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## ABSTRACT

In order to evaluate the validity of outcomes assessment at two-year colleges, the American College Testing (ACT) Program developed "Project Cooperation." Institutions participating in the project administered tests and surveys to measure changes in students' cognitive abilities over time and record student feedback, and reported the data along with curricula and student transcript information to ACT. In addition, ACT developed an achievement index and a planning/test content form to help institutions develop the best research design and match course objectives with test objectives. To measure cognitive outcomes, 78 colleges applied the Collegiate Assessment of Academic Proficiency (CAAP) test to freshmen in 1989 and 1990 and again to the same students in 1992. To gather student feedback, 72 participating institutions administered the College Outcomes Survey (COS) in spring 1992. The COS includes sections on student background, college outcomes or goals, student evaluation of the importance of each outcome/goal, student progress in all areas, and student satisfaction. While many institutions failed to achieve the minimum number of 100 matched records of students' cognitive outcomes and transcripts, results of the assessment of student feedback included the following: (1) acquiring knowledge and skills in an area of specialization ranked as the highest goal and as the area of most progress; (2) students responded positively towards colleges' general education programs; and (3) the areas of highest satisfaction were class size and response to older and nontraditional students. Extensive appendixes provide the CAAP planning form, principles for use of the CAAP in outcomes assessment, the COS, and the full Project Cooperation Community College Composite of the College Outcome Survey Report. (MAB)

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Student Outcomes Assessment: Are We as Good as We Think?

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Iowa City, Iowa

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December 18, 1992

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## STUDENT OUTCOMES ASSESSMENT—ARE WE AS GOOD AS WE THINK?

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At first blush we want to answer "Yes," basing our response on our best intuitive feelings and our beliefs that at our institution we *are* good. However, this answer by itself is not considered adequate. Empirical evidence as derived from valid research is required if our answer is to be accepted by external bodies (e.g., the federal government, state government, accrediting agencies) demanding accountability and the various publics we serve. In addition, the issue of institutional effectiveness has been and continues to be an important one from the perspective of the American Association of Community Colleges. Further, if an institution really wants to do the best job possible, it must document student achievement and be prepared to make changes in programs where required as a result of good research data. The important question is, how can we validly demonstrate our effectiveness?

This question was a major stimulus for a national research project—Project Cooperation—that began in 1988 as a result of an initiative from the American Association of Community Colleges. Subsequently, two major councils of AACC, the National Council for Instructional Administrators and the National Council for Student Development, and American College Testing joined efforts to cooperatively develop assessment models, both cognitive and affective, that can be emulated by other community colleges. To carry out this research, 12 institutions/systems were initially involved. These are: Midlands Technical College, Orangeburg-Calhoun Technical College, Technical College of the Lowcountry, Mass Bay Community College, Howard Community College, Macomb Community College, the St. Louis Community College System, the Metropolitan Community College System, Scottsdale Community College (Maricopa System), Riverside Community College, and Chemeketa Community College.

### Cognitive Perspective

Several models were proposed, but most institutions agreed to pursue *change-related* cognitive research. This research is longitudinal, that is, incoming students are assessed to establish a baseline and these same students then are assessed upon exit near the end of the sophomore level to show change. This type of research is the same as the I-E-O Model presented by Dr. Alexander Astin in his book, *Assessment for Excellence*. Entry level testing was carried out in 1989 and 1990 using ASSET (a major placement test for community colleges) and/or the Collegiate Assessment of Academic Proficiency or CAAP (an outcomes instrument designed to measure foundational skills achievement at the end of the sophomore level). It was anticipated that many of these students would have completed at least 45 semester credits by the spring of 1993 when CAAP would be administered to these same students. This design would allow for a pure longitudinal study cohort using CAAP as the pretest and CAAP as the posttest. It would also provide data for change study using ASSET as the pretest and the similar but more advanced test, CAAP, as the posttest. The purpose of this second design is to establish a reliable method of assessment that reduces the need for excessive testing and its costs. This approach might positively affect student motivation as well.

In 1991 ACT staff developed an achievement index methodology that would enable institutions to infer academic change over time, based on students' performance on two sequentially or construct-related tests. To validate this methodology, a minimum of 5000 matched test results (ASSET and CAAP) would be needed for each subject: writing skills, reading, and mathematics. Additional institutional participation was necessary if we were to obtain the required numbers of matched test results.

To address other concerns related to outcomes assessment success, ACT staff designed a CAAP Planning Form and Test/Content Form (see Appendix A) to help institutions develop the best research design and to help them match course objectives with test objectives. This research will not produce the desired data unless students tested with CAAP take the related courses. Faculties at each institution were to analyze their curricula to determine the match between test content and courses. In addition, we required selected transcript information to document the courses taken by the CAAP-tested students. See Appendix B for a detailed explanation of the overall research design.

Invitations were then sent in the fall of 1991 to several hundred community colleges across the country. Institutions invited to participate in the expanded research were on record as purchasing substantial numbers of ASSET (Forms B/C) in 1989 and 1990, assuming that many of their students would have met the minimum requirements for the design for sophomore level testing by spring of 1992. The requirements were that students took either Form B or C of ASSET at least one year earlier, that they had completed between 45 and 75 semester credits (although this number was later changed slightly), and that most of their credits had been earned at the institution agreeing to participate in this research. These institutions were to administer at least two CAAP modules to a minimum of 100 students each in the spring of 1992. Each institution could select the CAAP tests appropriate to its needs and could administer the tests in a two-week block of time of its own choosing. Each institution was also to provide the relevant student transcript data to ACT before the end of the summer.

Seventy-eight institutions agreed to participate as Project Cooperation "Affiliates" and submitted their research plans to ACT for review. Most institutions chose to administer CAAP in classrooms rather than testing a random sample of students at a central testing site. This method was preferred by many institutions because it was viewed as the simplest way to address the motivational problem of getting students to test. On the other hand, it created problems because students selected in this manner may not be representative of all sophomores, particularly if a large portion of the students in a class do not satisfy the research criteria. This method also did not solve the problem of students doing their best on the test(s).

CAAP testing commenced in late February of 1992 and ended in June. Several institutions were successful in testing a substantial number of students. Many, however, fell significantly short of the required numbers with overall attrition rates (differences between the number of modules ordered and the number administered) ranging from 11% to 100%. Student transcript information was then prepared by most of the institutions over several months, but some information was not sent to ACT until mid-October. Throughout the fall, ACT staff did everything possible to get the best match of test scores and student records. Unfortunately, the end result was that few institutions had attained the minimum of 100 matched records per subject. (a minimum of 100 students is needed to establish an

achievement index for individual institutions to obtain meaningful information.) Thus the goal of developing an achievement index was not attained.

Matching student records for this complex research presents significant challenges, particularly with respect to collecting the data. Let me illustrate how difficult this process is. For this project, orders were placed for approximately 15,000 Writing Skills modules. Of these, 7,028 were actually administered with 1902 having preliminary matches. Final matching efforts (ASSET Forms B/C, CAAP test results, student transcript information, plus the other criteria referenced above) produced 785 matched student records. This means that only 11% of the original number tested produced complete matches for the research pertaining to documenting writing skills change. If one considers the numbers originally planned for, this number is reduced to 5%. To successfully complete change research using multiple data sources, an institution should assess all students completing a program of study. This is the only way to obtain sufficient information for decision-making. Obviously the numbers needed to answer our question are currently too small to let us know if we are as good as we think we are from the cognitive perspective.

Because the achievement index system has already been proven for use with other ACT programs, it is conceivable that this method would work with CAAP and ASSET. However, colleges must collect more data until the required numbers are met to establish a national reference group for achievement index reporting. ACT will continue to work with institutions until this goal has been met and then will offer this service to those willing to provide the required data. Further, ACT has developed an alternative reporting method that is less complicated and allows an institution to document student achievement with a minimum of 100 students per subject area. (A minimum overall total of 5,000 students per subject area is not required to establish a proper reference group using this alternative approach.) This type of reporting will be available later this year when individual institutions have the data.

Before turning to the affective perspective on this question, some observations should be made that may be helpful to institutions researching *academic change*. These observations are as follows.

1. Strong public commitment to improve the institution is required by the president and the chief administrative officers.
2. Extensive faculty support is absolutely necessary if the research is to be successful and the results used to improve programs.
3. There must be an institution-wide public commitment to outcomes assessment.
4. Adequate lead time is critical to get the model in place and implement it successfully.
5. Detailed written plans should be prepared and agreed to before proceeding.
6. Students should be required to participate in outcomes assessment as a routine part of the collegiate experience and this requirement must be published in the college catalog and other documents.
7. Students should be fully apprised of the rationale for the assessment effort and shown that their participation and data obtained will be used by the institution for improvement.
8. The person(s) assigned the responsibility for the assessment effort must have the authority to do the job.
9. Multiple relevant data sources must be used to answer each outcome question.

10. Baseline data must be obtained for *all* incoming students.
11. Student sampling methods must be large enough to produce the desired number of matched records.
12. The results must be used to improve programs where warranted.

If community colleges utilize these suggestions for *change* research, they will have a greater likelihood of successfully documenting student academic achievement and will show their constituents and external boards and agencies just how good they really are.

### **Affective Perspective**

The answer to the question, "Are we as good as we think?" can be more readily obtained from student opinion feedback. We were able to obtain good data from the second major component of Project Cooperation research through the College Outcomes Survey. This instrument was developed by ACT survey experts with extensive input from the National Council for Student Development and Project Cooperation institutions. This optically scanned instrument is four pages in length and takes about 30 minutes to complete. See Appendix C. It consists of several parts: background information, college outcomes or goals with student evaluation of the importance of each and the progress made in attaining it, feelings about general education at the college, general evaluation of the college, personal growth in a number of non-academic areas with an evaluation of the college's contribution to that growth, student satisfaction with given aspects of the college, a section for the college to ask up to 30 locally-developed questions, and space for comments and suggestions.

The College Outcomes Survey was administered by 72 Project Cooperation community colleges in the spring of 1992. A report, based on 9,557 student surveys from these institutions, was prepared and published. A free copy of this report may be ordered through the author at ACT. This report provides answers to our basic question. The colleges represented in the report include many different sized institutions: 12% from colleges with enrollments of over 10,000; 17% from colleges with enrollments of 5,000 to 10,000; 50% from colleges with enrollments of 2,000 to 5,000; and 21% from colleges with enrollments under 2,000. All are public community colleges located in 24 states.

Before summarizing the results, several qualifications are needed. The data are not based on a random sample of students or colleges. The instruments were administered in different ways to different groups of students (thus the response rates varied widely). The number of cases and institutions in this report is limited. Thus comparisons based on the data must be interpreted with caution.

**Background summary:** Females represent 63% of the respondents. The average age is 26.43, with about 46% being 21 or below. Approximately 87% are Caucasian, with African-American being the largest single minority group (6%). Seventy-nine percent have overall college grade averages of B- or above. The current course load of these students is: 21% are taking 9 or less credits and 65% are taking 10-18 credits. The total number of credits that will be earned by the end of the term are as follows: 20% have under 36 credits, 21% have between 36 and 60 credits; and 32% have between 60 and 83 credits. Almost three fourths of the students have earned all their credits at the college they are currently attending. Another 14% have transferred from 1-15 credits. The major areas of study represented by the survey-takers in the order of most students to least students are:

health science - 26%, business and management - 17%, education - 6%, social science - 5%, undecided - 5%, pre-engineering - 5%, community services - 5%, teacher education - 4%, computer science - 4%, business and office - 4%, engineering - 4%, trade and industrial - 4%, etc. Slightly more than a third plan to transfer to a four year college the next academic year, 37% plan to re-enroll in the same college, and 13% do not plan to attend college.

Several responses pertain to educational achievement and goals. About half have earned no degree or certificate since high school and 28% have earned an associate degree. When these students enrolled the lifetime goal was an associate degree (for 27%), a baccalaureate degree (32%), master's degree (18%), and doctorate/professional degree (9%). These percentages have changed since enrollment in the college. They now are: associate degree (14%), baccalaureate degree (31%), master's degree (30%), and doctorate/professional degree (12%). What is significant here is that the community college experience has caused many students to raise their educational goals to a higher level. This is one of many positive outcomes reflected by the results of this survey.

The last background question pertains to students' responsibilities and time allocations. Let me highlight a few areas. Twenty-nine percent spent 21 or more hours per week in course-related activities. Less than a quarter (24%) are not working for pay; 27% are working over 30 hours; 16% are working 21-30 hours; and 13% are working 16-20 hours per week. Only 29% are not involved in care of family. About 27% are spending 30 or more hours caring for family; 12% spend 16-30 hours; 18% spend only 1-5 hours.

**Importance of and progress toward attaining outcomes at this college:** Average ratings of each outcome statement (i.e., for each of 26 items) were ranked first in terms of the level of importance to the student of attaining the outcome, and then in terms of the amount of progress attained on each. For the importance ratings, a 3-point scale ranged from "Of great importance" (3.00) to "Of little or no importance to me" (1.00). For the progress ratings, a 3-point scale ranged from "A lot of progress" (3.00) to "Little or no progress" (1.00).

On the **importance scale**, the following ten outcome statements received the highest average ratings: acquiring knowledge and skills in my area of specialization (2.94), acquiring knowledge and skills needed for a career (2.87), improving my ability to make better decisions (2.77), learning to set goals and follow through to completion (2.77), learning to think and reason (2.72), understanding my strengths and weaknesses (2.71), improving my ability to apply new information (2.66), improving my study skills (2.64), listening to and understanding what others say (2.63), and developing problem solving skills (2.63). On the **progress scale**, the ten highest average ratings were as follows: acquiring knowledge and skills in my area of specialization (2.44), acquiring knowledge and skills needed for a career (2.41), learning to think and reason (2.38), learning to set goals and follow through to completion (2.37), understanding my strengths and weaknesses (2.34), improving my ability to make better decisions (2.33), listening to and understanding what others say (2.32), improving my ability to apply new information (2.31), thinking objectively about beliefs, attitudes, and values (2.29), and developing problem solving skills (2.23).

Although the average rating for a given item on the progress scale generally fell about .5 to .4 points below the average rating for that same item on the importance scale, it is

important to remember that the two scales are different and should be interpreted in terms of the meanings associated with points on each. Nevertheless, the order of items remained relatively close to that found on the importance rankings. Bear in mind that the mid-point (2.00) on each 3-point scale represents "average or moderate" on each of the four rating scales of importance and progress here and growth and college contribution referenced in the personal growth section below. When a rating moves above the mid-point on the scale, i.e., above a "moderate or average" rating, we can assume the colleges are perceived by respondents as doing an above average job. By the same token, when the average rating falls below the mid-point we want to take notice. A few ratings did fall slightly below the mid-point on the rating scale. For example, three areas in which students reported the **least progress** on average were in increasing appreciation of art, music, literature and humanities (1.87), improving physical coordination, dexterity, and muscular or motor skills (1.87), and developing original ideas or products (1.92). The first two of these were also rated lowest in importance, but the third, developing original ideas or products, was rated somewhat above the mid-point (2.35) on the importance scale. Perhaps community colleges should take a closer look at how they are serving students who place importance on developing original ideas or products.

**Feelings about this college's general education:** The students were quite positive in their feelings about the college's general education program, holding that it will benefit them in their personal/professional life and that it helped them develop skills in English, math, social sciences, natural sciences, and the humanities. They do not feel that general education requirements are a waste of their time.

**General agreement with statements about the college:** Overall, students are satisfied with the college as a whole. They are proud of their accomplishments at the college (agreement average of 4.25 on a 5 point scale, where 5 = strongly agree and 1 = strongly disagree) and would recommend the college to others (4.13). They feel that the college has helped them meet their goals (4.09). The lowest level of agreement was the item, the college welcomes and uses feedback from students to improve the college (3.62). This rating shows that the students feel this issue falls between agree and neutral, neither agree or disagree. It should be noted that if students perceive the college does not welcome their feedback, the college will have a very difficult time getting them motivated to participate in assessment activities because they believe the college won't use the data to improve programs and services. Institutions must *show* students that they will use student feedback for improvement if they are to get students to participate and do their best.

**Personal growth since entering college:** Students were asked to relate 32 outcomes statements using two separate 3-point scales, the first referring to the extent of personal growth they had made since entering this college, and the second referring to the extent of the college's contribution, both in and out of class, to personal growth. On the first of these two scales, the points were defined as follows: "A lot of growth" = 3; "Moderate (average) growth" = 2; and "Little or no growth" = 1. "Not a goal of mine" was a fourth option, but this response was not included in the calculation of personal growth averages. On the report prepared for colleges, the average growth ratings for each item were ranked from highest to lowest, with the 10 highest average ratings being as follows: setting a direction for my life (2.52), increasing my intellectual curiosity (2.44), becoming academically competent (2.42), implementing long-term or life goals (2.41), taking responsibility for my own behavior (2.41), developing self-confidence (2.41), improving my ability to relate to others (2.36), making a life-long commitment to learning (2.35),



increasing self-understanding (2.35), and becoming more willing to consider opposing points of view (2.28).

The six items with the lowest average ratings were the following: becoming more aware of local, regional, and international issues and events (2.06), maintaining my physical fitness (2.02), understanding religious values differing from mine (2.01), learning the role of volunteering to support worthwhile causes (1.97), and preparing myself to participate effectively in the electoral process (1.91). It is interesting to note that students in community colleges gave only "moderate" ratings to items such as "develop good physical fitness", "understanding religious values differing from my own," and "preparing myself to participate effectively in the electoral process."

On the other hand, students report above average growth in a number of areas in which one would hope for such growth. The question here is, how much has the college contributed to this growth both in and out of class? On the 3-point college contribution scale, the top ten outcomes were as follows: becoming academically competent (2.31), increasing my intellectual curiosity (2.30), making a lifelong commitment to learning (2.18), setting a direction for my life (2.17), implementing long-term or life goals (2.16), developing self-confidence (2.14), learning to critique and judge information (2.13), improving my ability to relate to others (2.11), become more willing to consider opposing points of view (2.05), and becoming an effective team or group member (2.05). All in all, community colleges are doing a good job in many areas where they should be expected to contribute to student growth—both academically and in the affective domain.

**Satisfaction with given aspects of this college:** Finally students were asked to evaluate how satisfied they are with a variety of aspects of the college. On a 5-point scale where 5=very satisfied and 1=very dissatisfied, greatest satisfaction is found in the following: class size (4.11), college response to older/nontraditional students (4.08), quality of my program of study (4.05), quality of instruction (4.05), freedom from harassment on campus (4.03), college response to students with special needs (3.94), library/learning resources center services (3.93), faculty respect for students (3.92), student access to computer services and facilities (3.90), and availability of faculty for office appointments (3.86). Most of these outcomes are related to the quality of the academic programs and the commitment of the faculty to teaching.

Even in the areas of least satisfaction, students tended to be satisfied (i.e., their average ratings were well above the neutral rating of 3.00). For example, the aspects with the lowest satisfaction ratings were the following: student health/wellness services (3.50), personal counseling services (3.50), language development services for students whose first language is not English (3.49), recreational and intramural programs (3.47), job placement services (3.47), veterans services (3.39), mental health services (3.31), residence hall services and programs (3.30), support services for victims of crime and harassment (3.26). These are areas that community colleges might investigate to determine how students' needs can be served better. It is possible that many of these services have been affected in recent years because of shrinking budgets. It is also possible that these are areas that have traditionally been of lower priority at community colleges. Generally speaking, community colleges are doing a good job overall in meeting students' needs from the perspective of their students.

It is apparent from the above summary, based on the data obtained from students completing the College Outcomes Survey, that community colleges overall are doing a good job. They are positively affecting student outcomes that should be expected from the mission and objectives of community colleges. Nevertheless, there are many areas that are not as good as they should or could be. These areas are readily apparent when one looks at the data from individual colleges. The College Outcomes Survey is sensitive to these shortcomings and readily shows where problems may exist. We need to investigate these further, considering data from several sources, and then reach conclusions regarding what must be changed.

### **Conclusion**

Student outcomes assessment is a valuable method to determine how effective community colleges really are. To benefit from this approach a strong institution-wide commitment is required. Once this commitment is evident, students will be motivated and will give us the data we need. We then can document how much we really help our students achieve their academic and other goals. We can show that we really are as good as we think.

December 18, 1992



## CAAP Outcomes Assessment Planning Form

Thorough and precise planning is essential for effective outcomes assessment. By considering carefully issues such as the correspondence between course content and test content, the selection of students for testing, student motivation, and test administration, an institution can be more confident of obtaining meaningful assessment results, and of optimally utilizing staff time and financial resources.

This form is designed to assist you in planning your outcomes assessment. Although elaborate or detailed responses are not necessary, we encourage you to respond thoughtfully. We also encourage you to read the document entitled "Principles for Effective Use of CAAP in Outcomes Assessment" before completing the form.

**Instructions:**

1. Please complete Parts I and II.
2. Send your completed form to ACT as far in advance of testing as possible so that ACT staff can review it and make suggestions if necessary. The form should be sent to ACT CAAP Operations, P. O. Box 168, Iowa City, IA 52243.

If you have questions or need assistance, please contact either of the following individuals:

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 Director  
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 319/337-1051

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**Part I.**

Please fill in the information below.

Your name \_\_\_\_\_

Title \_\_\_\_\_

Institution \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Telephone ( ) \_\_\_\_\_ Extension \_\_\_\_\_

Best time to be contacted \_\_\_\_\_

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**Part II.**

1. Please list the assessment questions that are of interest to your institution, and the data sources that you believe can help provide answers to these questions. An example of an assessment question might be: "Does our general education core curriculum contribute to an increase in the skills and knowledge that we want our students to acquire?" Examples of relevant data sources could include courses taken, course grades and GPAs, and CAAP test scores.

**Assessment questions**

**Data sources**

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2. Please describe how you plan to use the results of your outcomes assessment study. What actions will you take, depending on the results?

3. Please describe the principal foundational skills your institution seeks to develop in its general education core program. Then, next to each skill, list the principal core course or courses in which these skills are developed. Finally, indicate the CAAP test(s) you intend to use to assess students' achievement in these skills.

CAAP may not be appropriate for measuring all of your institution's foundational skills. If it is not appropriate, please indicate this as well.

Here are some examples of foundational skills, courses, and CAAP tests:

You may use this approach or the Test/Content Form at the end of this planning document.

*Examples*

<i>Skill</i>	<i>Course(s)</i>	<i>CAAP test(s)</i>
<i>Demonstrate conventional application of punctuation, grammar, and sentence structure. Demonstrate the ability to organize ideas.</i>	<i>English Composition (ENG 100)</i>	<i>Writing Skills test</i>
<i>Demonstrate an understanding of the scientific method and the capacity to evaluate competing hypotheses.</i>	<i>Scientific Inquiry (SC 120)</i>	<i>Science Reasoning test</i>
<i>Demonstrate the ability to present a well-organized verbal report and/or speech.</i>	<i>Public Speaking (PS 100)</i>	<i>(not appropriate)</i>

The contents of the CAAP tests are described briefly in an attachment to this document. Please read the attachment before completing this question. If you would like more detailed information on the test contents, please see the CAAP Technical Manual.

<i>Skill</i>	<i>Course(s)</i>	<i>CAAP test(s)</i>
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4. Please describe the students who will be the focus of this study (the "reference group"), and how they relate to the general education core program. (Many institutions define the reference group as students who have earned between 45 and 60 credits at the beginning of the semester in which they are tested.)

5. Please describe any subgroups of the main reference group that you want to study separately. (Examples: Engineering majors, Hispanic students, non-traditional age students.)

3. (continued)

Skill	Course(s)	CAAP test(s)
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(Please attach additional pages if needed.)



6. Please state below whether you plan to test the entire reference group, or whether you intend to test a representative sample from it. If you plan to test a representative sample, please describe how you will select the sample. (Examples of acceptable methods of sampling are provided in the "Principles" document. ACT recommends a minimum sample size of 100 students per reference group.)
7. If you plan to study a special subgroup, state whether you plan to test all students in it, or whether you intend to test a representative sample. If you plan to test a representative sample, please describe how you will select the sample. Note: Selecting members of a special subgroup from a representative sample of the entire reference group may not result in sufficient data for analysis.

8. Please describe your plans to inform your faculty and to enlist their support for the study.

9. Please describe how you plan to motivate students to participate in the study and to do their best when taking the CAAP. (Suggestions for motivating students are provided in the "Principles" document.)

10. Briefly describe your plans for administering the CAAP, including test dates.

**A Brief Summary of the  
Contents of the CAAP Tests**

- **Writing Skills Test**—Measures students' comprehension of punctuation, grammar, sentence structure, and other elements necessary for effective written English.
- **Reading Test**—Measures reading comprehension by requiring examinees to refer to explicit statements and then reason, draw conclusions, and generalize beyond the written material.
- **Mathematics Test**—Measures mathematical skills in content areas ranging from pre-algebra to introductory calculus.
- **Critical Thinking Test**—Measures students' skills in classifying and analyzing the elements of an argument, and in evaluating and extending an argument.
- **Science Reasoning Test**—Measures scientific reasoning skills, but does not emphasize factual knowledge. Students are required to interpret graphs, tables, and scatter plots, analyze experimental results, and compare alternative hypotheses or viewpoints.
- **Writing (Essay) Test**—Measures students' skills in formulating and supporting assertions about a given issue, and in organizing and connecting major ideas.

For more detailed information regarding the  
contents of the CAAP tests, please see the  
CAAP Technical Manual.

## CAAP Test Content Form

An important step in ensuring that assessment results will be meaningful is for an institution to identify logical relationships among its goals for developing students' fundamental skills and knowledge, the contents of the courses in its general education core curriculum, and the contents of the CAAP tests.

For example, if the institution wishes to ensure that all of its graduates are proficient in writing grammatically correct and logically coherent essays, then the requisite skills and knowledge must be taught through specific courses in the core curriculum (e.g., freshman English composition). The institution could then consider measuring these skills and knowledge with relevant CAAP tests; in this instance, the Writing Skills and Writing Essay tests would be appropriate.

This form is designed to help institutions identify relationships among general education goals, core courses, and the contents of the CAAP tests. Because a single individual is unlikely to be familiar with his or her institution's entire general education curriculum, ACT recommends that several faculty members, or perhaps a general education committee, collaborate when completing this form. Mathematics faculty, for example, are familiar with the contents of core courses in mathematics, and could therefore determine whether the CAAP Mathematics test will measure the skills and knowledge taught in these courses. They may not, however, be familiar with the contents of core courses in English.

The principal use of this form, for most institutions, will likely be to identify CAAP tests that are appropriate for measuring students' fundamental academic skills and knowledge. It is possible, however, for the form to serve additional purposes. For example, the form may initiate discussions of general education goals in relation to the core courses currently being taught. Collaborating faculty then could determine that a general education goal might be achieved more readily by consolidating certain courses or by adding other courses to the core curriculum.

- Instructions:**
1. Please fill in Sections A, B, and (if applicable) Section C.
  2. Mail the completed form to: College Level Assessment Services  
American College Testing  
P. O. Box 168  
Iowa City, IA 52243

**Section A.**

1. The contents of the CAAP tests are briefly described in the left column of this table. Please indicate in the middle columns the extent to which mastering these skill and knowledge areas is important to your institution's general education goals. Then, list in the right column the course(s) in which the skills and knowledge are taught.

If there are skills and knowledge that are important in your institution's core curriculum, but that are not measured by the CAAP tests, please describe them on Section C of this form (beginning on p. 18).

Contents of the CAAP tests	Importance in our general education curriculum (Check one)			General education course(s) in which these skills and knowledge are taught. (Please indicate course number(s).)
	High	Medium	Low	
<p><b>Writing Skills Test</b> The Writing Skills Test measures students' understanding of the following conventions of standard written English:</p> <p><i>Punctuation.</i> Items in this category test the use and placement of commas, colons, semicolons, dashes, parentheses, apostrophes, and quotation, question, and exclamation marks.</p> <p><i>Grammar.</i> Items in this category examine the use of adjectives, adverbs, and conjunctions, and test the agreement between subject and verb, and between pronouns and their antecedents.</p>				

(continued)

Contents of the CAAP tests	Importance in our general education curriculum (Check one)			General education course(s) in which these skills and knowledge are taught. (Please indicate course number(s).)
	High	Medium	Low	
<p><b>Writing Skills Test (cont'd)</b></p> <p><i>Sentence structure.</i> Items in this category test relationships between/among clauses, the placement of modifiers, and shifts in construction.</p>				
<p><i>Organization.</i> Items in this category test the organization of ideas and the relevance of statements in context (order, coherence, unity).</p>				
<p><i>Strategy.</i> Items in this category examine the appropriateness of expression in relation to audience and purpose, the strengthening of writing with appropriate supporting material, and the effective choice of statements of theme and purpose.</p>				
<p><i>Style.</i> Items in this category test precision and appropriateness in the choice of words and images, rhetorically effective management of sentence elements, avoidance of ambiguous pronoun references, and economy in writing.</p>				

Contents of the CAAP tests	Importance in our general education curriculum (Check one)			General education course(s) in which these skills and knowledge are taught. (Please indicate course number(s).)
	High	Medium	Low	
<p><b>Mathematics Test</b>            The Mathematics Test measures students' mathematical reasoning abilities. It emphasizes quantitative reasoning rather than the memorization of formulas. The content areas tested include:</p>				
<p><i>Pre-algebra and elementary algebra.</i> Items in this category are based on integers and algebraic expressions. Students may be required to solve year equations.</p>				
<p><i>Intermediate algebra and coordinate geometry.</i> Items in this category are based on graphing in the standard coordinate plane, or may involve operations with integer exponents, radical and rational expressions, the quadratic formula, linear inequalities in one variable, and systems of two linear equations in two variables.</p>				
<p><i>Advanced algebra.</i> Items in this category are based on rational exponents, exponential and logarithmic functions, complex numbers, matrices, inverses of functions, and domains and ranges.</p>				



Contents of the CAAP tests	Importance in our general education curriculum (Check one)			General education course(s) in which these skills and knowledge are taught. (Please indicate course number(s).)
	High	Medium	Low	
<p><b>Mathematics Test (cont'd)</b></p> <p><i>Trigonometry.</i> Items in this category are based on right triangle trigonometry, graphs of the trigonometric functions, and basic trigonometric identities.</p>				
<p><i>Introductory calculus.</i> Items in this category are based on limits, continuity, derivatives, and integrals.</p>				

Contents of the CAAP tests	Importance in our general education curriculum (Check one)			General education course(s) in which these skills and knowledge are taught. (Please indicate course number(s).)
	High	Medium	Low	
<p><b>Reading Test</b>            The Reading Test measures reading comprehension as a product of skill in referring, reasoning, and generalizing. The test consists of passages selected from fiction, the humanities, and the social and natural sciences. Students are required to derive meaning from the passages by:</p>				
Referring to what is explicitly stated.				
Reasoning to determine implicit meanings.				
Drawing conclusions, comparisons, and generalizations beyond the text.				

Contents of the CAAP tests	Importance in our general education curriculum (Check one)			General education course(s) in which these skills and knowledge are taught. (Please indicate course number(s).)
	High	Medium	Low	
<p><b>Critical Thinking Test</b>            The Critical Thinking Test consists of passages that present one or more arguments in a variety of formats, including case studies, debates, dialogues, overlapping positions, statistical arguments, experimental results, and editorials. The test measures students' skills in the following areas:</p>				
<p>Clarifying and analyzing the elements of an argument.</p>				
<p>Evaluating an argument.</p>				
<p>Extending an argument.</p>				

Contents of the CAAP tests	Importance in our general education curriculum (Check one)			General education course(s) in which these skills and knowledge are taught. (Please indicate course number(s).)
	High	Medium	Low	
<p><b>Science Reasoning Test</b>            The Science Reasoning Test measures scientific reasoning skills rather than recall of scientific content, or a high level of skill in mathematics or reading proficiency. The test presents stimuli in three different formats:</p>				
<p><i>Data representation format.</i> Students are presented with graphic and tabular material similar to that found in science journals and texts. The items associated with this format measure skills such as graph reading, interpretation of scatterplots, and interpretation of information presented in tables, diagrams, and figures.</p>				
<p><i>Research summaries format.</i> Students are provided with a description of one experiment or of several related experiments. Items in this format focus upon the design of experiments and the interpretation of experimental results.</p>				
<p><i>Conflicting viewpoints format.</i> Students are presented with several hypotheses or viewpoints that are mutually inconsistent owing to different premises, incomplete or disputed data, or differing interpretations of data. Items in this format measure students' skills in understanding, analyzing, and comparing alternative hypotheses or viewpoints.</p>				

Contents of the C-AAP tests	Importance in our general education curriculum (Check one)			General education course(s) in which these skills and knowledge are taught. (Please indicate course number(s).)
	High	Medium	Low	
<b>Writing Essay Test</b> The Writing Essay Test requires students to demonstrate skills in the following areas:				
Formulating an assertion about a given issue.				
Supporting the assertion with evidence appropriate to the issue, the position taken, and a given audience.				
Organizing and connecting major ideas.				

2. Please indicate below which of the general education courses in the preceding section, if any, are developmental courses.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Section B. OPTIONAL**

For future reference, it would be helpful to indicate the faculty/committee member(s) responsible for providing information on each of the content areas in Section A. ACT may refer to this chart for research purposes, or to request additional information. In requesting additional information, ACT staff will first contact the individual whose name appears in Part 1. The faculty/committee members listed below will not be contacted directly without this individual's permission.

Content area	Faculty/committee member(s) responsible	Department	Title
Writing Skills			
Mathematics			
Reading			
Critical Thinking			
Science Reasoning			
Writing Essay			

**Section C.**

1. Please describe any skills and knowledge that are important in your general education curriculum, but that are not measured by the CAAP tests.

Skills and knowledge taught in our general education curriculum	Importance (Check one)		General education course(s) in which these skills and knowledge are taught. (Please indicate course number(s).)
	High	Medium	
Writing			
Mathematics			
Critical Thinking			
Science			
Other			

2. Optional: For future reference, it would be helpful to indicate below the faculty/committee member(s) responsible for filling in Section C. ACT may use this information as described on the preceding page.

Name	Department	Title



7/12/91

## Principles for Effective Use of CAAP In Outcomes Assessment

Postsecondary institutions are being asked, with increasing frequency, to provide evidence of the effectiveness of their educational programs to legislatures, state boards, and other governing and funding bodies. There is a demand for institutions to demonstrate that students gain skills and knowledge by participating in postsecondary education. The results of such outcomes assessment efforts often receive considerable attention, and it is not uncommon for the results to be tied to program development and even to funding decisions.

Institutions themselves often conduct self-studies, irrespective of external accountability requirements. The results of such studies can be important in making decisions about program development, continuation, or enlargement, in detecting and ameliorating problems, and in how the institution perceives itself.

To initiate assessment studies, institutions must address several issues. They will need, for example, to develop formal plans, identify participants among administrators, faculty, and students, and select appropriate research designs. Outcomes assessment can be a large task involving substantial numbers of staff and students, and the investment of considerable resources.

Because of the importance attached to the results of outcomes assessment studies, and the effort required to both initiate and complete them, it is crucial that institutions conduct thorough and precise outcomes assessment research. This document is intended to provide guidance in designing effective outcomes assessment research involving the CAAP. Following the procedures described here will significantly increase the likelihood of obtaining accurate and meaningful results.

### Some General Considerations in Using Test Scores

#### Justification for Using Test Scores

Outcomes assessment describes the results of students' experiences in a postsecondary educational institution. In general, outcomes assessment encompasses affective characteristics (such as students' interests and satisfaction) as well as academic characteristics. On the academic side, one of the goals of outcomes assessment is to provide information that will be helpful in improving the academic performance of students and faculty.

Before deciding to use test scores in outcomes assessment, institutions must determine whether test scores will provide them with the information they are seeking. Test scores can be useful in outcomes assessment, provided that they are appropriate measures of the outcomes of interest. For example, if an institution is interested in measuring students' performance in mathematics, then there should be a sufficient match between the content of the mathematics curriculum and the content of the selected test.

One way in which test scores may be used in outcomes assessment is to measure the relative academic performance of students. For example, test scores could be used to measure the academic performance of students in a particular college or university relative to criterion descriptions of performance, or compared to norms for a relevant reference group. If, for instance, the average test score for sophomores at University A is lower than the average test score for sophomores in similar programs at other comparable universities, then this may be an indication that University A's sophomores have not reached similar levels of academic proficiency. A group's level of academic proficiency, however, will usually depend on its level of academic preparation on entering the program, as well as on other characteristics.

Another example of how test scores may be used in outcomes assessment is to measure the average amount of change occurring over time for students in a given program or department. (Note that the



emphasis here is on group change; ACT does not recommend using CAAP to measure individual change.) The average change is assumed to reflect the effectiveness of postsecondary instruction. For example, if the average test score of students who have completed an institution's core curriculum of general education courses is higher than the average test score of a comparable group who have had no exposure to the core curriculum, then this could be considered evidence of that program's effectiveness in educating them. The amount of gain may, of course, depend on the level of academic preparation students had on entering a program, as well as on other student characteristics.

### Using Test Scores Properly

Test scores should not be the sole determinant for making decisions for improving curriculum effectiveness. Instead, they should be used in conjunction with other types of data, such as retention and graduation rates, course grades, and opinion survey responses.

Decisions regarding the allocation of resources or funds within institutions, and decisions regarding the hiring, promotion, or retention of staff are of particular importance, and require the use of other types of data in conjunction with test scores. It would be inappropriate, for example, to allocate funds to a particular department solely on the basis of its students' pre- and posttest scores. Likewise, the English department chair, for instance, should not feel that his or her department's position will be jeopardized solely because of a low average test score earned by its students.

In addition, low test scores are appropriately used only as indicators that further investigation should be conducted. By themselves, such scores are not indisputable evidence of a problem with a certain curriculum or program, nor do they constitute a complete or effective outcomes assessment.

### **Developing Formal Plans**

It is important for institutions to develop formal plans for outcomes assessment. Formal plans allow an institution, among other things, to avoid wasting financial resources and staff time. In the planning stage, an institution engages in numerous activities. It will, for example, want to determine the assessment questions to be investigated (e.g., "Does our general education curriculum contribute to an increase in the skills and knowledge we want our students to acquire?"), and review any assessment data that have been collected previously by various campus departments and offices. These are only a few examples of activities involved in outcomes assessment planning; for more information, see College Assessment Planning (1990b).

Another activity included in planning an assessment is the selection of appropriate measures of the outcomes of interest. If an institution wants to determine the suitability of CAAP scores for its outcomes assessment, then the following suggestions may be helpful:

1. Develop an explicit description of the institution's goals for developing students' foundational skills. For example, an institution may want all of its students to demonstrate proficiency in intermediate algebra by the time they have completed their sophomore year.
2. Develop a listing and description of the courses in the core academic program being evaluated. There should be a logical relationship between the institution's goals for developing fundamental skills and the contents of the courses in its core academic program. For example, for sophomores to demonstrate proficiency in intermediate algebra, they must take course work in algebra, as part of the core academic program, that will enable them to sufficiently develop the requisite mathematical skills.

3. Review the content specifications for all of the CAAP tests to determine whether the institution's evaluation goals are likely to be met by using CAAP tests. This will help to avoid potential difficulties after the assessment is underway. For example, programs lasting less than one year may be too short to be properly studied with the CAAP.

To assist institutions in identifying the match between test content and courses, ACT can furnish a specially developed form. The form describes the content of each of the CAAP tests; next to each description could be listed potential courses in the core program for which this test is viewed as appropriate.

### Developing a Testing Plan

Once an outcomes assessment plan has been adopted that includes the use of CAAP tests, the institution should develop a testing plan. The testing plan should include:

1. An explicit specification of the reference group(s) to be tested, and how they relate to the core program being evaluated. For example, you might specify that you will test end-of-year sophomores who have nearly completed your institution's general education core curriculum. (See the following section.)
2. A description of the sampling method, if any, to be employed. (See the section on below selecting and recruiting a sample.)
3. The steps to be taken to inform and motivate faculty and students about the testing. (Information on motivating students is provided in a separate section below.)
4. The CAAP modules to be administered and a description of how the tests are relevant to the programs being evaluated.
5. The date(s) on which CAAP will be administered.
6. A description of what testing facilities will be provided (e.g., our testing will take place in certain classrooms, we will have no more than 50 students per classroom, our faculty will serve as proctors, etc.).

ACT has a checklist available for institutions to use in developing their plans.

As part of the testing plan, the institution should develop a description of other instruments or indicators it plans to use in its outcomes assessment. Retention rates, courses taken and grades earned, graduation rates, or responses to an opinion questionnaire are examples of indicators that might be used. This description should include consideration of how these indicators might be linked or integrated to draw conclusions and make decisions about a program.

The institution should also state the general kinds of decisions that will be made based on the results of the outcomes assessment. For example, if the results indicate that students' average performance in mathematics is unchanged from the freshman to the sophomore year, then the institution could plan to form a committee to investigate the content of certain mathematics courses.

It may also be helpful to speculate about actions that might be triggered by results of various kinds. In the above example, the Mathematics Department faculty may become defensive or feel threatened by the disappointing results. If, during the planning stage of the outcomes assessment, it is explained to them (and to other relevant departments) that results will be used only to initiate further discussion, and not to find fault with a given program, then their anxiety may be lessened.

ACT strongly encourages all institutions to follow these protocols and document their testing plans in writing to ACT in advance of anticipated testing. As part of our outcomes assessment service, ACT staff will then review the plans and, if necessary, offer suggestions to help maximize the value of research findings.

### **Selecting a Reference Group for Testing**

The reference group is the (sub)population of your students that you wish to study, and about which inferences will be made. A reference group can be any one of a number of intact groups that are logically related to an institution's goals for general education. One example of a commonly selected reference group is all sophomores who have completed the general education requirements at a particular institution. By testing these students, an institution could collect data pertaining to the overall effectiveness of its general education core curriculum.

Other examples of reference groups include: all sophomores with at least 60 semester hours of credit, or all sophomores enrolled in an institution's engineering program, or all students majoring in English who have completed at least 15 semester hours of English course work.

The reference group selected must be logically related to the core program being evaluated. Further, the reference group and the core program must be compatible with the institutions' goals for developing fundamental skills. For example, if an institution wishes to ensure that all of its graduates can write grammatically correct, and logically coherent essays (a fundamental academic skill) then it might benefit most from evaluating its required courses in English composition taken by all students during either the freshman or sophomore year. In this case, the reference group must consist of students who had recently completed, or nearly completed, the required courses in English composition.

The selection of a test is closely related to the selection of a reference group; the test that is ultimately chosen must be appropriate for the reference group and the program being evaluated. An institution may find its assessment efforts wasted if the selected test is not congruent with the institution's core academic program and goals for developing students' basic academic skills. Selecting the CAAP Mathematics test to evaluate sophomores who have nearly completed the general education curriculum, for example, might be illogical if the institution does not have a minimum proficiency in mathematics as one of its developmental goals for students, and does not require students to take course work in mathematics. On the other hand, an institution might wish to determine whether it should add proficiency in mathematics as an academic goal. One kind of information that would be useful in making this decision would be data comparing the institution's students' mathematics skills with those of students at other institutions.

### **Generalizability of Outcomes Assessment Results**

The selection of a reference group has implications for the ways in which the results of an outcomes assessment can be used. The results of an outcomes assessment apply only to the reference group, and cannot be generalized to other reference groups. For example, if it is found that completing certain coursework in mathematics increases the performance of engineering students on the CAAP Mathematics test, then this result is applicable only for engineering students; it may or may not be true that the CAAP Mathematics performance of sociology majors would be enhanced if they were to complete the same certain mathematics courses.

## Selecting and Recruiting an Appropriate Sample of Students

### Testing a Population

When possible, it is best for an institution to test all members of a reference group population. This method is less time-consuming than randomly selecting a sample of students, and it reduces the problems sometimes encountered when attempting to generalize findings from a sample to a larger reference group population. When selecting students in this manner, it is important that all or nearly all of the reference group population actually take the CAAP. If only part of the population takes the CAAP, then the resulting subpopulation can be considered a nonrandom sample. Administering the CAAP to nonrandom samples could have serious implications for the results of an outcomes assessment; in some cases, the results will be uninterpretable.

Sometimes, based on economic or other considerations, an institution will decide not to test all members of a reference population, but instead to sample from the population. Of the many considerations involved in conducting an outcomes assessment, few are as important as the selection of an appropriate sample. Following are some examples of acceptable and unacceptable methods of sampling.

### Acceptable Methods of Sampling

One of the ways an institution can obtain an appropriate sample is by randomly sampling individual students. For example, one student could be selected at random from the first  $N$  students listed on a roster of all students. The selection of this first student could be performed in several ways; one possible method relies on a table of random numbers. A number  $K$  between 1 and  $N$  is chosen from the table (e.g., the table is opened to any page and the first number between 1 and  $N$  is selected). The  $K$ th student is selected, and every  $N$ th student is selected thereafter, until a sufficient number of students is obtained.

A potential difficulty in randomly selecting students is that sometimes they cannot be conveniently assembled for testing. For example, an institution located in an urban setting may select a sample that includes a significant proportion of commuter students. Because these students are not often on campus, relative to other students, it may be difficult to test the entire sample during a time that is convenient for everyone. If, as a matter of convenience, the commuter students are not included in the testing, then the sample will be biased and the outcomes assessment results will be applicable only to those students living on campus.

A more practical method of sampling may be to select entire classrooms in which members of the reference population are enrolled, and to administer the CAAP to all students in the class. For example, if two English courses in the general education curriculum are being evaluated, and they each have six different sections, then two sections from each course might provide a sample of sufficient size. The random selection of sections could also be performed using a table of random numbers. All students within the two selected sections would then be tested.

As noted previously, after a sample of students has been randomly selected, it is important that all or nearly all of them actually take the CAAP. If the CAAP instead is taken by only a small proportion of the sample, then the examinees may not be representative of all students in the programs or courses being evaluated. This can occur whether or not the initial sample was representative. For example, let us say that College X randomly selected 100 of its 1,000 sophomores to take the CAAP. The testing, however, was not mandatory and only 20 sophomores chose to take the test. The group of 20 could be considered volunteers, and might differ from the typical College X sophomore (e.g., they might be more motivated). For this reason, those students who actually took the CAAP at College X ( $n=20$ ) may not be representative

of all College X sophomores ( $N=1,000$ ), even though they were randomly selected as part of the initial sample ( $n=100$ ).

### Unacceptable Methods of Sampling

One mistake sometimes made when sampling is to select students simply on the basis of convenience. Let us say that, during the process of selecting a random sample of students, an institutional researcher finds that he or she has access to a list of sophomores who live in dormitories. Should the researcher select the sample based on this incomplete list of students, or should he or she wait until a complete list becomes available? Obviously, to select students from an incomplete list could prevent the findings from being generalizable beyond the study, and for this reason should not be done.

Samples of students can be selected in other temptingly convenient (but equally unacceptable) ways. For instance, it would be inappropriate to select a convenient sample of students from one academic major or program (e.g., nursing majors) if other programs were also being evaluated.

A totally unacceptable method of sampling is simply to ask for volunteers from the reference population. This method is appealing because it typically requires less effort than random sampling. Its main shortcoming is that volunteers will often differ from nonvolunteers with respect to important characteristics (e.g., motivation), thereby preventing the results of the study from being generalizable to all students in the reference population.

### Additional Considerations in Selecting a Sample

The sample size needed for accurate inferences about a reference group will depend on many factors that cannot be controlled in advance, such as the size and academic skills of the reference group being studied and the analyses being done on the resulting test scores. Therefore, it is not possible to specify a general rule for sample size that will be appropriate for all situations.

ACT recommends as a "rule of thumb" a minimum sample size of 100 students per reference group. Because the CAAP is modular, (i.e., one or more of the five different objective tests and the essay test can be administered, rather than the entire test battery) this sample size recommendation must be followed for each CAAP test that is administered. For example, an institution will likely have sufficient data if it administers the entire CAAP battery, or 1 or more of the CAAP tests to each student in a sample of 100 students from a given program. On the other hand, if each of 5 different groups of 20 students in this program takes a different CAAP objective test (which still results in a sample of 100 students being tested) then sample sizes (per test) will be too small to be useful.

Institutions with small enrollments cannot always select a sample of 100 students per reference group. If an institution's reference group contains between 50 and 100 students, the institution should consider testing the entire reference group. If the reference group contains fewer than 50 students, then the institution should test students over a period of several years, until a pooled sample of sufficient size can be obtained.

Selecting an appropriate sample of students is a crucial aspect of any outcomes assessment. Prior to receiving CAAP testing materials, each institution will be asked to provide ACT with a brief written description of its selection method and expected sample size. If you have questions about selecting a sample, or obtaining a sufficient sample size, please contact ACT.

## **Motivating Students**

After an appropriate sample has been selected, another important task in the outcomes assessment process is to motivate students. Students must not only be motivated to take the CAAP, but be motivated to perform their best as well. Each institution can best decide what is most effective in motivating its students. Following are some suggestions.

### **Methods Associated With Student and Institutional Benefits**

Students may be motivated to take the test and do their best if the benefits of the assessment, for students and the institution, are clearly communicated. Students' motivation could be enhanced, for instance, by emphasizing that the assessment study provides a way to obtain information about the quality of the education students have received. For this method to be most effective, an institution should clearly and consistently communicate to the students its commitment to outcomes assessment, and should make available to the students the overall results of the study. In addition, it may be helpful if students' participation in the assessment is made to appear as a normal, routine part of attending the institution, rather than a special project requiring extra effort.

Another way to improve student motivation is to inform students that their participation will benefit future students through program improvement. Moreover, such improvement could lead to an increase in the value of students' degrees.

### **Methods Associated With Rewarding Students**

Directly rewarding students can be an effective method of motivation. Examples of substantive privileges that can be given to students on the basis of their participation and/or performance include:

1. Parking in desirable locations on or off campus.
2. Receiving early course registration privileges. Avoiding long registration lines, or having relatively easy access to certain very popular courses may be incentives to some students.
3. Having first chance at buying tickets to concerts, athletic events, etc.
4. Moving to the top of the waiting list for a room in a desirable residence hall.

Meaningful financial incentives, awarded to students on the basis of their participation and/or performance, can also serve to increase student motivation. Examples include:

1. Reduction in tuition.
2. Gift certificate from the college or university bookstore.
3. Tickets to a popular event that will be held on campus in the near future (e.g., a concert).

After an institution has chosen the type of award it will use, plans can be made regarding the method for selecting recipients of the award(s). For example, awards could be made to all students who score at or above a given cutoff. Another possibility is to enter the names of students scoring above a particular score into a lottery system, whereupon several winners will receive awards such as those listed above.

Rewarding students for increases in test performance may also be an effective form of motivation. For example, an award could be made if a student's CAAP score obtained at the completion of a program is high relative to a related test score obtained before any exposure to the program. This method is an option only for those institutions that perform longitudinal testing of students or that will, in the future, use students' ACT Assessment or ASSET scores obtained at entry in conjunction with students' end-of-sophomore year CAAP scores to arrive at an estimate of change (ACT is currently designing such a system). ACT can assist institutions in implementing a method of rewarding students for score increases.

It is possible to reward students merely for their participation in the outcomes assessment, independent of their performance on the CAAP, but this may fail to motivate them to perform their best. For example, an institution may offer free t-shirts to students if they complete the test. If students are interested only in turning in a completed answer sheet to obtain the award, and not interested in attempting to achieve the best possible scores, then the results of the test will be less valid.

### Mandatory Testing

Another method for motivating students is to make the testing mandatory. For mandatory testing to be effective, however, it is important that students try to do their best on the CAAP, rather than simply being present for the testing. If students are not sincere in their efforts, then their scores will not be valid for use in outcomes assessment.

One suggestion for encouraging students to perform well during a mandatory administration of CAAP is to require them to achieve a certain minimum score or higher in order to register for any future courses. The minimum score could be set low enough so that only those students who deliberately put forth no effort (e.g., marking answer "B" for every test question) would be penalized. In a more stringent application, cutoff scores could be set high enough so that only students who have high estimated chances of success would be permitted to take upper-level course work. If cutoff scores are to be used in this fashion, then it is important that the institution conduct a local validity study to make certain that its selected minimum score is appropriate, and that students are not penalized unnecessarily. All students, moreover, should be given the opportunity to take the test again and improve their scores.

Another suggestion is to make students' CAAP scores a permanent part of their academic record. One potential disadvantage of this method is that it may be perceived by high-scoring students as rewarding, but be perceived by low-scoring students as threatening.

### **Some Additional Considerations In Administering the CAAP**

The concept of the validity of test scores applies not only to the uses made of them, but to the entire testing process as well, including the administration and scoring of the test. If the test is improperly administered, then the test scores cannot be valid. Consider, for example, what would happen if the test were administered under nonstandardized conditions to students in different programs, departments, or institutions. Any comparisons of mean scores among such groups, or comparison with other groups who took the test under standardized conditions, would be inappropriate. An institution would find it difficult to justify, for instance, the comparison of average scores between two departments, one of which administered the test in a quiet classroom under standardized conditions, while the other tested students in a crowded cafeteria and used a test supervisor who neglected to read part of the instructions for the test.

To ensure that the best quality data are being obtained, and that valid uses can be made of the test scores, ACT requires that institutions strictly follow the standardized test administration procedures described in the CAAP Test Supervisor's Manual (1990a). In addition, we advise using at least one proctor for every

25 students tested. Proctors, like the test supervisor, should be familiar with the contents of the manual prior to the administration of CAAP.

Test supervisors are sometimes the first to identify problems with students' answer sheets. Before sending completed answer sheets to ACT, it is a good idea for the test supervisor to examine them for patterns. An unmotivated examinee may, for example, use the circles on the answer sheet to create objects, designs, or messages. If patterned answer sheets are found, ACT recommends that the test supervisor copy from them the students' names, SSNs, and test booklet numbers. This information can be recorded on a separate page, and attached to the completed Irregularity Report. ACT will not score these answer sheets.

### Conclusion

The purpose of this document is to offer suggestions for designing and conducting effective outcomes assessment research involving the CAAP. By adhering to the preceding conventions, institutions will greatly increase their chances of obtaining accurate and useful results.

We hope that the information presented in this document will be helpful in your outcomes assessment. If you have questions, or need additional guidance, please contact ACT. Our staff will be happy to assist you.

### References

The American College Testing Program (1990a). CAAP Test Supervisor's Manual. Iowa City, Iowa: Author.

The American College Testing Program (1990b). College Assessment Planning. Iowa City, Iowa: Author.

For assistance with CAAP, contact

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P.O. Box 168  
Iowa City, IA 52243  
Tel. 319/337-1051

OR

Dr. Jeff Schiel  
Research Associate  
Tel. 319/337-1076



# COLLEGE OUTCOMES SURVEY

**DIRECTIONS:** The information you supply on this questionnaire will be kept confidential. Your name, while collected for research purposes, will not be individually listed on any report. If any item requests information that you do not wish to provide, feel free to omit it.

Please use a soft-lead (No. 1 or 2) pencil to fill in ovals indicating your responses. If an item does not apply to you, mark "Not applicable." To change a response, erase your first mark completely and mark the correct response.

## SECTION I—BACKGROUND INFORMATION

Begin by printing your name in the boxes in Block A. Next, write numbers in Blocks B through E and blacken the appropriate oval in the column below each box. Complete remaining blocks by selecting an appropriate response for each item.

Your Name

Last Name										First Name										MI			

**B** Social Security Number (Identification Number)

1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0

**C** Birth Date

Month	Day	Year
1 Jan	1	1
2 Feb	2	2
3 March	3	3
4 April	4	4
5 May	5	5
6 June	6	6
7 July	7	7
8 Aug	8	8
9 Sept	9	9
0 Oct	0	0
1 Nov	1	1
2 Dec	2	2

**D** Major and Occupational Choice

Use the enclosed list of college majors and occupational choices to select the 3-digit code that best describes your current major area of study and your occupational choice. If you have more than one current area of study, select the one that best describes your major educational program.

Major Area of Study	Occupational Choice
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
0	0

**E** Credit Hours

Write the numbers in the boxes. Use leading zeros where necessary (e.g. 009 for 9 credits). Then blacken the appropriate ovals.

Credit Hours For Which You Are Now Enrolled	Credit Hours Earned Here Before This Term	Credit Hours Accepted Here In Transfer
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9
0	0	0

**F** Sex

1 Male

2 Female

**G** Are you of Hispanic/Latino ethnicity? (Select One)

1 No

2 Yes Mexican American

3 Yes Puerto Rican

4 Yes Cuban/Latino American

5 Yes Other Hispanic/Latino

**H** Which race do you consider yourself to be?

1 American Indian or Alaskan Native

2 Asian or Pacific Islander

3 Black

4 White

5 Multiracial

6 Other or Race Unknown

**J** Citizenship and Residence

1 U.S. Citizen—In State Student

2 U.S. Citizen—Out-of-State Student

3 Resident Alien Immigrant

4 Non-resident Alien-Non-immigrant

**J** In which language do you communicate best?

1 English

2 Spanish

3 An Asian Language

4 Other \_\_\_\_\_

**K** Indicate your plans for the next academic year.

1 Plan NOT to Attend College (Graduating)

2 Plan NOT to Attend (Stopping Out)

3 Plan to Re-enroll in this College

4 Plan to Attend Another College

5 Undecided

**L** Educational Achievements and Goals (Mark OVE oval in EACH column.)

Highest Degree You Are Now Pursuing at this College

Highest Goal You Now Intend to Pursue in Your Lifetime

Highest Goal You Had When You First Enrolled Here

Background	Timeline Goal	Highest Educational Attainment of Parents (or Guardians)	Father	Mother
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9
0	0	0	0	0

**M** Responsibilities and Time Allocations

Indicate the number of hours per week you currently spend on each type of activity listed below.

0	1-5	6-10	11-15	16-20	21-30	31+
1	1	1	1	1	1	1
2	2	2	2	2	2	2
3	3	3	3	3	3	3
4	4	4	4	4	4	4
5	5	5	5	5	5	5
6	6	6	6	6	6	6
7	7	7	7	7	7	7
8	8	8	8	8	8	8
9	9	9	9	9	9	9
0	0	0	0	0	0	0

**M** Responsibilities and Time Allocations (Continued)

Indicate the number of hours per week you currently spend on each type of activity listed below.

1	1	1	1	1	1	1
2	2	2	2	2	2	2
3	3	3	3	3	3	3
4	4	4	4	4	4	4
5	5	5	5	5	5	5
6	6	6	6	6	6	6
7	7	7	7	7	7	7
8	8	8	8	8	8	8
9	9	9	9	9	9	9
0	0	0	0	0	0	0

## SECTION II—COLLEGE OUTCOMES

**IMPORTANCE:** Indicate to the LEFT of each item how important it is to you to attain that outcome (regardless of the amount of progress you have made toward attaining it).

**PROGRESS:** Indicate to the RIGHT of each item how much progress you have made at this college toward attainment of that outcome (regardless of its importance to you).

IMPORTANCE	PROGRESS						
			VERY GREAT	GREAT	MODERATE (Average)	LITTLE	NONE
<input type="radio"/>	<input type="radio"/>	1 Drawing conclusions after weighing evidence, facts, and ideas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	2 Developing problem-solving skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	3 Learning to think and reason	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	4 Locating, screening, and organizing information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	5 Thinking objectively about beliefs, attitudes, and values	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	6 Developing my creativity, generating original ideas and products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	7 Improving my writing skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	8 Reading with greater speed and better comprehension	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	9 Speaking more effectively	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	10 Further developing my study skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	11. Listening to and understanding what others say	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	12 Learning to formulate and re-shape my lifetime goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	13. Developing openness to new ideas and practices	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**B** Indicate your views of required courses OUTSIDE your major.

IMPORTANCE	PROGRESS						
			VERY GREAT	GREAT	MODERATE (Average)	LITTLE	NONE
<input type="radio"/>	<input type="radio"/>	1. This college has helped me meet the goals I came here to achieve.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	2. If choosing a college I would choose this one.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	3. My experiences here have equipped me to deal with possible career changes.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	4. I would recommend this college to others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	5. This college is equally supportive if women and men.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	6. My experiences here have helped motivate me to make something of my life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	7. This college is equally supportive of all racial/ethnic groups.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	8. I am proud of my accomplishments at this college.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	9. This college welcomes and uses feedback from students to improve the college.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

IMPORTANCE	PROGRESS						
			VERY GREAT	GREAT	MODERATE (Average)	LITTLE	NONE
<input type="radio"/>	<input type="radio"/>	14 Acquiring knowledge and skills needed for a career	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	15. Becoming competent in my major	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	16. Appreciating the fine arts, music, literature, and the humanities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	17. Broadening my intellectual interests	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	18. Discovering productive and rewarding uses of my talents and leisure time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	19. Learning principles for improving physical and mental health	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	20. Developing effective job-seeking skills and interview-ing resume construction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	21. Learning about career options	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	22. Applying scientific knowledge and skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	23. Learning principles for conserving and improving the global environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	24. Effectively using technology and computers high-tech environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	25. Learning about the role of science and technology in society	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	26. Understanding and applying math concepts and statistics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**C** Indicate the extent to which you agree with the following statements about this college.

IMPORTANCE	PROGRESS						
			VERY GREAT	GREAT	MODERATE (Average)	LITTLE	NONE
<input type="radio"/>	<input type="radio"/>	1. This college has helped me meet the goals I came here to achieve.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	2. If choosing a college I would choose this one.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	3. My experiences here have equipped me to deal with possible career changes.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	4. I would recommend this college to others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	5. This college is equally supportive if women and men.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	6. My experiences here have helped motivate me to make something of my life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	7. This college is equally supportive of all racial/ethnic groups.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	8. I am proud of my accomplishments at this college.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	9. This college welcomes and uses feedback from students to improve the college.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**SECTION II CONTINUED**

Your personal growth since entering this college can be attributed to many factors, some of which may NOT be related to your experiences at this college.

**PERSONAL GROWTH:** Indicate the LEFT of each item the extent of your growth since entering this college (regardless of the extent of the contribution made by your experiences at this college)

**COLLEGE CONTRIBUTION:** Indicate the RIGHT of each item the extent of the college's contribution (i.e., your college experiences both in and out of class) to your growth (regardless of the extent of your personal growth in a given area).

PERSONAL GROWTH	PERSONAL GROWTH					PERSONAL GROWTH	PERSONAL GROWTH					COLLEGE CONTRIBUTION	COLLEGE CONTRIBUTION				
	VERY MUCH	MODERATE (Average)	LITTLE	NONE	NOT A GOAL OF MINE		VERY MUCH	MODERATE (Average)	LITTLE	NONE	NOT A GOAL OF MINE		VERY GREAT	MODERATE (Average)	LITTLE	NONE	NOT APPLICABLE
1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	
2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	
3	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	
4	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	
5	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	
6	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	
7	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	
8	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	
9	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	
10	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	
11	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	
12	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	
13	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	
14	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	
15	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	
16	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	
17	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	
18	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0	
19	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0	
20	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	
21	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	
22	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0	0	
23	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	0	
24	0	0	0	0	0	24	0	0	0	0	0	0	0	0	0	0	
25	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0	0	
26	0	0	0	0	0	26	0	0	0	0	0	0	0	0	0	0	
27	0	0	0	0	0	27	0	0	0	0	0	0	0	0	0	0	
28	0	0	0	0	0	28	0	0	0	0	0	0	0	0	0	0	
29	0	0	0	0	0	29	0	0	0	0	0	0	0	0	0	0	
30	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	0	
31	0	0	0	0	0	31	0	0	0	0	0	0	0	0	0	0	
32	0	0	0	0	0	32	0	0	0	0	0	0	0	0	0	0	
33	0	0	0	0	0	33	0	0	0	0	0	0	0	0	0	0	
34	0	0	0	0	0	34	0	0	0	0	0	0	0	0	0	0	
35	0	0	0	0	0	35	0	0	0	0	0	0	0	0	0	0	
36	0	0	0	0	0	36	0	0	0	0	0	0	0	0	0	0	

SECTION III—SATISFACTION WITH GIVEN ASPECTS OF THIS COLLEGE

Indicate your level of satisfaction with each of the following

Table with 35 rows of satisfaction levels (Very Satisfied, Neutral, Dissatisfied, Very Dissatisfied) for various campus services and programs. Includes a legend and a scale from 1 to 35.

SECTION IV—YOUR EXPERIENCES AT THIS COLLEGE

How large a contribution do you feel your educational experiences at this college have made to your growth and preparation in each of the following areas?

Table for Section IV with columns for Very Great, Great, Moderate, Little, None. Rows include: Campus Contribution to Your Growth/Preparation; Intellectual Growth; Personal Growth; and Social Growth.

Indicate your cumulative college grade average

- Radio button options: A- to A (1.50-4.00), B to B- (3.00-3.50), C to C+ (2.00-2.50), D to D- (1.00-1.50), Below D (0.00-0.99), Does Not Apply.

SECTION V—ADDITIONAL QUESTIONS

If an additional set of multiple-choice questions is included with this form please use this section to record your responses.

Table for Section V with 30 columns and multiple rows of radio button options for various questions.

SECTION VI—COMMENTS AND SUGGESTIONS

If you wish to make any comments or suggestions, please use the lines provided below

Blank lines for student comments and suggestions.

**COLLEGE OUTCOMES SURVEY  
REPORT**

**Community College Composite**

**Project Cooperation - 1992**

## PRELIMINARY COMPARATIVE DATA FOR THE ACT COLLEGE OUTCOMES SURVEY

### NATURE OF THE SAMPLE FOR 2-YEAR COMMUNITY COLLEGES

This normative report is based on 9,557 student records obtained from 72 community colleges that administered the spring 1992 version of the ACT College Outcomes Survey prior to August 31, 1992. Normative data of this type are often referred to as 'User Norms' since they simply represent a composite of the data obtained by a number of institutions that administered an instrument during a particular period of time.

Not all instruments processed by ACT during the period indicated are included in this report. All of the records from institutions other than 2-year colleges were excluded. Schools with large numbers of respondents were randomly sampled down for this User Norms Report to guarantee that colleges with large numbers of respondents would not be overrepresented in the comparative data.

The colleges represented in the report include both large and small institutions (21% of respondents were from institutions with under 2,000 enrollment; 50% were from institutions with enrollment of 2,000 to 5,000; 17% of respondents were from institutions with enrollment of 5,000 to 10,000; and 12% were from institutions with enrollment over 10,000). All are public 2-year community colleges and represent 24 states across the country.

Several important qualifications are necessary with respect to the data presented in this report. First, the data are not based on a random sample of students and colleges. The colleges are primarily those that participated in Project Cooperation, a national research effort sponsored by two major councils of the American Association of Community Colleges--the National Council for Student Development and the National Council of Instructional Administrators--and ACT.

Second, the survey instruments were administered in different ways to different groups of students from the various institutions represented in this report; consequently, the response rates obtained by the institutions using the survey varied widely. The effects of these varying administration modes and response rates on the normative data are unknown.

Finally, the number of cases and institutions represented in this report is limited, and therefore, comparisons based on the data must be interpreted with caution.

In addition to the normative data for the total sample of 9557 students, data are also presented for various subgroups of students. The same subgroups listed as illustrations on Cover Page III are used in this report.

ACT COLLEGE OUTCOMES SURVEY  
 NORMATIVE DATA USER LIST FOR 2-YEAR COMMUNITY COLLEGES  
 (PRELIMINARY VERSION OF THE SURVEY ADMINISTERED AND SCORED PRIOR TO AUGUST 31, 1992)

CODE	INSTITUTION	STATE	CODE	INSTITUTION	STATE
1	0035 JAMES H FAULKNER STATE JR COLLEGE	-AL	38	2040 NORTHWESTERN MICH COLLEGE	-MI
2	0036 SNEAD STATE JR COLLEGE	-AL	39	2054 MACOMB COMMUNITY COLLEGE	-MI
3	0040 SOUTHERN UNION STATE JR COLLEGE	-AL	40	2071 BAY DE NOC COMMUNITY COLLEGE	-MI
4	0061 NORTHEAST ALA STATE JR COLLEGE	-AL	41	2313 JEFFERSON COMMUNITY COLLEGE	-MO
5	0078 LAWSON COMMUNITY COLLEGE	-AL	42	2328 ST. LOUIS COMMUNITY COLLEGE	-MERAMEC - MO
6	0085 CENTRAL ARIZ COLLEGE	-AZ	43	2372 THREE RIVERS COLLEGE	-MO
7	0097 CHANDLER/GILBERT COMMUNITY COLLEGE	CTR - AZ	44	2441 SOUTHEAST COMMUNITY COLLEGE	- BEATRICE CAMPUS - NE
8	0105 SCOTTSDALE COMMUNITY COLLEGE	-AZ	45	2478 WESTERN NEBRASKA COMMUNITY COLLEGE	- NE
9	0109 EAST ARKANSAS COMMUNITY COLLEGE	-AR	46	2647 EASTERN NEW MEXICO UNIV-ROSWELL	- NE
10	0115 GARLAND COUNTY COMMUNITY COLLEGE	-AR	47	2651 DONA ANA BRANCH COMMUNITY COLLEGE	- NM
11	0148 MOHAVE COMMUNITY COLLEGE	-AZ	48	2731 DUCHESS COUNTY COMMUNITY COLLEGE	- NY
12	0501 COLORADO MT COLLEGE	-CO	49	2751 GENESSEE COMMUNITY COLLEGE	- NY
13	0525 COLORADO NORTHWESTERN COMMUNITY COLLEGE	-CO	50	2768 HUDSON VALLEY COMMUNITY COLLEGE	- NY
14	0544 MORGAN COMMUNITY COLLEGE	-CO	51	3206 NORTH DAKOTA STATE COLLEGE OF SCIENCES	- ND
15	0552 SOUTH MOUNTAIN COMMUNITY COLLEGE	-AZ	52	3230 BELMONT TECH COLLEGE	- OH
16	0905 HONOLULU COMMUNITY COLLEGE	-HI	53	3261 COLUMBUS STATE COMMUNITY COLLEGE	- OH
17	0959 PRAIRIE STATE COLLEGE	-IL	54	3398 REDLANDS COMMUNITY COLLEGE	- OK
18	1019 JOHN WOOD COMMUNITY COLLEGE	-IL	55	3423 OKLAHOMA STATE UNIV TECH INSTI	- OK
19	1053 KANKAKEE COMMUNITY COLLEGE	-IL	56	3493 CHEMEKETA COMMUNITY COLLEGE	- OR
20	1082 BLACK HAWK COLLEGE	-IL	57	3827 GREENVILLE TECH COLLEGE	- SC
21	1161 SOUTHEASTERN ILL COLLEGE	-IL	58	3865 ORANGEBURG-CALHOUN TECH COLLEGE	- SC
22	1173 SHAWNEE COMMUNITY COLLEGE	-IL	59	3969 DYERSBURG STATE COMMUNITY COLLEGE	- TN
23	1265 NORTHEAST IOWA COMMUNITY COLLEGE	-IA	60	4272 DIXIE COLLEGE	- UT
24	1269 INDIAN HILLS COMMUNITY COLLEGE	-IA	61	4278 UTAH VALLEY COMMUNITY COLLEGE	- UT
25	1275 KIRKWOOD COMMUNITY COLLEGE	-IA	62	4359 GERMANNA COMMUNITY COLLEGE	- VA
26	1332 MARSHALLTOWN COMMUNITY COLLEGE	-IA	63	4415 PATRICK HENRY COMMUNITY COLLEGE	- VA
27	1369 WESTERN IA TECH COMMUNITY COLLEGE	-IA	64	4448 CLARK COLLEGE	- WA
28	1406 BUTLER COUNTY COMMUNITY COLLEGE	-KS	65	4480 SKAGIT VALLEY COLLEGE	- WA
29	1414 GARDEN CITY COMMUNITY COLLEGE	-KS	66	4488 WENATCHEE VALLEY COLLEGE	- WA
30	1564 ASHLAND COMMUNITY COLLEGE	-KY	67	5570 CINCINNATI TECH COLLEGE	- OH
31	1964 KELLOGG COMMUNITY COLLEGE	-MI	68	6114 TECH COLLEGE OF THE LOW COUNTRY	- SC
32	1966 DELTA COMMUNITY COLLEGE	-MI	69	6369 CENTRAL COMMUNITY COLLEGE	GRAND ISLAND - NE
33	1976 LAKE MICHIGAN COLLEGE	-MI	70	6747 SHOALS COMMUNITY COLLEGE	- AL
34	2016 KALAMAZOO VALLEY COMMUNITY COLLEGE	-MI	71	9607 WATERBURY STATE COLLEGE	- CT
35	2017 KIRTLAND COMMUNITY COLLEGE	-MI	72	9999 METROPOLITAN COMMUNITY COLLEGES	-MO
36	2029 MONTCALM COMMUNITY COLLEGE	-MI			
37	2034 MUSKEGAN COMMUNITY COLLEGE	-MI			



INTRODUCTION

THE 1992 PILOT VERSION OF THE ACT COLLEGE OUTCOME SURVEY WAS DEVELOPED BY ACT AS PART OF ITS GROWING COMMITMENT TO HELP INSTITUTIONS ASSESS OUTCOMES. THE INITIAL IMPETUS WAS PROVIDED BY PROJECT COOPERATION, A NATIONAL RESEARCH EFFORT SPONSORED BY TWO MAJOR COUNCILS OF THE AMERICAN ASSOCIATION OF COMMUNITY AND JUNIOR COLLEGES - THE NATIONAL COUNCIL FOR STUDENT DEVELOPMENT AND THE NATIONAL COUNCIL OF INSTRUCTIONAL ADMINISTRATORS -- AND ACT.

ADDITIONAL INPUT WAS PROVIDED BY ADMINISTRATORS AND FACULTY AT FOUR-YEAR INSTITUTIONS. THE PILOT VERSION OF THIS SURVEY WAS ADMINISTERED IN THE SPRING OF 1992 BY APPROXIMATELY 100 TWO- AND FOUR-YEAR COLLEGES TO ABOUT 30,000 STUDENTS.

THIS INSTITUTIONAL REPORT IS BASED ON THE SPRING 1992 VERSION OF THE ACT COLLEGE OUTCOMES SURVEY. IN ADDITION TO THESE INTRODUCTORY COVER PAGES ARE 206 PAGES CONSISTING OF 12 SUMMARY PAGES AND 194 DETAIL PAGES. ADDITIONAL PAGES ARE INCLUDED AT THE END OF THE REPORT FOR INSTITUTIONS ELECTING TO USE SECTION IV OF THE SURVEY FORM FOR LOCAL ITEMS.

SUMMARY PAGES

TWELVE SUMMARY PAGES APPEAR FIRST AND PROVIDE AN OVERVIEW OF YOUR INSTITUTION'S RESULTS. THE FIRST FIVE SUMMARY PAGES FOCUS ON THE BACKGROUND INFORMATION COLLECTED IN SECTION I OF THE COLLEGE OUTCOMES SURVEY. THESE PAGES INCLUDE 1) FREQUENCIES FOR EACH ITEM, 2) PERCENTAGES CALCULATED BY INCLUDING THE BLANKS FOR A GIVEN ITEM, AND 3) PERCENTAGES CALCULATED BY EXCLUDING THE BLANKS (I.E., NONRESPONDERS).

THE SUMMARY PAGES FOR SECTIONS II AND III CONTAIN AVERAGES AND THE NUMBER OF RESPONSES ON WHICH EACH AVERAGE WAS BASED. ITEMS IN SECTION II, PARTS A AND D, SHOW 1) IMPORTANCE AVERAGES (PART A), 2) PROGRESS AVERAGES (PART A), 3) PERSONAL GROWTH AVERAGES (PART B), AND 4) COLLEGE CONTRIBUTION AVERAGES (PART B). PART A ITEMS ARE RANKED FIRST IN ORDER OF IMPORTANCE, AND THEN IN ORDER OF PROGRESS. PART D ITEMS ARE RANKED FIRST IN ORDER OF PERSONAL GROWTH, AND THEN IN ORDER OF COLLEGE CONTRIBUTION TO THAT GROWTH.

FOR MORE INFORMATION OR HELP

IF YOU HAVE QUESTIONS ABOUT THE TECHNICAL ASPECTS OF THE REPORT, PLEASE CALL ONE OF THE FOLLOWING INDIVIDUALS.

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IF YOU NEED HELP USING THE REPORT,  
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COLLEGE LEVEL ASSESSMENT  
AND SURVEY SERVICES  
EDUCATIONAL SERVICES DIVISION  
AMERICAN COLLEGE TESTING



-----NOTES AND DEFINITIONS-----

NOTES FOR PERCENTAGES AND AVERAGES.  
 \*TWO TYPES OF PERCENTAGE ARE SHOWN IN SUMMARY PAGES 1-5. ONE INCLUDING BLANKS (A) AND ONE WITHOUT BLANKS (% W/O BL).  
 \*\*AVERAGES THROUGHOUT THIS REPORT HAVE BEEN CALCULATED FOR RESPONDERS TO THE GIVEN ITEM (I.E. BLANKS HAVE BEEN OMITTED IN CALCULATING AVERAGES).  
 FURTHERMORE, IN SECTION II, PARTS B & D, AND IN SECTION III, AVERAGES DO NOT INCLUDE NOT APPLICABLE; NOT A GOAL OF MINE; OR NO RATING POSSIBLE. NOT APPLICABLE, NOT ABLE TO JUDGE

NOTE FOR PAGES 1-12 SEE DETAIL PAGES 13 206 FOR CROSS TABULATIONS OF EACH ITEM BY THE OVERALL GROUP TOTAL AND BY EACH SUBGROUP.

NOTE FOR PAGE 3 A LIST OF 285 SPECIFIC MAJORS PLUS A CODE FOR UNDECIDED WAS USED BY RESPONDENTS TO ANSWER SECTION I, ITEM N. SPECIFIC MAJOR OPTIONS HAVE BEEN COLLAPSED INTO 23 GENERAL MAJOR GROUPS FOR THIS REPORT, BUT SPECIFIC MAJORS OR COMBINATIONS OF MAJORS ARE AVAILABLE TO INSTITUTIONS FOR SUBGROUP REPORTS AND FOR ANALYSIS.

NOTES FOR PAGES 6 AND 7. \*IMPORTANCE AVERAGES FOR SECTION II, PART A, WERE BASED ON A 3 POINT SCALE WHERE OF GREAT IMPORTANCE TO ME = 3, OF SOME IMPORTANCE TO ME = 2, AND OF LITTLE OR NO IMPORTANCE TO ME = 1. BLANKS WERE OMITTED FROM AVERAGES. \*\*PROGRESS AVERAGES FOR SECTION II, PART A, WERE BASED ON A 3 POINT SCALE WHERE A LOT OF PROGRESS = 3, MODERATE (AVERAGE) PROGRESS = 2, AND LITTLE OR NO PROGRESS = 1. BLANKS WERE OMITTED FROM AVERAGES.

NOTE FOR PAGE 8 AGREEMENT AVERAGES (SECTION II, PART B) WERE COMPUTED BASED ON A 5 POINT SCALE WHERE STRONGLY AGREE = 5, AGREE = 4, NEUTRAL = 3, DISAGREE = 2, AND STRONGLY DISAGREE = 1. BLANKS ARE NOT APPLICABLE TO ME WERE OMITTED FROM THE AVERAGES.

NOTE FOR PAGE 9. AGREEMENT AVERAGES (SECTION II, PART C) WERE COMPUTED BASED ON A 5-POINT SCALE WHERE STRONGLY AGREE = 5, AGREE = 4, NEUTRAL = 3, DISAGREE = 2, AND STRONGLY DISAGREE = 1. BLANKS WERE OMITTED FROM AVERAGES.

NOTES FOR PAGES 10 AND 11. \*PERSONAL GROWTH AVERAGES (SECTION II, PART D) WERE COMPUTED BASED ON A 3-POINT SCALE WHERE A LOT OF GROWTH = 3, MODERATE (AVERAGE) GROWTH = 2, AND LITTLE OR NO GROWTH = 1. BLANKS AND NOT A GOAL OF MINE WERE OMITTED FROM AVERAGES.

\*\*COLLEGE CONTRIBUTION AVERAGES (SECTION II, PART D) WERE COMPUTED BASED ON A 3-POINT SCALE WHERE A GREAT DEAL = 3, A MODERATE (AVERAGE) AMOUNT = 2, AND LITTLE OR NOTHING = 1. BLANKS AND NOT APPLICABLE WERE OMITTED FROM AVERAGES.

NOTE FOR PAGE 12. SATISFACTION AVERAGES FOR SECTION III WERE COMPUTED BASED ON A 5-POINT SCALE WHERE VERY SATISFIED = 5, SATISFIED = 4, NEUTRAL, NEITHER SATISFIED NOR DISSATISFIED = 3, DISSATISFIED = 2, VERY DISSATISFIED = 1. BLANKS AND NO RATING POSSIBLE, NOT APPLICABLE, NOT ABLE TO JUDGE WERE OMITTED FROM AVERAGES.

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Note: See attached report for details on the reform effort. See attached report for details on the reform effort.

NOTE: A SUBGROUP IS A SEGMENT OF YOUR TOTAL RESPONDENT GROUP IN WHOSE RESPONSES YOU HAVE A PARTICULAR INTEREST FOR ADDITIONAL INSPECTION AND/OR ANALYSIS. USUALLY, SUBGROUPS ARE DEFINED BY THE INSTITUTION, ALTHOUGH ACT MAY MAKE SUBQUESTIONS AT TIMES. A SUBGROUP CAN BE DEFINED BY RESPONSES TO A SINGLE ITEM OR TO A COMBINATION OF TWO ITEMS IN THE SURVEY. FOR EXAMPLE, SUBGROUPS DEFINED BY SINGLE ITEMS COULD CONSIST OF ALL RESPONDENTS WHO 1) IDENTIFIED THEMSELVES AS ONE OF THE VARIOUS MINORITY GROUPS ON THE RACIAL/ETHNIC ITEM OR WHO SELECTED CERTAIN MAJORS. SUBGROUPS DEFINED BY COMBINING RESPONSES TO TWO DIFFERENT ITEMS COULD BE ALL FEMALES (SECTION I, ITEM 1) WHO ARE MAJORING IN ANY ONE OF SEVERAL GIVEN AREAS OF SCIENCE OR ENGINEERING (SECTION I, ITEM N). IN THIS REPORT THE OVERALL TOTAL AND 15 SELECTED SUBGROUPS ARE ANALYZED BY MEANS OF CROSS TABULATIONS.

SUBGROUPS FOR THE COLLEGE OUTCOMES SURVEY ARE ILLUSTRATED BELOW. ADDITIONAL SUBGROUPS MAY BE IDENTIFIED AND PURCHASED.

- |                     |  |
|---------------------|--|
| 1) FEMALE, AGE 24+  | (SECTION I, ITEMS I & C)   |
| 2) MALE, AGE 24+    | (SECTION I, ITEMS I & C)   |
| 3) WORK/PAY 21+HRS  | (SECTION I, ITEM P, RESPONSE #3, WORKED FOR PAY 21+ HRS PER WEEK)                    |
| 4) CARE/FAM 21+HRS  | (SECTION I, ITEM P, RESPONSE #4, CARE OF FAMILY 21+ HRS PER WEEK)                    |
| 5) THINK/REASON=YES | (SECTION II, PART A, ITEM 22, OF GREAT IMPORTANCE AND A LOT OF PROGRESS)             |
| 6) THINK/REASON=NO  | (SECTION II, PART A, ITEM 22, OF GREAT IMPORTANCE BUT LITTLE OR NO PROGRESS)         |
| 7) CORE SKILLS=POS  | (SECTION II, PART B, ITEM 3, STRONGLY AGREE OR AGREE)                                |
| 8) CORE SKILLS=NEG  | (SECTION II, PART B, ITEM 3, DISAGREE OR STRONGLY DISAGREE)                          |
| 9) GOALS MET        | (SECTION II, PART C, ITEM 1, STRONGLY AGREE OR AGREE)                                |
| 10) GOALS NOT MET   | (SECTION II, PART C, ITEM 1, STRONGLY DISAGREE OR DISAGREE)                          |
| 11) PROUD OF ACCOMP | (SECTION II, PART C, ITEM 8, STRONGLY AGREE OR AGREE)                                |
| 12) SELF-UNDERS=POS | (SECTION II, PART D, ITEM 3, A LOT-PERS GROWTH AND A GREAT DEAL-COLLEGE CONTRIBUTED) |
| 13) RELA OTHERS=POS | (SECTION II, PART D, ITEM 5, A LOT-PERS GROWTH AND A GREAT DEAL-COLLEGE CONTRIBUTED) |
| 14) QUAL/INSTRU=POS | (SECTION III, ITEM 7, VERY SATISFIED OR SATISFIED)                                   |
| 15) QUAL/INSTRU=NEG | (SECTION III, ITEM 7, DISSATISFIED OR VERY DISSATISFIED)                             |

SECTION I SUMMARY: BACKGROUND INFORMATION

ITEM C: AGE\*

	N	%	% W/O BL
19 OR UNDER	1594	16.68	17.38
20	1675	17.53	18.27
21	916	9.58	9.99
22	516	5.40	5.63
23	380	3.98	4.14
24	308	3.22	3.36
25 TO 29	1093	11.44	11.92
30 TO 39	1744	18.25	19.02
40 TO 49	751	7.86	8.19
50 TO 59	146	1.53	1.59
60 OR OVER	46	0.48	0.50
BLANK	388	4.06	N/A
TOTAL	9557	100.00	100.00

AVG AGE: 26.43

ITEM D: RACIAL/ETHNIC BACKGROUND

	N	%	% W/O BL
AFRO-AMERICAN/BLACK, NON HISPANIC	580	6.07	6.16
AMERICAN INDIAN/ALASKAN NATIVE	101	1.06	1.07
ASIAN AMERICAN/PACIFIC ISLANDER	132	1.38	1.40
CAUCASIAN/WHITE, NON-HISPANIC	8264	86.47	87.83
MEXICAN-AMERICAN/CHICANO	125	1.31	1.33
PUERTO RICAN	12	0.13	0.13
CUBAN	3	0.03	0.03
OTHER HISPANIC/LATINO	50	0.52	0.53
OTHER	142	1.49	1.51
BLANK	148	1.55	N/A
TOTAL	9557	100.00	100.00

ITEM E: OVERALL COLLEGE GRADE AVERAGE

	N	%	% W/O BL
A- TO A (3.50-4.00)	2477	25.92	26.18
B TO A- (3.00-3.49)	2773	29.02	29.30
B TO B- (2.50-2.99)	2266	23.08	23.31
C TO B- (2.00-2.49)	1615	16.90	17.07
C TO C- (1.50-1.99)	303	3.17	3.20
D TO C- (1.00-1.49)	41	0.43	0.43
BELOW D (2.00-0.99)	7	0.07	0.07
DOES NOT APPLY	41	0.43	0.43
BLANK	94	0.98	N/A
TOTAL	9557	100.00	100.00

ITEM F: CREDIT HOURS CURRENTLY TAKING

	N	%	% W/O BL
0 CREDITS	296	3.10	3.14
1-3 CREDITS	300	3.14	3.18
4-6 CREDITS	808	8.45	8.57
7-9 CREDITS	921	9.64	9.76
10-12 CREDITS	2300	24.07	24.39
13-15 CREDITS	2493	26.09	26.43
16-18 CREDITS	1335	13.97	14.15
19-21 CREDITS	550	5.75	5.83
22 OR MORE CREDITS	429	4.49	4.55
BLANK	125	1.31	N/A
TOTAL	9557	100.00	100.00

\*NOTE: AVERAGE AGE WAS CALCULATED USING THE BIRTHDATE AND THE PROCESSING DATE.

NOTE: SEE DETAIL PAGES 13-37 CONTAINING ANALYSES OF RESPONSES FOR THE OVERALL TOTAL AND FOR EACH OF THE SELECTED SUBGROUPS. THE FIRST PERCENT (%) COLUMN FOR ITEMS SUMMARIZED ON PAGES 1-5 INCLUDES THE PERCENT OF STUDENTS WHO LEFT THE ITEM BLANK. THE PERCENTAGES USED IN THE DETAIL PAGES ALSO INCLUDE THE PERCENT OF STUDENTS WHO LEFT THE ITEM BLANK.

SECTION I SUMMARY: BACKGROUND INFORMATION

ITEM G: TOTAL CREDITS EARNED BY END OF TERM

	N	%	% W/O BL
O CREDITS	112	1.17	1.32
1-11 CREDITS	237	2.48	2.80
12-23 CREDITS	536	5.61	6.32
24-35 CREDITS	829	8.67	9.78
36-47 CREDITS	836	8.75	9.86
48-59 CREDITS	1002	10.48	11.82
60-71 CREDITS	1926	20.15	22.72
72-83 CREDITS	817	8.55	9.64
84-95 CREDITS	618	6.47	7.29
96-107 CREDITS	777	8.13	9.17
108 AND OVER	789	8.22	9.27
BLANK	1081	11.31	N/A
TOTAL	9557	100.00	100.00

ITEM H: CREDITS TRANSFERRED TO COLLEGE

	N	%	% W/O BL
O CREDITS	6778	70.92	72.65
1-15 CREDITS	1298	13.58	13.91
16-30 CREDITS	637	6.67	6.83
31-45 CREDITS	284	2.97	3.04
45 OR MORE	333	3.48	3.57
BLANK	227	2.38	N/A
TOTAL	9557	100.00	100.00

ITEM I: GENDER

	N	%	% W/O BL
MALE	3541	37.05	37.18
FEMALE	5384	52.61	62.82
BLANK	32	0.33	N/A
TOTAL	9157	100.00	100.00

ITEM J: CITIZENSHIP

	N	%	% W/O BL
US CITIZEN	9344	97.77	98.13
RESIDENT ALIEN/IMMIGRANT	121	1.27	1.27
NON-RES. ALIEN/NON-IMMIGRANT	57	0.60	0.60
BLANK	35	0.37	N/A
TOTAL	9557	100.00	100.00

NOTE: SEE DETAIL PAGES 13-37 CONTAINING ANALYSES OF RESPONSES FOR THE OVERALL TOTAL AND FOR EACH OF THE SELECTED SUBGROUPS. THE FIRST PERCENT (%) COLUMN FOR ITEMS SUMMARIZED ON PAGES 1-5 INCLUDES THE PERCENT OF STUDENTS WHO LEFT THE ITEM BLANK. THE PERCENTAGES USED IN THE DETAIL PAGES ALSO INCLUDE THE PERCENT OF STUDENTS WHO LEFT THE ITEM BLANK.

SECTION I SUMMARY: BACKGROUND INFORMATION

ITEM K: IS ENGLISH BEST FOR YOU

	N	%	% W/O BL
YES	9378	98.13	98.43
NO	150	1.57	1.57
BLANK	29	0.30	N/A
TOTAL	9557	100.00	100.00

ITEM L: DIFFICULTY WITH ENGLISH

	N	%	% W/O BL
LITTLE OR NO DIFFICULTY	9143	95.67	96.93
SOME DIFFICULTY	266	2.78	2.82
CONSIDERABLE DIFFICULTY	24	0.25	0.25
BLANK	124	1.30	N/A
TOTAL	9557	100.00	100.00

ITEM M: PLANS FOR NEXT ACADEMIC YEAR

	N	%	% W/O BL
NOT TO ATTEND COLLEGE	1269	13.28	13.39
RE-ENROLL IN THIS COLLEGE	3517	36.80	37.12
TRANSFER TO 2-YR COLLEGE	214	2.24	2.26
TRANSFER TO 4-YR COLLEGE	3177	33.24	33.53
UNDECIDED	1298	13.58	13.70
BLANK	82	0.86	N/A
TOTAL	9557	100.00	100.00

ITEM N: MAJOR AREA OF STUDY

	N	%	% W/O BL
UNDECIDED	472	4.94	5.16
AGRICULTURE	110	1.15	1.20
ARCHITECTURE	88	0.92	0.96
BUSN & MGMT	1531	16.02	16.75
BUSN & OFFICE	360	3.77	3.94
MKTG & DISTRIB	59	0.72	0.75
COMMUNICATIONS	163	1.71	1.78
COMMUNITY SERVICES	437	4.57	4.78
COMPUTER SCIENCE	363	3.80	3.97
CROSS DISCIPLIN	72	0.75	0.79
EDUCATION	591	6.18	6.47
TEACHER EDUCATION	375	3.92	4.10
PRE-ENGINEERING	454	4.75	4.97
ENGINEERING	357	3.74	3.91
FOREIGN LANG	14	0.15	0.15
HEALTH SCIENCE	2396	25.07	26.21
HOME ECON	60	0.63	0.66
LETTERS	47	0.49	0.51
MATHEMATICS	28	0.29	0.31
REL/PHIL + THEOL	9	0.09	0.10
SCIENCE	150	1.57	1.64
SOCIAL SCIENCE	497	5.20	5.44
TRADE & INDUSTRL	358	3.75	3.92
ARTS - VIS/PERF	139	1.45	1.52
BLANK	417	4.36	N/A
TOTAL	9557	100.00	100.00

NOTE: SEE DETAIL PAGES 13-37 CONTAINING ANALYSES OF RESPONSES FOR THE OVERALL TOTAL AND FOR EACH OF THE SELECTED SUBGROUPS. THE FIRST PERCENT (%) COLUMN FOR ITEMS SUMMARIZED ON PAGES 1-5 INCLUDES THE PERCENT OF STUDENTS WHO LEFT THE ITEM BLANK. THE PERCENTAGE USED IN THE DETAIL PAGES ALSO INCLUDE THE PERCENT OF STUDENTS WHO LEFT THE ITEM BLANK. THE PERCENTAGE LISTED IN 2-YR SPECIFIC MAJORS PLUS A CODE FOR UNDECIDED WAS USED BY RESPONDENTS TO ANSWER SECTION I. ITEM N. SPECIFIC MAJOR OPTIONS HAVE BEEN COLLATED INTO 21 GENERAL MAJOR GROUPS FOR THIS REPORT. BUT SPECIFIC MAJORS OR COMBINATIONS OF MAJORS ARE AVAILABLE FOR SUBGROUP REPORTS AND FOR ANALYSIS.

SECTION I SUMMARY: BACKGROUND INFORMATION

ITEM 0: EDUCATIONAL ACHIEVEMENT AND GOALS

1. HIGHEST LEVEL YOU HAVE NOW ATTAINED

	N	%	% W/O BL
NO DEG/CERTIF SINCE HS	3902	40.83	50.81
SPEC PROG/COURSE WRK	413	4.32	5.38
LICENSE/CERTIF MAINT	332	3.47	4.32
VOC/TECH CERTIF	660	6.91	8.59
ASSOC/2-YR DEGREE	2155	22.55	28.06
BACH/4-YR DEGREE	171	1.79	2.23
MASTER'S DEGREE	27	0.28	0.35
DOCTOR'S/PROF DEGREE	20	0.21	0.26
BLANK	1877	19.64	N/A
TOTAL	9557	100.00	100.00

2. LEVEL YOU ARE CURRENTLY PURSUING

	N	%	% W/O BL
NO DEG/CERTIF SINCE HS	244	2.55	3.01
SPEC PROG/COURSE WRK	203	2.12	2.51
LICENSE/CERTIF MAINT	172	1.80	2.12
VOC/TECH CERTIF	171	1.79	2.11
ASSOC/2-YR DEGREE	4856	50.81	59.97
BACH/4-YR DEGREE	2167	22.67	26.76
MASTER'S DEGREE	190	1.99	2.35
DOCTOR'S/PROF DEGREE	94	0.98	1.16
BLANK	1460	15.28	N/A
TOTAL	9557	100.00	100.00

3. HIGHEST LIFETIME GOAL

	N	%	% W/O BL
NO DEG/CERTIF SINCE HS	495	5.18	6.49
SPEC PROG/COURSE WRK	157	1.64	2.06
LICENSE/CERTIF MAINT	179	1.87	2.35
VOC/TECH CERTIF	163	1.71	2.14
ASSOC/2-YR DEGREE	1087	11.37	14.26
BACH/4-YR DEGREE	2350	24.59	30.82
MASTER'S DEGREE	2286	23.92	29.98
DOCTOR'S/PROF DEGREE	308	3.22	4.07
BLANK	1932	20.22	N/A
TOTAL	9557	100.00	100.00

4. HIGHEST LIFETIME GOAL WHEN YOU ENROLLED

	N	%	% W/O BL
NO DEG/CERTIF SINCE HS	593	6.20	7.69
SPEC PROG/COURSE WRK	157	1.64	2.04
LICENSE/CERTIF MAINT	124	1.30	1.61
VOC/TECH CERTIF	260	2.72	3.37
ASSOC/2-YR DEGREE	2063	21.59	26.74
BACH/4-YR DEGREE	2452	25.66	31.79
MASTER'S DEGREE	1372	14.36	17.79
DOCTOR'S/PROF DEGREE	693	7.25	8.98
BLANK	1843	19.28	N/A
TOTAL	9557	100.00	100.00

NOTE: SEE DETAIL PAGES 13-37 CONTAINING ANALYSES OF RESPONSES FOR THE OVERALL TOTAL AND FOR EACH OF THE SELECTED SUBGROUPS. THE FIRST PERCENT (.) COLUMN FOR ITEMS SUMMARIZED ON PAGES 1-5 INCLUDES THE PERCENT OF STUDENTS WHO LEFT THE ITEM BLANK. THE PERCENTAGES USED IN THE DETAIL PAGES ALSO INCLUDE THE PERCENT OF STUDENTS WHO LEFT THE ITEM BLANK.

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SECTION I SUMMARY: BACKGROUND INFORMATION

ITEM P: RESPONSIBILITIES AND TIME ALLOCATIONS: NUMBER OF HOURS PER WEEK CURRENTLY SPENT ON EACH TYPE OF ACTIVITY

HRS./WK	1. COURSE-RELATED ACTIVITY			2. OTHER LEARNING EXPERIENCES			3. WORK FOR PAY			4. CARE OF FAMILY		
	N	%	% W/O BL	N	%	% W/O BL	N	%	% W/O BL	N	%	% W/O BL
0 HOURS	250	2.62	2.67	4636	48.51	51.83	2210	23.12	23.90	2632	27.54	28.60
1-5 HOURS	1520	15.90	16.22	2033	21.27	22.73	413	4.32	4.47	1611	16.86	17.51
6-10 HOURS	1796	18.79	19.17	848	8.87	9.48	596	6.24	6.45	823	8.61	8.94
11-15 HOURS	1461	15.29	15.59	447	4.68	5.00	704	7.37	7.61	580	6.07	6.30
16-20 HOURS	1596	16.70	17.03	485	5.07	5.42	1268	13.27	13.71	580	6.07	6.30
21-30 HOURS	1342	14.04	14.32	234	2.45	2.62	1563	16.35	16.90	534	5.59	5.80
31+ HOURS	1405	14.70	14.99	261	2.73	2.92	2493	26.09	26.96	2442	25.55	26.54
BLANK	187	1.96	N/A	613	6.41	N/A	310	3.24	N/A	355	3.71	N/A
TOTAL	9557	100.00	100.00	9557	100.00	100.00	9557	100.00	100.00	9557	100.00	100.00

HRS./WK	5. COMMUNITY SERVICE OFF-CAMPUS			6. SPORTS (TEAM, SPECTATOR)			7. CAMPUS CLUBS/ORGANIZATIONS			8. OTHER ON-CAMPUS EVENTS		
	N	%	% W/O BL	N	%	% W/O BL	N	%	% W/O BL	N	%	% W/O BL
0 HOURS	4165	45.67	47.77	4598	48.11	50.50	6782	70.96	74.32	7010	73.35	76.97
1-5 HOURS	3604	37.71	39.44	2742	28.69	30.12	1837	19.22	20.13	1760	18.42	19.33
6-10 HOURS	746	7.81	8.16	981	10.26	10.77	295	3.09	3.23	200	2.09	2.20
11-15 HOURS	227	2.38	2.48	416	4.35	4.57	132	1.38	1.45	74	0.77	0.81
16-20 HOURS	101	1.06	1.11	172	1.80	1.89	46	0.48	0.50	27	0.28	0.30
21-30 HOURS	50	0.52	0.55	107	1.12	1.18	9	0.09	0.10	16	0.17	0.18
31+ HOURS	45	0.47	0.49	89	0.93	0.98	24	0.25	0.26	20	0.21	0.22
BLANK	419	4.33	N/A	452	4.73	N/A	432	4.52	N/A	450	4.71	N/A
TOTAL	9557	100.00	100.00	9557	100.00	100.00	9557	100.00	100.00	9557	100.00	100.00

NOTE: SEE DETAIL PAGES 13-37 CONTAINING ANALYSES OF RESPONSES FOR THE OVERALL TOTAL AND FOR EACH OF THE SELECTED SUBGROUPS. THE FIRST PERCENT (%) COLUMN FOR ITEMS SUMMARIZED ON PAGES 1-5 INCLUDES THE PERCENT OF STUDENTS WHO LEFT THE ITEM BLANK. THE PERCENTAGES USED IN THE DETAIL PAGES ALSO INCLUDE THE PERCENT OF STUDENTS WHO LEFT THE ITEM BLANK.

SECTION II SUMMARY, PART A: IMPORTANCE OF AND PROGRESS TOWARD ATTAINING OUTCOMES AT THIS COLLEGE (RANKED BY IMPORTANCE)  
 TOTAL SCORED: 9557

IMPORTANCE TO YOU OF OBTAINING OUTCOMES (AT LEFT)		PROGRESS MADE AT THIS COLLEGE (AT RIGHT)	
RANK	AVG* # FOR AVG NO.	ITEM TEXT	RANK AVG** # FOR AVG
1	2 94	1 ACQUIRING KNOWLEDGE AND SKILLS IN MY AREA OF SPECIALIZATION	1 2.44 9285
2	2 87	11 ACQUIRING KNOWLEDGE AND SKILLS NEEDED FOR A CAREER	2 2.41 9261
3	2 77	7 IMPROVING MY ABILITY TO MAKE BETTER DECISIONS	6 2.33 9256
4	2 77	8 LEARNING TO SET GOALS AND FOLLOW THROUGH TO COMPLETION	4 2.37 9254
5	2 72	22 LEARNING TO THINK AND REASON	3 2.38 9223
6	2 71	9 UNDERSTANDING MY STRENGTHS AND WEAKNESSES	5 2.34 9258
7	2 66	19 IMPROVING MY ABILITY TO APPLY NEW INFORMATION	8 2.31 9224
8	2 64	14 IMPROVING MY STUDY SKILLS	12 2.21 9256
9	2 63	18 LISTENING TO AND UNDERSTANDING WHAT OTHERS SAY	7 2.32 9242
10	2 63	24 DEVELOPING PROBLEM SOLVING SKILLS	10 2.23 9226
11	2 62	10 LEARNING ABOUT CAREER OPTIONS	15 2.12 9262
12	2 58	25 THINKING OBJECTIVELY ABOUT BELIEFS, ATTITUDES, AND VALUES	9 2.29 9221
13	2 54	23 DRAWING CONCLUSIONS FROM VARIOUS TYPES OF DATA	11 2.22 9222
14	2 53	12 DEVELOPING EFFECTIVE JOB-SEEKING SKILLS (E.G., INTERVIEWING, RESUME CONSTRUCTION)	22 2.01 9260
15	2 45	17 IMPROVING MY READING COMPREHENSION SKILLS	16 2.12 9244
16	2 45	15 IMPROVING MY WRITING SKILLS	13 2.21 9264
17	2 45	20 LOCATING, ORGANIZING, AND SCREENING INFORMATION	14 2.15 9217
18	2 44	16 IMPROVING MY SPEAKING SKILLS	17 2.11 9248
19	2 42	26 USING COMPUTERS EFFECTIVELY (E.G., FOR COMPUTING, WORD PROCESSING)	21 2.04 9215
20	2 37	6 DEVELOPING MY OWN TALENTS (E.G., IN ART, SCIENCE, WRITING, ATHLETICS)	20 2.06 9256
21	2 35	21 DEVELOPING ORIGINAL IDEAS OR PRODUCTS	24 1.92 9234
22	2 32	5 BROADENING MY INTELLECTUAL INTERESTS OUTSIDE MY MAJOR	18 2.10 9244
23	2 20	2 LEARNING ABOUT THE ROLE OF SCIENCE AND TECHNOLOGY IN SOCIETY	23 1.98 9256
24	2 19	13 IMPROVING PHYSICAL COORDINATION, DEXTERITY, AND MUSCULAR OR MOTOR SKILLS	25 1.87 9249
25	2 19	4 UNDERSTANDING AND APPLYING MATH CONCEPTS	19 2.06 9258
26	1 96	3 INCREASING MY APPRECIATION OF ART, MUSIC, LITERATURE, AND HUMANITIES	26 1.87 9232

NOTE: SEE TABLE PAGES 38-39 CONTAINING ANALYSES OF RESPONSES FOR THE OVERALL TOTAL AND FOR EACH OF THE SELECTED SUBGROUPS  
 \*IMPORTANCE AVERAGES WERE COMPUTED BASED ON A 3-POINT SCALE WHERE OF GREAT IMPORTANCE=3, OF SOME IMPORTANCE=2, AND OF  
 LITTLE OR NO IMPORTANCE=1. BLANKS WERE OMITTED FROM CALCULATION OF IMPORTANCE AVERAGES. \*\*PROGRESS AVERAGES WERE COMPUTED BASED  
 ON A 3-POINT SCALE WHERE A LOT OF PROGRESS=3, MODERATE (AVERAGE) PROGRESS=2, AND LITTLE OR NO PROGRESS=1. BLANKS WERE OMITTED FROM  
 CALCULATION OF THE PROGRESS AVERAGES.



SECTION II SUMMARY, PART A: IMPORTANCE OF AND PROGRESS TOWARD ATTAINING OUTCOMES AT THIS COLLEGE (RANKED BY PROGRESS)  
 TOTAL SCORED: 9557

IMPORTANCE TO YOU OF OBTAINING OUTCOMES (AT LEFT)

PROGRESS MADE AT THIS COLLEGE (AT RIGHT)

RANK	AVG* # FOR AVG NO.	ITEM	ITEM TEXT	RANK	AVG** # FOR AVG
1	2.94	1	ACQUIRING KNOWLEDGE AND SKILLS IN MY AREA OF SPECIALIZATION	1	2.44
2	2.87	11	ACQUIRING KNOWLEDGE AND SKILLS NEEDED FOR A CAREER	2	2.41
3	2.72	22	LEARNING TO THINK AND REASON	3	2.38
4	2.77	8	LEARNING TO SET GOALS AND FOLLOW THROUGH TO COMPLETION	4	2.37
5	2.71	9	UNDERSTANDING MY STRENGTHS AND WEAKNESSES	5	2.34
6	2.77	7	IMPROVING MY ABILITY TO MAKE BETTER DECISIONS	6	2.33
7	2.63	18	LISTENING TO AND UNDERSTANDING WHAT OTHERS SAY	7	2.32
8	2.66	19	IMPROVING MY ABILITY TO APPLY NEW INFORMATION	8	2.31
9	2.58	25	THINKING OBJECTIVELY ABOUT BELIEFS, ATTITUDES, AND VALUES	9	2.29
10	2.63	24	DEVELOPING PROBLEM SOLVING SKILLS	10	2.23
11	2.54	23	DRAWING CONCLUSIONS FROM VARIOUS TYPES OF DATA	11	2.22
12	2.64	14	IMPROVING MY STUDY SKILLS	12	2.21
13	2.45	15	IMPROVING MY WRITING SKILLS	13	2.21
14	2.45	20	LOCATING, ORGANIZING, AND SCREENING INFORMATION	14	2.15
15	2.62	10	LEARNING ABOUT CAREER OPTIONS	15	2.12
16	2.45	17	IMPROVING MY READING COMPREHENSION SKILLS	16	2.12
17	2.44	16	IMPROVING MY SPEAKING SKILLS	17	2.11
18	2.32	5	BROADENING MY INTELLECTUAL INTERESTS OUTSIDE MY MAJOR	18	2.10
19	2.13	4	UNDERSTANDING AND APPLYING MATH CONCEPTS	19	2.06
20	2.37	6	DEVELOPING MY OWN TALENTS (E.G., IN ART, SCIENCE, WRITING, ATHLETICS)	20	2.06
21	2.41	26	USING COMPUTERS EFFECTIVELY (E.G., FOR COMPUTING, WORD PROCESSING)	21	2.04
22	2.53	12	DEVELOPING EFFECTIVE JOB-SEEKING SKILLS (E.G., INTERVIEWING, RESUME CONSTRUCTION)	22	2.01
23	2.53	2	LEARNING ABOUT THE ROLE OF SCIENCE AND TECHNOLOGY IN SOCIETY	23	1.98
24	2.45	21	DEVELOPING ORIGINAL IDEAS OR PRODUCTS	24	1.92
25	2.13	13	IMPROVING PHYSICAL COORDINATION, DEXTERITY, AND MUSCULAR OR MOTOR SKILLS	25	1.87
26	1.96	3	INCREASING MY APPRECIATION OF ART, MUSIC, LITERATURE, AND HUMANITIES	26	1.87

NOTE: SEE DETAIL PAGES 38-89 CONTAINING ANALYSES OF RESPONSES FOR THE OVERALL TOTAL AND FOR EACH OF THE SELECTED SUBGROUPS.  
 \*IMPORTANCE AVERAGES WERE COMPUTED BASED ON A 3-POINT SCALE WHERE OF GREAT IMPORTANCE=3, OF SOME IMPORTANCE=2, AND OF LITTLE OR NO IMPORTANCE=1. BLANKS WERE OMITTED FROM CALCULATION OF IMPORTANCE AVERAGES. \*\*PROGRESS AVERAGES WERE COMPUTED BASED ON A 3-POINT SCALE WHERE A LOT OF PROGRESS=3, MODERATE (AVERAGE) PROGRESS=2, AND LITTLE OR NO PROGRESS=1. BLANKS WERE OMITTED FROM CALCULATION OF THE PROGRESS AVERAGES.

SECTION II SUMMARY, PART B: YOUR FEELINGS ABOUT THIS COLLEGE'S GENERAL EDUCATION ("CORE") REQUIREMENTS  
 -----  
 TOTAL SCORED: 9557

AGREEMENT		# FOR	ITEM STEM: GENERAL EDUCATION ("CORE") REQUIREMENTS AT THIS COLLEGE....	
AVG*		AVG	ITEM NO	ITEM TEXT
2 15	8618		1	...WERE LARGELY A WASTE OF TIME FOR ME.
3 65	8708		2	...HELPED ME UNDERSTAND CONTENT AREAS OUTSIDE MY MAJOR.
3 91	8801		3	...DEVELOPED MY SKILLS IN ENGLISH, MATH, SOCIAL SCIENCES, NATURAL SCIENCES & HUMANITIES.
3 66	8729		4	...EXPANDED MY INTELLECTUAL AND CULTURAL HORIZONS.
3 95	8734		5	...WILL BENEFIT ME IN MY PERSONAL/PROFESSIONAL LIFE.
3 49	8357		6	...GAVE ME A BROADER GRASP OF ISSUES INVOLVED IN CITIZENSHIP.
3 69	8761		7	...HELPED ME UNDERSTAND WAYS OF THINKING AND STUDYING IN AREAS OUTSIDE MY MAJOR.

NOTE: SEE (TAIL PAGES 90-96) CONTAINING ANALYSES OF RESPONSES FOR THE OVERALL TOTAL AND FOR EACH OF THE SELECTED SUBGROUPS  
 \*AGREEMENT AVERAGES FOR PART B WERE COMPUTED BASED ON A 5-POINT SCALE WHERE STRONGLY AGREE=5, AGREE=4, NEUTRAL=3, DISAGREE=2,  
 AND STRONGLY DISAGREE=1. BLANKS AND NOT APPLICABLE TO ME WERE OMITTED FROM CALCULATION OF THE AGREEMENT AVERAGES.

SECTION II SUMMARY, PART C: EXTENT TO WHICH YOU AGREE WITH STATEMENTS ABOUT THIS COLLEGE.

TOTAL SCORED: 9557

SATISFACTION AVG*	FOR AVG	ITEM NO.	ITEM TEXT
4 19	9285	1	THIS COLLEGE HAS HELPED ME MEET THE GOALS I CAME HERE TO ACHIEVE.
3 88	9256	2	IF CHOOSING A COLLEGE AGAIN, I WOULD CHOOSE THIS ONE.
3 83	9259	3	THIS COLLEGE IS PREPARING ME FOR EMPLOYMENT.
4 13	9270	4	I WOULD RECOMMEND THIS COLLEGE TO OTHERS.
4 12	9256	5	THIS COLLEGE IS EQUALLY SUPPORTIVE OF WOMEN AND MEN.
3 95	9254	6	MY EXPER. AT THIS COLLEGE HAVE HELPED MOTIVATE ME TO MAKE SOMETHING OF MY LIFE.
3 76	9246	7	THIS COLLEGE IS EQUALLY SUPPORTIVE OF ALL RACIAL/ETHNIC GROUPS.
4 29	9261	8	I AM PROUD OF MY ACCOMPLISHMENTS AT THIS COLLEGE.
3 62	9252	9	THIS COLLEGE WELCOMES AND USES FEEDBACK FROM STUDENTS TO IMPROVE THE COLLEGE.

\*SEE DETAIL PAGES 97-105 CONTAINING ANALYSES OF RESPONSES FOR THE OVERALL TOTAL AND FOR EACH OF THE SELECTED SUBGROUPS  
 \*AGREEMENT AVERAGES FOR PART C WERE COMPUTED BASED ON A 5-POINT SCALE WHERE STRONGLY AGREE=5, AGREE=4, NEUTRAL=3, DISAGREE=2,  
 AND STRONGLY DISAGREE=1. ITEMS AND NOT APPLICABLE TO ME WERE OMITTED FROM CALCULATION OF THE AGREEMENT AVERAGES

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SECTION II SUMMARY, PART D: PERSONAL GROWTH AND COLLEGE CONTRIBUTION TOWARD ATTAINING OUTCOMES (RANKED BY PERSONAL GROWTH)  
 TOTAL SCORED: 9557

PERSONAL GROWTH SINCE ENTERING THIS COLLEGE (AT LEFT) COLLEGE CONTRIBUTION BOTH IN AND OUT OF CLASS (AT RIGHT)

RANK	AVG* # FOR AVG NO.	ITEM TEXT	RANK	AVG** # FOR AVG
1	2.52	9108	1	2.17
2	2.41	8566	2	2.30
3	2.42	9681	1	2.31
4	2.41	8870	5	2.16
5	2.41	8692	19	1.93
6	2.41	5925	6	2.14
7	2.36	9022	8	2.11
8	2.35	8789	3	2.18
9	2.35	8900	14	2.03
10	2.28	8847	9	2.10
11	2.27	8659	24	1.86
12	2.27	8879	7	2.13
13	2.26	8748	11	2.05
14	2.25	8786	12	2.04
15	2.25	8520	25	1.85
16	2.25	8250	23	1.89
17	2.23	8744	16	1.98
18	2.21	8373	28	1.71
19	2.21	8617	10	2.05
20	2.18	8484	20	1.92
21	2.18	8763	17	1.98
22	2.18	8536	18	1.96
23	2.15	8491	21	1.91
24	2.11	8439	26	1.80
25	2.09	8159	15	2.00
26	2.09	8678	30	1.70
27	2.07	8218	13	2.03
28	2.05	8468	22	1.89
29	2.02	8505	32	1.68
30	2.01	7704	31	1.69
31	1.97	7400	27	1.75
32	1.91	7605	29	1.71

NOTE: SEE PAGE II FOR NOTES AND DEFINITIONS.  
 SEE DETAIL PAGES 169-184 CONTAINING ANALYSES OF RESPONSES FOR THE OVERALL TOTAL AND FOR EACH OF THE SELECTED SUBGROUPS  
 \*PERSONAL GROWTH AVERAGES WERE COMPUTED BASED ON A 3-POINT SCALE WHERE OF A LOT OF GROWTH=3, MODERATE (AVERAGE) GROWTH=2, AND LITTLE OR NO GROWTH=1. BLANKS AND NOT A GOAL OF MINE WERE OMITTED FROM CALCULATION OF THE PERSONAL GROWTH AVERAGES \*COLLEGE CONTRIBUTION AVERAGES WERE COMPUTED BASED ON A 3-POINT SCALE WHERE A GREAT DEAL=3, MODERATE (AVERAGE)=2, AND LITTLE OR NOTHING=1. BLANKS AND NOT APPLICABLE WERE OMITTED FROM CALCULATION OF THE COLLEGE CONTRIBUTION AVERAGES.

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SECTION II SUMMARY, PART D: PERSONAL GROWTH AND COLLEGE CONTRIBUTION TOWARD ATTAINING OUTCOMES (RANKED BY COLLEGE CONTRIBUTION)  
 TOTAL SCORED: 9557

PERSONAL GROWTH SINCE ENTERING THIS COLLEGE (AT LEFT) COLLEGE CONTRIBUTION BOTH IN AND OUT OF CLASS (AT RIGHT)

RANK	AVG* # FOR AVG NO.	ITEM	ITEM TEXT	RANK	AVG** # FOR AVG
3	2 42	9081	2 BECOMING ACADEMICALLY COMPETENT	1	2 31
2	2 44	8466	9 INCREASING MY INTELLECTUAL CURIOSITY	2	2 30
8	2 35	8789	26 MAKING A LIFE LONG COMMITMENT TO LEARNING	3	2 18
1	2 52	9108	1 SETTING A DIRECTION FOR MY LIFE	4	2 17
4	2 41	8870	23 IMPLEMENTING LONG-TERM OR LIFE GOALS	5	2 16
6	2 41	9025	4 DEVELOPING SELF-CONFIDENCE	6	2 14
12	2 27	8879	8 LEARNING TO CRITIQUE AND JUDGE INFORMATION	7	2 13
7	2 36	9022	5 IMPROVING MY ABILITY TO RELATE TO OTHERS	8	2 11
10	2 28	8847	11 BECOMING MORE WILLING TO CONSIDER OPPOSING POINTS OF VIEW	9	2 10
19	2 21	8517	10 BECOMING AN EFFECTIVE TEAM OR GROUP MEMBER	10	2 05
13	2 25	8748	22 DEALING FAIRLY WITH A WIDE RANGE OF PEOPLE	11	2 05
14	2 25	8786	27 BECOMING PRODUCTIVELY AND PERSONALLY INVOLVED WITH OTHERS	12	2 04
27	2 17	8218	28 GAINING INSIGHT INTO HUMAN NATURE THROUGH THE STUDY OF LITERATURE & HUMANITIES	13	2 03
9	2 35	8950	3 INCREASING SELF-UNDERSTANDING	14	2 03
25	2 14	8556	6 BECOMING MORE AWARE OF POLITICAL AND SOCIAL ISSUES	15	2 00
17	2 23	8744	17 INITIATING CONVERSATIONS	16	1 98
21	2 18	8788	18 DEVELOPING LEADERSHIP SKILLS	17	1 98
22	2 14	8535	12 INTERACTING WELL WITH PEOPLE FROM CULTURES OTHER THAN MY OWN	18	1 96
5	2 41	8542	20 TAKING RESPONSIBILITY FOR MY OWN BEHAVIOR	19	1 93
27	2 18	8484	16 BECOMING SENSITIVE TO MORAL INJUSTICES AND WAYS OF AVOIDING OR CORRECTING THEM	20	1 92
23	2 15	8491	15 RECOGNIZING MY RIGHTS, RESPONSIBILITIES, AND PRIVILEGES AS A CITIZEN	21	1 91
28	2 06	8608	30 BECOMING MORE AWARE OF LOCAL, REGIONAL, & INTERNATIONAL ISSUES/EVENTS	22	1 89
16	2 25	8250	7 BECOMING LESS EASILY INFLUENCED BY OTHERS	23	1 89
11	2 27	8659	19 CLARIFYING MY PERSONAL VALUES	24	1 86
15	2 25	8520	13 DEVELOPING MORAL PRINCIPLES TO GUIDE MY ACTIONS AND DECISIONS	25	1 85
24	2 11	8476	29 LEARNING HOW TO MANAGE PERSONAL, FAMILY, OR BUSINESS FINANCES	26	1 80
21	1 37	7600	14 LEARNING THE ROLE OF VOLUNTEERING TO SUPPORT WORTHWHILE CAUSES	27	1 75
18	2 21	8373	32 LEARNING HOW TO BECOME A MORE RESPONSIBLE FAMILY MEMBER	28	1 71
32	1 31	7605	31 PREPARING MYSELF TO PARTICIPATE EFFECTIVELY IN THE ELECTORAL PROCESS	29	1 71
26	2 04	8678	25 PRACTICING GOOD HEALTH HABITS	30	1 70
33	2 01	7704	21 UNDERSTANDING RELIGIOUS VALUES THAT DIFFER FROM MY OWN	31	1 63
29	2 02	8595	24 MAINTAINING MY PHYSICAL FITNESS	32	1 68

NOTE: SEE PAGE II FOR NOTES AND DEFINITIONS.

SEE DETAIL PAGES 166-169 CONTAINING ANALYSES OF RESPONSES FOR THE OVERALL TOTAL AND FOR EACH OF THE SELECTED SUBGROUPS.  
 \*PERSONAL GROWTH AVERAGES WERE COMPUTED BASED ON A 3-POINT SCALE WHERE OF A LOT OF GROWTH=3, MODERATE (AVERAGE) GROWTH=2, AND LITTLE OR NO GROWTH=1. RANKS AND NOT A GOAL OF MINE WERE OMITTED FROM CALCULATION OF THE PERSONAL GROWTH AVERAGES \*COLLEGE CONTRIBUTION AVERAGES WERE COMPUTED BASED ON A 3-POINT SCALE WHERE A GREAT DEAL=3, MODERATE (AVERAGE) 2, AND LITTLE OR NOTHING=1. RANKS AND NOT APPLICABLE WERE OMITTED FROM CALCULATION OF THE COLLEGE CONTRIBUTION AVERAGES.

ACT COLLEGE OUTCOMES SURVEY REPORT  
 PROJECT COOPERATION 1992 COMMUNITY COLLEGE COMPOSITE  
 09/16/92 CODE 9990

SECTION III SATISFACTION WITH GIVEN ASPECTS OF THIS COLLEGE  
 TOTAL SCORED: 9557

SATISFACTION # FOR AVG*	ITEM NO.	ITEM TEXT
4.05	1	QUALITY OF MY PROGRAM OF STUDY
3.62	2	QUALITY OF ACADEMIC ADVISING
3.85	3	AVAILABILITY OF FACULTY FOR OFFICE APPOINTMENTS
3.73	4	INFORMAL CONTACT WITH FACULTY IN NON-ACADEMIC SETTINGS
3.92	5	FACULTY RESPECT FOR STUDENTS
4.11	6	CLASS SIZE
4.05	7	QUALITY OF INSTRUCTION
3.75	8	VARIETY OF COURSES OFFERED
3.78	9	TUTORIAL SERVICES, INCLUDING WRITING LABS, MATH LABS
3.69	10	TRANSFER OF COURSE CREDITS FROM OTHER COLLEGES TO THIS COLLEGE
3.67	11	FLEXIBLE DEGREE REQUIREMENTS
3.70	12	CONCERN FOR ME AS AN INDIVIDUAL
3.74	13	MY SENSE OF BELONGING ON THIS CAMPUS
4.03	14	FREEDOM FROM HARASSMENT ON CAMPUS
3.94	15	COLLEGE RESPONSE TO STUDENTS WITH SPECIAL NEEDS
4.09	16	COLLEGE RESPONSE TO OLDER/NONTRADITIONAL STUDENTS
3.25	17	CAMPUS AIDS EDUCATION PROGRAM
3.61	18	CAMPUS ATMOSPHERE OF ETHNIC, POLITICAL, & RELIGIOUS UNDERSTANDING
3.70	19	RULES GOVERNING STUDENT CONDUCT
3.84	20	PERSONAL SECURITY/SAFETY ON CAMPUS
3.65	21	OPPORTUNITIES FOR INVOLVEMENT IN CAMPUS ACTIVITIES
3.51	22	COLLEGE SOCIAL ACTIVITIES
3.47	23	RECREATIONAL & INTRAMURAL PROGRAMS
3.73	24	LIBRARY/LEARNING RESOURCES CENTER SERVICES
3.90	25	STUDENT ACCESS TO COMPUTER FACILITIES AND SERVICES
3.70	26	NEW STUDENT ORIENTATION SERVICES
3.68	27	NEW STUDENT PLACEMENT IN READING/WRITING/MATH COURSES
3.49	28	LANGUAGE DEVELOPMENT SERVICES FOR STUDENTS WHOSE FIRST LANGUAGE IS NOT ENGLISH
3.50	29	STUDENT HEALTH/WEILLNESS SERVICES
3.74	30	FINANCIAL AID SERVICES
3.60	31	PERSONAL COUNSELING SERVICES
3.81	32	MENTAL HEALTH SERVICES
3.61	33	CAREER PLANNING SERVICES
3.47	34	JOB REPLACEMENT SERVICES
3.30	35	RESIDENCE HALL SERVICES AND PROGRAMS
3.26	36	SUPPORT SERVICES FOR VICTIMS OF CRIME AND HARASSMENT
3.39	37	VETERANS SERVICES

NOTE: SEE PAGE II FOR NOTES AND DEFINITIONS.  
 SEE DETAIL TABLES 170-210 CONTAINING ANALYSES OF RESPONSES FOR THE OVERALL TOTAL AND FOR EACH OF THE SELECTED SUBGROUPS.  
 SATISFACTION AVERAGES WERE COMPUTED BASED ON A 5-POINT SCALE WHERE VERY SATISFIED=5, SATISFIED=4, NEUTRAL, NEITHER SATISFIED  
 NOR DISSATISFIED=3, DISSATISFIED=2, VERY DISSATISFIED=1. BLANKS AND NO RATING POSSIBLE, NOT APPLICABLE, NOT ABLE TO JUDGE WERE  
 OMITTED IN CALCULATING THE SATISFACTION AVERAGES.

# ESS

## ACT Evaluation/Survey Service Order Form

(Prices effective September 1, 1992--Subject to change without notice)

To order ESS materials, you must use this form even if you submit a purchase order. Place your order at least three weeks before you need the materials. Materials will be shipped by UPS or comparable method. Please print or type.

Description	Quantity	Price	Total
<b>Survey Instruments</b> (Distributed in packages containing 25 instruments and, if appropriate, 25 copies of the major occupation code list.)			
1. Adult Learner Needs Assessment Survey (package of 25)	_____ pkgs.	\$7.50	\$_____
2. Alumni Survey (package of 25)	_____ pkgs.	\$7.50	\$_____
3. Alumni Survey (2-Year College Form) (package of 25)	_____ pkgs.	\$7.50	\$_____
4. Alumni Outcomes Survey (package of 25)	_____ pkgs.	\$7.50	\$_____
5. College Outcomes Survey (package of 25)	_____ pkgs.	\$7.50	\$_____
6. College Student Needs Assessment Survey (package of 25)	_____ pkgs.	\$7.50	\$_____
7. Entering Student Survey (package of 25)	_____ pkgs.	\$7.50	\$_____
8. Student Opinion Survey (package of 25)	_____ pkgs.	\$7.50	\$_____
9. Student Opinion Survey (2-Year College Form) (package of 25)	_____ pkgs.	\$7.50	\$_____
10. Survey of Academic Advising (package of 25)	_____ pkgs.	\$7.50	\$_____
11. Survey of Current Activities and Plans (package of 25)	_____ pkgs.	\$7.50	\$_____
12. Survey of Postsecondary Plans (package of 25)	_____ pkgs.	\$7.50	\$_____
13. Withdrawing Nonreturning Student Survey (package of 25)	_____ pkgs.	\$7.50	\$_____
14. Withdrawing Nonreturning Student Survey (Short Form) (package of 25)	_____ pkgs.	\$5.00	\$_____
<b>ESS Specimen Set</b> (Includes one copy of each survey instrument, an ESS order form, several sample report pages, a sample Sign-up Selection Form, and the ESS Users Guide)	_____ sets	\$7.50	\$_____
<b>ESS Users Guide</b> (Free with order of 400 or more survey instruments, also included with the ESS Specimen Set above)	_____ copies	\$5.00	\$_____
<b>ESS Item Catalog</b> (Contains several hundred sample items to help your institution construct its own local survey questions)	_____ copies	\$6.00	\$_____
	OVER:		
		SUBTOTAL:	\$_____

**Normative Data Reports** (Each report contains comparative data based on student records from colleges that administered the particular survey instrument(s).)

1. Adult Learner Needs Assessment Survey Normative Data Report	_____	copies	\$25.00	\$_____
2. Alumni Survey Normative Data Report	_____	copies	\$25.00	\$_____
3. Alumni Survey (2-Yr. College Form) Normative Data Report	_____	copies	\$25.00	\$_____
4. College Student Needs Assessment Survey Normative Data Rpt.	_____	copies	\$25.00	\$_____
5. Entering Student Survey Normative Data Report	_____	copies	\$25.00	\$_____
6. Student Opinion Survey Normative Data Report	_____	copies	\$25.00	\$_____
7. Student Opinion Survey (2-Yr. College Form) Normative Data Rpt.	_____	copies	\$25.00	\$_____
8. Survey of Academic Advising Normative Data Report	_____	copies	\$25.00	\$_____
9. Withdrawing/Nonreturning Student Survey Normative Data Rpt.	_____	copies	\$25.00	\$_____
10. Withdrawing/Nonreturning Student Survey (Short Form) N.D.R.	_____	copies	\$25.00	\$_____
Subtotal from side 1				\$_____

(California residents add 6% sales tax.)

**TOTAL** \$\_\_\_\_\_

If total is less than \$15.00, please enclose payment with order.  
Postage and shipping charges will be added to all invoices.

**ACT Scoring/Reporting Service**

As part of the standard ESS program, ACT will optically score your institution's completed survey instruments and prepare a summary report of the results. (Scoring/reporting prices: \$80.00 reporting/handling fee or \$100.00 reporting/handling fee for a laser printed report *plus* \$.60 per student record processed.) The summary report is based on up to 15 student subgroups of your choice and provides extensive frequency data for all items on the particular survey. Institutions that use the Scoring/Reporting Service may also obtain copies of their student data on magnetic tape or IBM compatible PC diskette.

If you plan to administer an ESS instrument, do you also plan to use the ACT Scoring/Reporting Service?

Yes       Undecided       No

Ship Materials To:

Bill To:

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Signed: \_\_\_\_\_ Date \_\_\_\_\_ Phone (\_\_\_\_) \_\_\_\_\_

Return this form to:

ACT  
 Evaluation Survey Service (83)  
 P.O. Box 168  
 Iowa City, Iowa 52243

Telephone (319)337-1186  
 Facsimile (319)339-3020

**ACT**

06/92