixty percent have never participated in a community-based project as part of a regular course. And, 32% have never discussed ideas from their readings or classes with faculty members outside of class.
- Seniors are more likely to have worked with classmates outside of class to prepare class assignments; used e-mail to communicate with an instructor; and talked about career plans with a faculty member or advisor than the NSSE user sample.
- Seniors are less likely to have had serious conversations with students of a different race or ethnicity than the NSSE user sample.
- Seniors are generally more engaged than first-year students. In particular, seniors are more likely to have made a class presentation; worked with classmates outside of class to prepare class assignments; discussed grades or assignments with instructors; and talked about career plans with a faculty member or advisor.

The NSSE also asked students, “To what extent has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?” The response categories are very much, quite a bit, some, and very little and are coded 4, 3, 2, and 1 respectively. Table 3 displays the percentages of first-year students and seniors responding very much or quite a bit, means, and number of cases.

Table 3: Impact of College Experience on Educational and Personal Growth
(percent responding very much or quite a bit)

| | First-Year Students | Seniors |
|---|---------------------|---------|
| Acquiring a broad general education | 83 | 83 |
| Acquiring job or work-related knowledge and skills | 47 | 78 |
| Writing clearly and effectively | 69 | 79 |
| Speaking clearly and effectively | 51 | 75 |
| Thinking critically and analytically | 75 | 84 |
| Analyzing quantitative problems | 51 | 62 |
| Using computing and information technology | 64 | 82 |
| Working effectively with others | 70 | 80 |
| Voting in local, state, or national elections | 47 | 33 |
| Learning effectively on your own | 79 | 79 |
| Understanding yourself | 66 | 71 |
| Understanding people of other racial and ethnic backgrounds | 38 | 46 |
| Developing a personal code of values and ethics | 53 | 57 |
| Contributing to the welfare of your community | 22 | 42 |

- The majority of first-year students feel that their experiences at UWSP have contributed quite a bit to their knowledge, skills and personal development. The greatest contributions are associated with acquiring a broad general education; learning effectively on your own; thinking critically and analytically; and, working effectively with others. Lesser contributions are associated with contributing to the welfare of your community and understanding people of other racial and ethnic backgrounds.
- First-year students are similar to the NSSE user sample except they are more likely to indicate their experiences at UWSP contributed to their voting in local, state, or national elections and less likely to indicate their experiences contributed to their understanding people of other racial and ethnic backgrounds.
- The majority of seniors feel that their experiences at UWSP have contributed quite a bit to their knowledge, skills and personal development.
- Seniors are similar to the NSSE user sample except they are more likely to indicate their experiences at UWSP contributed to using computing and information technology and voting in local, state, or national elections.
- Seniors are more likely than first-year students to feel their experiences at UWSP contributed to acquiring work-related knowledge and skills; speaking clearly and effectively; using computing and information technology; and contributing to the welfare of your community.

NSSE materials suggest that academic, intellectual, and social engagement questions can be formed into indices that are associated with good educational practice. Accordingly, five indices based on information provided by George D. Kuh, “The National Survey of Student Engagement: Conceptual Framework and Overview of Psychometric Properties,” were formed by computing the mean response for all of the items in each scale. According to the conceptual framework articulated by Kuh, engagement indices should relate to the impact college has on students’ educational and personal growth or what students gain from their college experience. The fourteen educational and personal growth items are divided into three indices based on George D. Kuh’s suggestions.

Table 4 displays Pearson correlation coefficients for each of the good educational practice scales and the gains scales and satisfaction items.

Table 4: Educational Practices, Growth and Satisfaction

| | General Education | Personal & Social Development | Practical Competence | Satisfaction with Overall UWSP Educational Experience | Would Attend UWSP Again | Would Recommend UWSP to Others |
|---|-------------------|-------------------------------|----------------------|---|-------------------------|--------------------------------|
| Level of Academic Challenge | .41 | .36 | .38 | .25 | .18 | .22 |
| Active and Collaborative Learning | .39 | .39 | .45 | .30 | .16 | .21 |
| Student Interactions with Faculty Members | .42 | .43 | .48 | .29 | .24 | .27 |
| Enriching Educational Experience | .30 | .46 | .32 | .29 | .22 | .17 |
| Supportive Campus Environment | .41 | .51 | .41 | .58 | .47 | .43 |

- All of the correlation coefficients are statistically significant ($p < .01$).
- Each of the good educational practice scales is moderately correlated with each of the reported gains scales. The highest correlation is between supportive campus environment and personal and social development.
- Each of the good educational practice scales is moderately correlated with each of the satisfaction items. The highest correlation is between supportive campus environment and satisfaction with overall experience

The ACT Alumni Outcomes Survey provided respondents with “a list of abilities or skills one might expect to develop while pursuing a postsecondary education” and asked them to “indicate the impact of your experiences at this school on your attainment of each skill.” The response categories are major, moderate, minor or no impact. Table 5 displays the percentage of UWSP alumni indicating their experiences had a major or moderate impact.

Table 5: Impact of College Experiences on Development of Abilities and Skills
(percent indicating a major or moderate impact)

| | |
|--|----|
| Working cooperatively in groups; working as a team member | 90 |
| Recognizing and using effective verbal communication skills | 88 |
| Accessing and using a variety of information sources | 87 |
| Recognizing and using effective written communication skills | 86 |
| Defining and solving problems | 85 |
| Making and exercising a lifelong commitment to learning | 81 |
| Analyzing and drawing conclusions from various types of data | 81 |
| Thinking objectively about beliefs, attitudes, and values | 80 |
| Developing original ideas and/or products | 77 |
| Getting along with people whose attitudes and opinions are different from mine | 77 |
| Developing and using effective leadership skills | 73 |
| Understanding the interaction of human beings and the environment | 73 |
| Getting along with people from various cultures, races, backgrounds, etc. | 68 |
| Living my personal and professional life according to my own standard/ethic | 61 |
| Understanding and appreciating cultural and ethnic differences between people | 61 |
| Understanding and appreciating art, music, literature, etc. | 58 |
| Learning about existing and emerging career options | 54 |
| Appreciating and exercising my rights, responsibilities, and privileges as a citizen | 51 |
| Understanding international issues (political, economic, etc.) | 42 |

- UWSP alumni generally indicate their experience at UWSP had a moderate or major impact on their skill development. Their experience had the greatest impact on working cooperatively in groups; effective verbal and written communication; accessing and using information; problem solving; lifelong commitment to learning; analyzing data; and, thinking objectively. They report less impact on understanding and appreciating the arts; learning about career options; appreciating and exercising the rights and responsibilities of citizenship; and, understanding international issues.
- UWSP alumni are more likely than a user sample of 23,113 alumni from 117 public colleges to report their college experiences had a major or moderate impact on developing original ideas and/or products; accessing and using a variety of information sources; developing and using effective leadership skills; understanding the interaction of human beings and the environment; understanding and appreciating art, music, literature, etc.; getting along with people whose attitudes and opinions are different; and, working cooperatively in groups. They are less likely to report a major or moderate impact on understanding international issues. UWSP and public college alumni are similar on the remaining eleven items.

No English and Mathematics Placement Test results are reported due to insufficient sample sizes.

Academic Departments

In general, departments continue to find strengths in their programs. National, state, and local procedures generally show that students are succeeding in their majors. Surveys of student and alumni satisfaction with programs are generally very positive.

Student Development

The FIG survey found that students generally felt the FIG program met their expectations and helped them with developing their study skills, concerns they had about attending college, and, locating campus resources. The overwhelming majority (90%) had contact with faculty outside the classroom and felt it was helpful living near other students taking the same classes.

How We Responded to the Assessment Information

Assessment Subcommittee

The assessment subcommittee continues to conduct workshops and distribute information to help departments better understand assessment and how it fits with department, college, university and UW System missions. The subcommittee continues to work with departments and the institution to develop ways to use assessment results to improve programs.

Chapter 7: Academic Programs and Curriculum, Section 3: Assessment of the University Handbook was revised to take into account recommendations contained in the Evaluation of UWSP Assessment Program, 1994-1999.

Academic Departments

Departments have used or plan to use assessment results to make the following changes:

- Review curriculum
- Add new course to curriculum
- Adopt a block structure for taking courses
- Require students in major to also complete specified minor
- Develop an exit competency exam aligned with professional standards
- Adopted in-class discussion format
- Initiated proposal to plan a new major

Student Development

Residence Hall Directors implemented a program in January 2000 to help students on academic probation succeed at UWSP. See Academic Newsletter-Residential Living-UWSP, Fall 2001, p.5 for additional information.

Institutional

The chair of the Assessment Subcommittee made a presentation on “GDR Objectives, Course Syllabi, Coursework and Assessment” at the Academic Affairs Administrative Staff

Meeting, August 2001. Steve Bondeson discussed his experience with building the natural science GDR objectives into Chemistry 106.

UPDC placed special emphasis on grant proposals featuring the development and implementation of innovative assessment strategies for curriculum improvement for 2000-2001 and 2001-2002. One grant has been awarded to Robert Peavler and David Hastings, Music Department, "...to improve initial assessment of incoming students, develop a system to monitor their progress throughout a class, and provide a final assessment for them." An interactive website "to help provide better assessment" for all students in music is also being developed.

Barbara Ellen Walvoord, Director of the Kaneb Center for Teaching and Learning, Concurrent Professor of English, and a Fellow with The Institute for Educational Initiatives, University of Notre Dame facilitated a workshop on "How to Use the Grading Process to Enhance Student Learning (and Still Have Time for Yourself)" on January 17, 2001.

A Teaching/Learning Open House was held on April 27, 2001. Faculty/staff showcased--via informal poster presentations and roundtable discussions--teaching strategies/practices which they found to contribute positively to student learning.

Academic Affairs provided each department with a copy of Barbara. E. Walvoord and Virginia Johnson Anderson's book, Effective Grading: A Tool for Learning and Assessment. New faculty and teaching academic staff were provided with a set of Resources for Promoting Learning at UWSP. All faculty and staff are provided with copies of Teaching Excellence: Toward the Best in the Academy and electronic access to The National Teaching & Learning Forum.

What We Learned about Assessment

Previously identified weaknesses in our assessment process continue to exist. These include inadequately defined objectives; lack of valid and reliable testing procedures; difficulty in using assessment results to improve student learning in programs or specific courses; lack of standards to evaluate assessment results; and, inadequate use of assessment results to make institutional adjustments. Too often, assessment is done to meet bureaucratic requirements--the secondary purpose--rather than improve student learning--the primary purpose.

Recommendations

The assessment process must be designed to detect gaps between what the faculty intend for students to learn and what they actually learn. This necessitates specifying the intended outcomes, discovering whether students are achieving them, and making changes in the program or its delivery if they are not. The following suggestions by Patricia Dwyer and Mark Stern shift the focus of assessment towards the improvement of student learning.

1. What do you want your students to KNOW upon graduation/transfer? What are you doing to facilitate the accomplishment of these outcomes? How can you tell if you've accomplished the goals?

2. What do you want your students to be able to DO upon graduation/transfer? What are you doing to facilitate the accomplishment of these outcomes? How can you tell if you've accomplished the goals?
3. What VALUE ORIENTATION do you want your students to be able to consider upon graduation/transfer? What are you doing to facilitate the accomplishment of these outcomes? How can you tell if you've accomplished the goals?
4. For what do you want your department to be known on campus? What are you doing to facilitate the accomplishment of these outcomes? How can you tell if you've accomplished the goals?

Based on ACT's description of the Critical Thinking Test, coursework which helps students develop their skills in clarifying, analyzing, evaluating, and extending arguments in a variety of formats--case studies, debates, dialogues, overlapping positions, statistical arguments, experimental results or editorials--should enhance their test performance.

According to Kuh, "The National Survey of Student Engagement: Conceptual Framework and Overview of Psychometric Properties":

Emphasizing good educational practice helps focus faculty, staff, students and others on the tasks and activities that are associated with higher yields in terms of desired student outcomes. Toward these ends, faculty and administrators would do well to arrange the curriculum and other aspects of the college experience in accord with these good practices, thereby encouraging students to put forth more effort (e.g., write more papers, read more books, meet more frequently with faculty and peers, use information technology appropriately) which will result in greater gains in such areas as critical thinking, problem solving, effective communication, and responsible citizenship

While the academic, intellectual, and social engagement of UWSP students is similar in many cases and exceeds the NSSE user sample in others, there are instances where they fall below the user norms. With respect to the latter, faculty could increase the engagement of first-year students by creating more opportunities for them to:

- Work with classmates outside of class to prepare class assignments
- Tutor or teach other students, paid or voluntary
- Participate in community-based projects as part of a regular course
- Discuss grades or assignments with an instructor
- Discuss ideas from readings or classes with faculty members outside of class
- Have serious conversations with students of a different race or ethnicity
- Read more textbooks, books, or book-length packs of course readings
- Write more papers or reports between 5 and 19 pages

Increasing the engagement of first-year students in these areas and others should lead to greater educational and personal growth and more satisfaction.