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ABSTRACT

In fall 1981, a survey of students enrolled in the 27 community colleges in Washington was conducted to determine student background characteristics and educational objectives, self-ratings of abilities, types of college courses taken, types of learning activities participated in during particular courses, reasons for and for not enrolling in liberal arts courses, and estimates of progress made toward each of 14 educational objectives (e.g., thinking critically and writing effectively). Survey responses from 6,162 students enrolled in 338 classes in 26 of the 27 colleges were analyzed to determine the relationship between the types and number of courses students completed and their ratings of their educational abilities and progress. Findings included the following: (1) students felt most confident in their ability to read (81%), write (73%), and speak (70%) effectively; (2) the majority of the students felt they had made progress in all but one of the 14 educational objectives, with the exception being appreciation of art, music, and drama; (3) students who had completed one or more courses in each of four liberal arts areas (i.e., humanities, sciences, social sciences and mathematics) were likely to rate their abilities and progress higher than those without this background; and (4) in most instances, an increase in the number of college units completed was accompanied by an increase in students' ratings of their educational progress. The questionnaire is appended. (HB)

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MEASURING THE BENEFITS OF LIBERAL ARTS EDUCATION
IN WASHINGTON'S COMMUNITY COLLEGES

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Measuring the Benefits of Liberal Arts Education in Washington's Community Colleges

What are the short and long-term benefits of taking courses in the liberal arts--that is the humanities, mathematics, sciences, and social sciences? Having such information is useful for responding to students who question the value of having to take liberal arts courses, who regard such requirements as unnecessary impediments to the attainment of their educational objectives. It can aid in countering the argument being advanced by numerous observers that community colleges should concentrate on career and compensatory education while the collegiate function should be maintained in senior institutions. And it can be used to address the charge that the quality of education provided in community college collegiate courses is inferior to that provided in similar courses offered in four-year colleges and universities.

When asked to document what students learn in liberal arts programs, community college leaders typically point to the desired outcomes of a general education, high enrollments in these courses, and the results of follow-up studies which show that most students are satisfied with their educational experiences in college. However, none of these responses provide information on what students have gained in their humanities, science, and social science courses. Nor is there much information on the relative merits for students in the various programs of taking or not taking courses in the liberal arts.

At a time when state legislators and coordinating boards are demanding accountability on one hand and are looking for ways to cut costs of higher education on the other, community college educators need information on the value of their programs.⁶ These data can be obtained in several ways:

1) from achievement tests given at the beginning and at the end of courses and programs of study; 2) from follow-up studies of former students; and 3) from student self-reports. The study reported here focused on the latter measure.

The study. In Fall 1981, the Center for the Study of Community Colleges (CSCC) conducted a survey of students enrolled in the 27 community colleges in the state of Washington. This study, sponsored by the National Endowment for the Humanities, was designed to obtain answers to such questions as:

Which courses do students complete?

What is the relationship between the types of courses students complete and the ratings of their educational abilities?

What is the relationship between the types of courses completed and student estimates of their educational progress?

What kinds of courses are completed by students with different educational objectives?

What reasons do students give for not enrolling in liberal arts courses?

Do the learning activities students participate in vary from one type of course to another?

Methodology. A sample of 25 percent of all class sections offered at 10 a.m. and 7 p.m. on Wednesday of the seventh week of the Fall 1981 term was drawn. Survey forms for the students in those classes were sent to their instructors who in turn were asked to distribute and retrieve them and return them to GSCC. Completed surveys were obtained from 6,162

students enrolled in 338 of the 363 classes (93% response rate) that were selected for participation in this study. The classes involved represent a cross section of the subject areas taught in 26 of the 27 Washington State community colleges. (The surveys that were filled out by students at Fort Steilacoom Community College were lost in the mail.)

In comparison to statewide figures for Fall 1981, students in this sample were younger. As illustrated in Table 1, the percentage of students who were enrolled full-time (10 or more hours) was much higher in the sample than it was for the state as a whole (78% vs. 44%). These discrepancies in age and enrollment status are due in part to the small number of surveys returned from non-credit and off-campus classes, areas where students are typically older and are enrolled on a part-time basis.

Questionnaire. The Student Survey contained 12 sets of items designed to elicit information on student background characteristics, self-ratings of abilities, types of college courses taken, types of learning activities participated in during a particular course, reasons students had for not enrolling in various types of liberal arts courses, and estimates of progress made toward each of 14 important general education objectives. A copy of the Student Survey is provided in Appendix A.

Comments on self-report data. The students' own judgments were used in ascertaining their abilities and estimates of their educational progress in college. For example, students were asked to rate the progress they made in college as either "very much," "some," "little," or "none." While these options are clearly different from one another, self-ratings or judgments of this kind are typically made with some reference group in mind. If community college faculty members are asked how well satisfied they are with their income, they do not use a reference group that ranges from a Rockefeller or a DuPont to a recipient of welfare; the reference group is most likely to be other academics or other professionals. So, too, if students are asked about their abilities, their reference group is most likely to be other students they know or their sense of their own skills.

How do students rate their abilities? The students were asked to rate their abilities in each of eleven areas. The response categories were "poor," "fair," "good," or "excellent." The percentage of students who rated their ability to perform a particular activity as either good or excellent are presented in Table 2. Here we find that students felt most confident in their ability to read (81%), write (73%), and speak (70%) effectively, appreciate music (80%), and critically examine ideas (79%). A smaller percentage felt confident in their ability to appreciate art (63%), theater and drama (57%), use mathematics to solve problems (61%), and understand different cultures (52%). Only 17 percent of the respondents felt confident in their ability to speak in a language other than English.

What is the relationship between time in college and student ratings of their skills? The data summarized in Table 3 show that, with the exception of

music appreciation, there was a positive relationship between the percentage of students who rated their skills as good or excellent and the number of college credits completed. Students who completed 16 to 30 units rated their abilities higher than those who had not completed their first college course. Students who completed over 60 units rated their skills higher than those who had completed 16 to 30 units.

As shown in Table 3, students who completed over 60 credits were much more likely than those just beginning college to rate their skills as good or excellent in critically examining ideas (87% vs. 70%), using mathematics to solve problems (68% vs. 56%), understanding different cultures (64% vs. 42%), reading effectively (87% vs. 74%), writing effectively (80% vs. 68%), and speaking effectively (76% vs. 64%). The differences between these two groups were much smaller with respect to speaking a foreign language (18% vs. 14%), and in appreciating art (66% vs. 61%), music (80% vs. 82%), and theater (61% vs. 54%). Such results are not surprising when considering that what students know is related to what they study, and most of the respondents in the sample had not completed courses in a foreign language, or in art, music, or theater appreciation.

What is the relationship between the types of courses students completed and the rating of their abilities? We would expect that students who completed a course in art appreciation would rate their ability to appreciate art higher than those who had not taken a course in that area. Similarly, it would be reasonable to expect that students who completed a course in mathematics would rate their ability to use mathematics to solve problems higher than those who had not taken a mathematics course in college. The relationship between student ratings of their skills and courses taken in each of 17 areas are, for the most part, in the expected direction. These results are reported in Table 4.

In order to present the data in a more parsimonious fashion, courses were grouped into the following six categories: (1) Business, (2) Occupational-Technical, (3) Humanities (art, music, theater, film history and appreciation, foreign languages, humanities, literature, philosophy), (4) Science (biological and physical); (5) Social Science (anthropology, economics, geography, history, political science, sociology), and (6) Mathematics/Computer Sciences. These categories were made to resemble the way in which courses were grouped in Washington's community colleges.

Students who had taken two or more courses in a certain subject area were compared with those who had not taken a course in that field in terms of their self-ratings. The differences in the percentage of students in these two groups who rated their skills as good or excellent are presented in Table 5.

As shown in Table 5, a greater percentage of students who had completed at least two courses in the humanities than those who had not taken a course in this area rated their skills as good or excellent in all of the competencies considered. These results were expected since most of the abilities listed in Table 5 are related to what is taught in humanities courses. The differences between those who had taken at least two courses in the humanities and those who had not completed courses in this area was greatest with respect to understanding different cultures (19%), understanding one's cultural heritage (12%), critically examining ideas (11%), appreciating and enjoying theater (11%) and art (10%), and writing effectively (10%). Although the differences in most instances were not as pronounced, students who had completed courses in two other areas of the liberal arts--social sciences and sciences--were more likely to rate their skills as good or excellent than those who had not taken courses in those fields.

With a few notable exceptions, namely using mathematics to solve problems and critically examining ideas, completion of courses in business and occupational-technical areas were not associated with as large an increase in the percentage of students who felt confident in their abilities than was found among those who had completed courses in the liberal arts areas. What these findings suggest is that many of the desired outcomes of general education are more likely to be obtained in humanities, social science, and science courses than in business and occupational-technology courses.

How much progress do students think they have made in college?

Students were asked to rate the amount of progress they had made at their college in each of 14 areas. The response categories were "None," "A Little," "Some," and "Very Much."

As shown in Table 6, the majority of students reported that they made some or very much progress in all but one of the 14 areas of attainment considered. The one exception was developing an understanding and enjoyment of art, music, and drama where 71 percent of the respondents indicated that they had made little or no progress. Areas in which students felt that they had made the most progress were learning on their own, acquiring background for further education in a professional field, becoming aware of different points of view, and self understanding. Areas in which more than one-third of the sample reported little or no progress included writing effectively (34%), understanding social issues (37%), speaking effectively (38%), understanding the social implications of scientific developments (47%), and developing an understanding and enjoyment of art, music, and drama (71%).

What is the relationship between time in college and student estimates of their educational progress? In most instances, the rise in the number of units students completed was accompanied by an increase in the percentage who reported that they made very much progress in developing their skills. For example, students who had completed 60 or more units were much more likely than those who had completed none to report very much progress in the following area: gaining background for further education (59% vs. 28%), gaining a broad general education (46% vs. 24%), thinking critically (43% vs. 23%), and putting ideas together (44% vs. 26%). The differences between these two groups were rather modest in four other areas: understanding social issues (24% vs. 15%), developing a sense of values (35% vs. 28%), developing an enjoyment of art, music, drama (16% vs. 10%), and understanding others (43% vs. 40%). This information is reported in Table 7.

What is the relationship between types of courses completed and student estimates of their educational progress? Students who had taken two or more courses in a certain subject were compared with those who had not taken a course in that area in terms of their estimates of progress in college. The differences in the percentage of students in these two groups who reported that they had made very much progress in developing their skills are shown in Table 8. Data on student estimates of their educational progress associated with participation in the various kinds of courses included in the study are provided in Table 9.

A greater percentage of students who had completed at least two courses in the humanities than those who had not taken a course in the humanities reported that they made very much progress in all of the areas of attainment. These results were expected since most of the benefits considered are desired outcomes of humanities education. Those who participated in humanities courses were more likely than those who did not to feel that they had made much progress in obtaining a broad general education, thinking critically, becoming aware of different points of view, understanding social issues, putting together ideas to see relationships, similarities and differences, writing and speaking effectively, understanding the societal implications of scientific developments, and developing an understanding of art, music, and drama.

With respect to the sciences and social sciences, a greater percentage of students who had taken those courses than those who had not taken those courses reported very much progress in gaining a broad general education, thinking critically, putting together ideas to see relationships, similarities, and differences, understanding the social implications of scientific issues, and, particularly in the social sciences, understanding social issues. On the other hand, there was little or no differences between those who had completed courses in the sciences or social sciences and those who had not in terms of the percentage who made very much progress in developing an understanding and enjoyment of art, music, drama, and understanding of others.

At the other end of the benefits continuum, the percentage of students who felt they made very much progress toward the attainment of most of the

educational outcomes did not increase as substantially for those who completed courses in business and occupational technology areas as it did for students who completed courses in areas of the liberal arts. These results suggest that enrollment in business or occupational courses does not contribute as much to student attainment of traditional general education objectives as participation in courses in the humanities, sciences, or social sciences.

Breadth of exposure to the curriculum and student attainment. In order to obtain a degree, students at most colleges are required to take courses from a number of curricular areas such as the humanities, sciences, social sciences, and mathematics. The rationale for instituting this distribution requirement is to promote the breadth of student competencies through exposing them to a wide range of subject areas. If this assumption is true, then we would predict that the greater the range of subject areas taken, the greater the breadth of student skills and competencies.

In order to examine the validity of the assumption, a Breadth Index was created. This was a measure within the liberal arts curriculum of the number of areas in which a student had taken courses. A score of four was assigned to those students who had completed courses in each of the following four areas: (1) the humanities, (2) sciences, (3) social sciences, and (4) mathematics. Students who had taken courses in all but one of these subject areas received a score of three, and so on. The information presented in Table 10 shows the percentage of students in each of the Breadth Index categories who rated their ability to do an activity as good or excellent.

In most instances, the increase in the number of liberal arts areas taken by students was accompanied by a rise in the percentage who rated their skills as good or excellent. In fact, for each of the eleven competencies considered, the percentage of students who felt confident in their skills was greatest among those who had received a score of four on the Breadth Index. Such

findings lend support to the assumption underlying general education distribution requirements--namely, the greater the breadth of exposure to the liberal arts, the greater the range of competencies developed.

Courses completed by students with different educational objectives.

Since the mid 1960s, there has been a dramatic increase in the proportion of students attending community colleges to prepare for a career. This growth in occupational enrollments has been accompanied by mounting concern among educators that many of these students would take only those business and occupational courses they needed to gain employment and then leave college without having been exposed to the liberal arts. Defenders of occupational programs take issue with these assertions and note that, if anything, fewer students in liberal arts programs enroll in occupational courses than the reverse.

A great deal has been said and written about the need for occupational program students to take courses in the humanities as well as the other areas of the liberal arts. Much money has been spent in devising ways of incorporating humanities into occupational programs, yet little information is available on the actual extent to which students in occupational programs are exposed to the liberal arts. Nor are there much data available on what students in occupational programs gain and lose by taking courses in the liberal arts as opposed to taking a comparable number of courses in their occupational field. The information obtained in the survey provides some evidence on what courses students in occupational and transfer programs have taken and what benefits members of each group reported from their experiences in college.

Courses completed by students in transfer and in occupational programs.

Students were asked to identify their primary reason for attending college. The response categories were: to prepare for a career; to prepare for transfer to a four-year college or university; to gain skills necessary for advancement

in a career; to obtain a general education; to satisfy a personal interest; and to develop basic learning skills.

The results reported in Table 11 are for career and transfer students who completed 16 or more college units. Here we find that those preparing to transfer (transfer students) were more likely than students preparing for a career (occupational students) to have completed courses in the humanities (92% vs. 79%), social sciences (92% vs. 77%), sciences (71% vs. 56%), and mathematics/computer sciences (79% vs. 74%). On the other hand, a greater percentage of occupational than transfer students had taken courses in business (63% vs. 53%) and in occupational-technological areas (60% vs. 36%).

A number of additional findings in Table 11 are particularly worth noting.

1. During their 16 plus hours of college, nearly all of the students in the two groups had taken at least one course in the liberal arts.

2. Forty-four percent of the students preparing for a career and 29 percent preparing to transfer had not taken a course in the biological or physical sciences as part of their first 16 plus hours of college.

3. Twenty-seven percent of the students preparing for a career and 21 percent of those attending college to prepare for transfer had not taken a course in mathematics or computer sciences. If mathematics and computer sciences were treated as separate categories, the percentage of students who had not taken courses in either of these areas undoubtedly would be substantially higher.

4. Just over one-half (51%) of the students attending college to prepare for a career had taken seven or more courses in the liberal arts while a substantial percentage of those attending to prepare for transfer had taken at

least one course in business (53%) and/or in an occupational-technology area (36%).

The information presented in Table 11 shows that students attending college to gain other skills necessary for advancement in their career or to satisfy a personal interest were older and had completed a greater number of credits than those attending college to prepare for a career or for transfer. Over 70 percent of the students in the career advancement and personal development groups were 23 years of age or older, and close to one-half of them had completed over 60 units of college credit.

As shown in Table 11, over one-half of those attending college to gain skills to advance in their career and over 40 percent of the students taking classes for personal interest had scores of four on the Breadth Index, which means that they had completed courses in each of the liberal arts curricular areas. Without exception, students in these groups were above the sample average in terms of the number of courses completed in each of the subject areas considered. Hence, it would be misleading to characterize these students as having educational backgrounds that were primarily liberal arts, business, or occupational.

Estimates of educational progress made by career and transfer students.

Differences in the kinds of courses taken by students preparing for transfer and those preparing for careers were reflected in the amount of progress each group felt it made in various achievement areas. These findings are reported in Table 12.

A greater percentage of transfer-oriented than career-oriented students reported that they had made much progress toward gaining a broad general education,

understanding and enjoying art, music and drama, expressing ideas effectively in writing, becoming aware of different points of view, understanding social issues, understanding the social implications of science, and thinking critically. The differences between the two groups were slight in the remaining six areas of attainment except in acquiring a background for further education in some professional field where a greater percentage of career than transfer program students felt they had made very much progress. As illustrated in Table 12, a greater percentage of transfer students than those in the other categories reported that they had made very much progress in nearly all areas of attainment.

Ratings of abilities by transfer and career program students. Transfer students were more likely than career-oriented students to rate their skills as good or excellent in nine of the eleven ability areas examined. However, in only four of these ability areas did the differences between these two groups exceed five percent. These were the abilities to examine ideas critically (82% vs. 76%), speak in a foreign language (20% vs. 13%), understand one's cultural heritage (74% vs. 66%), and understand different cultures (60% vs. 46%). These findings are depicted in Table 13.

Reasons students give for not enrolling in courses. Respondents to the survey were asked to indicate the most important reason they had for not enrolling in a particular type of course. The response categories were "not required for my program," "courses do not interest me," "too much required reading," and "too much required writing." The responses to this item given by those who had completed 16 or more credit hours are presented in Table 14.

The most frequently cited reason for not taking liberal arts courses was that it was not required. Not interested in the course was the second most common reason given for not having participated in liberal arts courses. Too much required reading was cited by about ten percent of the students as the major reason they had for not enrolling in courses in literature/humanities/philosophy

(13%), social/natural/biological/physical sciences (12%), and political science/history (9%). Less than ten percent of the respondents said that they did not enroll in one of the six subject areas considered because there was "too much required writing."

Reasons given by students in career and transfer programs for not taking liberal arts courses. About twice as many students attending college to prepare for a career as those preparing to transfer indicated that "not being required for the major" was the primary reason they had for not participating in courses in literature/humanities, philosophy, mathematics, sciences/social sciences, and political science/history. Likewise, about 70 percent in each group noted that they did not participate in art, music, theatre, or foreign language courses because the courses were not required.

It is important to note that a high percentage of those preparing to transfer noted that too much required reading or too much required writing was the primary reason they had for not taking courses in literature/humanities/philosophy (32%), sciences/social sciences (29%), and political science/history (20%). It should also be pointed out that close to one-half of the transfer program students who had avoided mathematics and 40 percent of those who had not taken courses in the sciences or social sciences did so because they were not interested in those subjects. These findings are reported in Table 15.

Relationship between students ratings of their abilities and their experiences in college. Previous research has shown that there is a positive relationship between how students rate their skills and the types of courses they complete. For example, students who rated their skills in reading as good were much more likely to have completed courses in literature and history than those who were not confident in their reading skills.

In this study we found that about 20 percent of the students who rated their skills in reading or writing as fair or poor cited too much required reading as the major reason they had for not participating in courses in literature/humanities/philosophy (22%), sciences/social sciences (20%), and political science/history (18%). In all instances those students who rated one of their skills as fair or poor were much more likely than those who rated the same skill as good or excellent to say they did not participate in a course in which that ability was required because they were not interested in the subject. For example, 51 percent of those students who rated their skills in the arts as poor compared to 14 percent who rated themselves as good said they did not participate in art-music-theater courses because they were not interested in those subjects. What such data suggest is that students tend to avoid classes in which they think they will not do well.

Why students enroll in courses. The survey was administered to students in courses during the seventh week of the term. Respondents were asked to identify the primary reason they had for enrolling in the particular course they were in when they were completing the survey. Students responses to this item for each of the subject area categories are presented in Table 16.

There was much variation in the reason students had for enrolling in different types of courses. For example, within the humanities, 35 percent of the students enrolled to fulfill a general education or distribution requirement, 18 percent did so because it was required for their major, and 26 percent did so for personal enrichment. Nevertheless, the majority of students in the various areas of the liberal arts were taking courses to fulfill a general education or major field requirement while the majority enrolled in business and occupational classes were doing so to develop job-related skills and to fulfill a major field

requirement.

Only a small percentage of the students cited counselor or faculty encouragement, student recommendations, or interesting course descriptions as the most important reason they had for enrolling in the particular course. One exception to this statement is composition where ten percent of the students said they had taken the course because a faculty member or counselor had encouraged them to do so.

Do the types of learning activities students participate in vary from one type of course to another? Students were asked to indicate whether or not they had engaged in each of thirteen course-related activities during the first seven weeks of the class they were in at the time of the survey. In other words, if students were completing the survey during their literature class, they were instructed to respond to the questions in terms of what they did in that particular literature class. The percentage of students who noted that they participated in each of the activities is presented in Table 17 for the total sample and Table 18 for students in each of the course classification categories. Responses for each type of course included in this study are presented in Table 19.

The thirteen activities listed in Table 17 were divided into three categories--writing activities, student-instructor contacts, and academic activities. There is obviously much overlap among these categories but they were created to facilitate the ease of presenting the data.

Writing activities. There was much variation among the courses in terms of how much effort students spent in writing. The percentage of students who reported that they spent at least five hours or more writing a paper for this class ranged from a high of 61 percent in composition classes to 38 percent in

the humanities and 32 percent in the social sciences to 24 percent in business, 22 percent in the occupational technologies, 19 percent in mathematics/computer sciences, and 17 percent in the sciences.

One-fourth of the sample reported that they had during the first seven weeks of their class developed a bibliography or set of references for a term paper or other class assignment. Once again, a greater percentage of the students in composition (42%), social sciences (35%), and humanities (31%) classes than those in the other academic areas participated in this activity. Only 13 percent of the respondents in the sample had asked the course instructor for help to improve their writing. This figure would have been even lower had it not been for the composition courses where 49 percent of the students said they had asked the instructor for help with their writing.

Student-instructor contacts. Eight out of ten participants (80%) in the survey reported that they received helpful feedback on class assignments, papers, and tests from their instructors. The provision of feedback to students was high in all of the course areas. A much smaller percentage of the sample said that they had met their instructor in his or her office (35%). Students in composition (54%) and occupational-technology courses (46%) were more likely to have visited with the instructor than those enrolled in the other course areas. About one-fourth of the respondents noted that they had discussed career plans and ambitions with their instructor (27%) and/or had discussed ideas for a term paper or class project with their instructors (25%). In comparison to the sample average, participants in occupational-technology classes were much more likely to have discussed career plans and ambitions with their instructors (47% vs. 27%) while those in composition classes were more likely to have discussed ideas for a term paper or project with their instructors (47% vs. 25%)

Cognitive activities. Over 30 percent of the students in the sample said they had thought about practical applications of class material (90%), tried to explain the course materials to another person (79%), tried to see how facts and figures fit together (73%), worked on an assignment where they had to incorporate ideas from the course (71%), and related course readings to their personal experiences (61%). These results indicate that students are being stimulated to engage in activities that draw upon high-level cognitive skills. As shown in Table 17, students were participating in high level learning activities in all areas of the curriculum.

Fifty-seven percent of the students said that they had thought about some of the political, religious, sociological, and/or economic meanings of something they read. Here students enrolled in social science (89%) and humanities (75%) classes were much more likely to have engaged in this intellectual activity than those in the other types of classes.

Summary and Conclusions

In the Fall of 1981 a survey was given to 6,162 students in the state of Washington's community colleges. The results are summarized below. When interpreting these results it is important to keep in mind that in comparison to the average for all community college students in Washington, the students in the sample were younger and were much more likely to have been enrolled on a full-time basis. Also, all the findings are based on students' self reports.

Student ratings of their skills. Students in the sample felt most confident in their ability to read, write, and speak effectively, appreciate music, and critically examine ideas. They were least confident in their ability to appreciate art, music and drama, understand different cultures, and speak in a language other than English.

The more college units students completed, the more likely they were to rate their skills as good or excellent. Student ratings of the competencies were related to the kind of courses they completed in college. For example, students who completed courses in the humanities were much more likely than those who did not complete courses in the humanities to rate their skills as good or excellent in all of the competency areas considered. This was in the expected direction since most of the competency areas in which students were asked to rate their skills correspond to the objectives of humanities education.

Student estimates of the progress they had made in college. The majority of students in the sample reported that they had made some or very much progress in all but one of the 14 areas of traditional general education objectives. The one exception was developing an understanding and enjoyment of art, music and drama, an area in which 71 percent of the respondents indicated that they had made little or no progress. Areas in which students felt they had made the

most progress were: learning on their own, acquiring background for further education in a professional field, becoming aware of different points of view, and understanding one's self. Among the areas in which more than one-third of the sample reported little or no progress included: writing effectively, speaking effectively, understanding social issues, and understanding the social implications of scientific developments.

In most instances, the rise in the number of college units completed was accompanied by an increase in the percentage who reported that they made very much progress in achieving important objectives of general education. There was a positive relationship between the types of courses students had completed and the amount of progress they reported in competency areas which those courses were designed to promote. To illustrate, a greater percentage of students who had completed at least two courses in the humanities than those who had not, felt that they had made very much progress in all of the areas of attainment. These results were expected since most of the benefits considered in this study are desired outcomes of humanities education. The results of this study suggest that enrollment in business or occupational courses does not contribute as much to student attainment of general educational outcomes as participation in courses in the humanities, sciences, or social sciences.

Breadth of exposure to the curriculum. Students who had completed one or more courses in each of four liberal arts areas--humanities, mathematics, sciences, and social sciences--were more likely than those who had taken courses in three or fewer of these distribution areas to rate a greater number of their skills as good or excellent and to report that they had made very much progress on a larger number of the measures of attainment. Such findings lend support to the assumption underlying general education distribution requirements--namely, the greater the breadth of exposure to the liberal arts, the greater the range of competencies developed.

Comparisons between students attending college to prepare for transfer and those attending college to prepare for a career. A greater percentage of transfer-than-career-oriented students had taken courses in the humanities, social sciences, sciences, and mathematics or computer sciences. On the other hand, a greater percentage of occupational than transfer program students had completed courses in business and in an occupational or technological area. Nevertheless, just over one-half of the students attending college to prepare for a career had taken seven or more courses in the liberal arts while a substantial percentage of those attending college to prepare for transfer had taken at least one course in business or in an occupational or technological area. In general, the differences in the kind of courses taken by students preparing for transfer and those preparing for careers were reflected in the amount of progress each group felt it had made in various achievement areas.

Reasons students gave for enrolling and for not enrolling in liberal arts courses. There was much variation in the reasons students had for enrolling in different kinds of courses. For example, within the humanities, 36 percent of the students enrolled to fulfill a general education or distribution requirement, 26 percent did so for personal enrichment, and 18 percent enrolled because it was required for their major. These percentages are similar to those reported by students in other areas of the curriculum. "Not required" was the most frequently cited reason for not taking courses in various liberal arts areas. "Not interested in the course" was the second most common reason for not having participated in liberal arts courses.

One in five students who rated their skills in reading or writing as fair or poor cited too much required reading as the principle reason they had for not participating in courses in literature, humanities, philosophy, sciences, social sciences, and history. In all instances, those students who rated one of

their skills as fair or poor were much more likely than those who rated the same skills as good or excellent to say they did not participate in a course in which that ability was required because they were not interested in the subject.

Such data suggest that students tend to avoid courses in which they think they will not do well.

Activities in which students in different types of courses participate.

Students enrolled in composition, humanities, and social sciences courses were more likely than those in other subject areas to have engaged in writing activities during the first seven weeks of the term. However, with the exception of composition, more than half the students in the remaining subject areas had not spent a total of five hours or more writing a paper for their class, developing a bibliography for a class assignment, or asking their instructor for help to improve their writing.

With respect to student-instructor contacts, eight out of ten participants in the survey reported that they received helpful feedback on class assignments. A much smaller percentage of the sample said that they had met their instructor in his or her office, discussed career plans and ambitions, or discussed ideas for a term paper or project.

A high percentage of the students in most of the subject areas noted that during the first seven weeks of the term they had thought about practical applications of class materials, tried to explain the course material to another person, tried to see how facts and figures fit together, worked on an assignment in which they had to incorporate ideas from the course, and related course readings to their personal experiences. Such findings indicated that students are being stimulated to engage in activities that draw upon high-level skills.

Importance of assessing the benefits of academic programs. During the next two decades, community college leaders will be faced with several changes in their environment: (1) a 25 percent decline in the traditional 18 to 22

year old college population; (2) an increase in the competition for high school graduates by four-year colleges and universities, the military, proprietary schools, and business and industry; and (3) efforts by state policy makers to cut costs in higher education through elimination of marginal programs and reduction of duplication among the segments of postsecondary education. These changes have important implications for the future of community college academic degree programs.

Community colleges in most states are likely to face increased competition from other institutions, particularly for full-time academic transfer students. In order for the academic programs to remain competitive, community college educators will have to provide evidence that their programs are as good or better than comparable ones offered by other postsecondary institutions.

Competition for enrollments within community colleges will also intensify during the 1980s. In order to attract sufficient enrollments and resources, liberal arts educators will have to document the value of their courses to students, faculty in the occupational and technological programs, administrators, and college trustees. This can best be achieved by documenting the knowledge and skills students acquire in their courses and by demonstrating the demand for these skills.

Community college academic programs are often evaluated according to the number of degrees conferred and the number of students transferred. This is unfortunate since in a given year, less than five percent of the students enrolled in community colleges obtain an associate degree and transfer to a four-year college or university. Operators of the collegiate programs will need to document the contribution of their courses to students

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in the various college constituency groups, irrespective of whether they obtain associate degrees or not.

Conclusion. One of the primary purposes of this project was to examine the value of community college liberal arts programs. The results of this study showed that a high percentage of students in Washington's community colleges career, transfer, and personal enrichment programs participated in and benefitted from liberal arts courses. Traditional college courses should be maintained in community colleges since they promote the attainment of desired goals of general education such as gaining a broad general education, developing an understanding and enjoyment of art, music, drama, writing clearly and effectively, becoming aware of different points of view, and developing the ability to think analytically and logically.

TABLE 1
COMPARISON OF SAMPLE WITH
STATE FIGURES FOR FALL, 1981

	<u>SAMPLE</u>		<u>STATE</u>
<u>SEX</u>			
MALE	46%		45%
FEMALE	54%		53%
<u>AGE</u>			
17-22	53%	(17-20)	42%
23-29	22%	(21-29)	34%
30 AND OVER	25%		24%
<u>ENROLLMENT STATUS</u>			
PART-TIME (0-9 UNITS)	22%		56%
FULL-TIME (10 OR MORE UNITS)	78%		44%

TABLE 2

STUDENT RATINGS OF THEIR ABILITIES
WASHINGTON (N=6,162)

	<u>EXCELLENT/ GOOD</u>	<u>FAIR/ POOR</u>
READ EFFECTIVELY	81%	19%
APPRECIATE MUSIC	80%	20%
CRITICALLY EXAMINE IDEAS	79%	21%
WRITE EFFECTIVELY	73%	27%
SPEAK EFFECTIVELY	70%	30%
UNDERSTAND CULTURAL HERITAGE	69%	31%
APPRECIATE ART	63%	37%
USE MATHEMATICS TO SOLVE PROBLEMS	61%	39%
APPRECIATE THEATER AND DRAMA	57%	43%
UNDERSTAND DIFFERENT CULTURES	52%	48%
SPEAK IN A LANGUAGE OTHER THAN ENGLISH	17%	83%

TABLE 3

PERCENTAGE OF STUDENTS WHO RATED THEIR SKILLS
AS "GOOD" OR "EXCELLENT" BY
NUMBER OF UNITS COMPLETED

ABILITIES	NUMBER OF QUARTER HOURS COMPLETED				
	0 (N=1,351)	1-15 (N=919)	16-30 (N=763)	31-60 (N=1,500)	61- (N=1,563)
CRITICALLY EXAMINE IDEAS	70%	74%	77%	81%	87%
SPEAK IN A FOREIGN LANGUAGE	14%	16%	17%	18%	18%
APPRECIATE ART	61%	63%	61%	62%	66%
APPRECIATE MUSIC	82%	79%	80%	81%	80%
APPRECIATE THEATER AND DRAMA	54%	59%	54%	56%	61%
UNDERSTAND CULTURAL HERITAGE	65%	67%	69%	73%	73%
USE MATHEMATICS TO SOLVE PROBLEMS	56%	55%	60%	62%	68%
UNDERSTAND DIFFERENT CULTURES	42%	46%	52%	53%	64%
READ EFFECTIVELY	74%	79%	81%	83%	87%
WRITE EFFECTIVELY	68%	70%	69%	75%	80%
EXPRESS MYSELF WHEN SPEAKING	64%	71%	69%	71%	76%

Table 4

Percentage of Students Who Rated Their Skills as "Good" or
"Excellent" by Types of Courses Completed
(N=6,126)

	Critically Examine Ideas	Speak A Foreign Language	Appreciate Art	Appreciate Music	Appreciate Theater and Drama	Learn on Own
<u>Anthropology</u>						
No course	77%	15%	61%	80%	56%	46%
One or more courses	88%	18%	73%	83%	66%	52%
<u>Art History/Appreciation</u>						
No course	76%	15%	58%	80%	55%	45%
One or more courses	85%	19%	78%	84%	64%	53%
<u>Biological/Physical Sciences</u>						
No course	74%	16%	61%	80%	54%	44%
One or more courses	85%	16%	66%	81%	61%	51%
<u>Business</u>						
No course	76%	16%	64%	81%	56%	44%
One or more courses	82%	16%	61%	80%	60%	51%
<u>Cultural Geography</u>						
No course	77%	15%	62%	80%	56%	46%
One or more courses	86%	21%	70%	84%	65%	57%
<u>ESL</u>						
No course	79%	12%	63%	81%	58%	47%
One or more courses	75%	40%	61%	76%	51%	52%
<u>Foreign Language</u>						
No course	77%	11%	61%	80%	55%	46%
One or more courses	84%	34%	68%	81%	64%	53%
<u>History</u>						
No course	75%	15%	60%	80%	54%	45%
One or more courses	85%	18%	67%	82%	63%	51%
<u>Humanities</u>						
No course	73%	15%	59%	80%	52%	43%
One or more courses	84%	17%	67%	81%	63%	51%
<u>Literature</u>						
No course	74%	16%	59%	80%	53%	45%
One or more courses	86%	16%	69%	82%	66%	51%
<u>Math/Computer Sciences</u>						
No course	74%	15%	64%	82%	58%	42%
One or more courses	83%	18%	62%	79%	57%	52%
<u>Music History-Appreciation</u>						
No course	78%	15%	60%	79%	55%	46%
One or more courses	83%	21%	74%	87%	67%	51%
<u>Occupational-Tech.</u>						
No course	75%	17%	62%	81%	57%	44%
One or more courses	85%	14%	64%	80%	58%	52%
<u>Philosophy-Ethics</u>						
No course	76%	15%	61%	80%	55%	46%
One or more courses	88%	18%	69%	82%	66%	51%
<u>Political Science</u>						
No course	77%	15%	62%	81%	56%	46%
One or more courses	86%	17%	64%	78%	62%	51%
<u>Social Science</u>						
No course	73%	15%	61%	81%	54%	44%
One or more courses	84%	16%	64%	80%	60%	50%
<u>Theater/Film History-Appreciation</u>						
No course	78%	15%	61%	80%	54%	46%
One or more courses	86%	18%	76%	87%	80%	53%

Table 4 (cont'd.)

	Speak Effectively	Write Effectively	Become Aware of Different Viewpoints	Develop Sense of Values	Understand Social Issues	Understand Scientific Developments
Anthropology						
No course	18%	22%	40%	32%	19%	18%
One or more courses	25%	31%	49%	38%	31%	30%
Art History/Appreciation						
No course	17%	22%	40%	32%	19%	18%
One or more courses	27%	28%	47%	37%	25%	25%
Biological/Physical Sciences						
No course	16%	21%	38%	32%	18%	14%
One or more courses	23%	27%	46%	35%	24%	27%
Business						
No course	17%	23%	39%	32%	19%	20%
One or more courses	22%	25%	44%	35%	23%	20%
Cultural Geography						
No course	18%	23%	41%	33%	19%	18%
One or more courses	29%	30%	48%	37%	31%	29%
ESL						
No course	18%	23%	42%	32%	20%	20%
One or more courses	24%	25%	40%	38%	24%	20%
Foreign Language						
No course	18%	23%	41%	33%	20%	18%
One or more courses	24%	25%	40%	38%	24%	20%
History						
No course	17%	21%	39%	32%	17%	17%
One or more courses	25%	28%	46%	35%	28%	25%
Humanities						
No course	14%	18%	36%	30%	16%	15%
One or more courses	25%	29%	48%	37%	26%	25%
Literature						
No course	16%	20%	38%	31%	18%	16%
One or more courses	24%	30%	48%	36%	25%	25%
Math/Computer Sciences						
No course	17%	22%	39%	32%	19%	15%
One or more courses	21%	25%	44%	34%	22%	23%
Music						
No course	17%	22%	40%	32%	19%	19%
One or more courses	28%	29%	48%	39%	28%	24%
Occupational-Tech.						
No course	17%	22%	40%	32%	20%	17%
One or more courses	23%	26%	44%	34%	22%	24%
Philosophy-Ethics						
No course	17%	22%	40%	32%	19%	18%
One or more courses	26%	29%	48%	36%	28%	27%
Political Science						
No course	18%	23%	40%	33%	18%	18%
One or more courses	26%	27%	47%	34%	31%	26%
Social Science						
No course	15%	19%	36%	30%	15%	15%
One or more courses	23%	27%	46%	36%	26%	23%
Theater/Film History-Appreciation						
No course	18%	22%	40%	32%	20%	19%
One or more courses	31%	37%	51%	39%	29%	28%

Table 5

Percentage of Students Who Rated Skill As "Good" or
"Excellent" by Number of Courses Completed In a Subject Area
(N=6,126)

<u>Number of Courses</u>	<u>Humanities</u>	<u>Social Sciences</u>	<u>Sciences</u>	<u>Math/ Comp. Sci.</u>	<u>Business</u>	<u>Occupational Technical</u>
<u>Critically Examine Ideas</u>						
0	72%	72%	74%	74%	76%	75%
1	74%	77%	81%	79%	81%	80%
2 or more	83%	83%	88%	85%	83%	87%
<u>Speak Foreign Language</u>						
0	12%	14%	16%	15%	16%	17%
1	14%	14%	15%	15%	17%	15%
2 or more	20%	19%	17%	19%	15%	14%
<u>Appreciate Art</u>						
0	57%	61%	61%	64%	64%	62%
1	57%	61%	63%	64%	62%	64%
2 or more	67%	65%	68%	61%	61%	65%
<u>Appreciate Music</u>						
0	80%	81%	80%	82%	81%	81%
1	74%	79%	80%	79%	80%	79%
2 or more	82%	80%	82%	79%	80%	80%
<u>Understand Cultural Heritage</u>						
0	62%	64%	66%	68%	68%	68%
1	69%	64%	75%	72%	72%	72%
2 or more	74%	75%	73%	71%	71%	71%
<u>Use Math to Solve Problems</u>						
0	60%	60%	58%	50%	58%	57%
1	63%	65%	61%	57%	62%	62%
2 or more	61%	61%	67%	79%	67%	71%
<u>Understand Different Cultures</u>						
0	41%	40%	45%	46%	50%	50%
1	46%	46%	57%	54%	54%	54%
2 or more	60%	61%	62%	58%	54%	55%
<u>Read Effectively</u>						
0	76%	76%	77%	79%	79%	80%
1	79%	78%	85%	83%	81%	79%
2 or more	84%	85%	88%	84%	85%	85%
<u>Write Effectively</u>						
0	67%	67%	69%	71%	71%	72%
1	73%	71%	77%	77%	73%	72%
2 or more	77%	78%	82%	74%	79%	76%
<u>Speak Effectively</u>						
0	66%	66%	67%	69%	68%	70%
1	68%	68%	74%	73%	73%	69%
2 or more	74%	74%	77%	72%	75%	74%
<u>Appreciate Theater</u>						
0	51%	53%	54%	58%	56%	57%
1	49%	52%	57%	58%	59%	57%
2 or more	62%	61%	64%	56%	60%	58%

TABLE 6

IN THINKING ABOUT YOUR EXPERIENCES AT THIS COLLEGE,
HOW MUCH PROGRESS HAVE YOU MADE IN EACH OF THE FOLLOWING AREAS?

N=6,126

	<u>VERY MUCH</u>	<u>SOME</u>	<u>LITTLE/NONE</u>
LEARN ON OWN	47%	41%	11%
AQUIRING BACKGROUND FOR FURTHER EDUCATION IN A PROFESSIONAL FIELD	43%	41%	16%
UNDERSTAND DIFFERENT KINDS OF PEOPLE	42%	41%	17%
UNDERSTAND MYSELF--ABILITIES, INTERESTS, PERSONALITY	41%	41%	19%
BECOME AWARE OF DIFFERENT POINTS OF VIEW	41%	41%	18%
PUT IDEAS TOGETHER TO SEE RELATIONSHIPS	36%	45%	20%
GAIN A BROAD GENERAL EDUCATION	36%	45%	20%
DEVELOP SENSE OF VALUES	33%	39%	28%
THINK CRITICALLY	32%	48%	20%
WRITE EFFECTIVELY	24%	42%	34%
UNDERSTAND SOCIAL ISSUES	21%	42%	37%
UNDERSTAND SOCIAL IMPLICATIONS OF SCIENTIFIC DEVELOPMENTS	20%	34%	47%
SPEAK EFFECTIVELY	19%	43%	38%
DEVELOP UNDERSTANDING AND ENJOYMENT OF ART, MUSIC, DRAMA	12%	17%	71%

TABLE 7

PERCENTAGE OF STUDENTS WHO REPORTED THAT THEY MADE
 VERY MUCH PROGRESS TOWARD ACHIEVING
 DESIRED EDUCATIONAL OBJECTIVES

<u>BENEFIT AREA</u>	<u>NUMBER OF QUARTER HOURS COMPLETED</u>				
	0 (N=1,351)	1-15 (N=919)	16-30 (N=763)	31-60 (N=1,500)	61+ (N=1,563)
BACKGROUND FOR FURTHER EDUCATION	28%	33%	41%	49%	59%
BROAD GENERAL EDUCATION	24%	25%	30%	47%	46%
ENJOYMENT OF ART, MUSIC, DRAMA	10%	9%	12%	14%	16%
SELF UNDERSTANDING	34%	37%	39%	46%	46%
UNDERSTAND OTHERS	40%	39%	39%	46%	43%
THINK CRITICALLY	23%	26%	28%	35%	43%
PUT IDEAS TOGETHER	26%	32%	34%	39%	44%
LEARN ON THEIR OWN	39%	45%	47%	50%	53%
EXPRESS IDEAS EFFECTIVELY IN SPEAKING	11%	16%	19%	23%	25%
EXPRESS IDEAS EFFECTIVELY IN WRITING	19%	19%	22%	27%	29%
BECOME AWARE OF DIFFERENT POINTS OF VIEW	34%	37%	39%	49%	45%
DEVELOP SENSE OF VALUES	28%	31%	32%	38%	35%
UNDERSTAND SOCIAL ISSUES	15%	16%	19%	27%	24%
UNDERSTAND SOCIAL IMPLICATIONS OF SCIENTIFIC DEVELOPMENT	12%	16%	19%	23%	26%

Table 8
 Percentage of Students Who Reported "Very Much" Progress
 By Number of Courses Completed in a Subject Area
 (N=6,126)

<u>Number of Courses</u>	<u>Humanities</u>	<u>Social Sciences</u>	<u>Sciences</u>	<u>Business</u>	<u>Occupational- Technical</u>
<u>Background for further education</u>					
0	35%	36%	38%	39%	36%
1	45%	47%	47%	42%	47%
2 or more	48%	47%	53%	54%	62%
<u>Broad General Education</u>					
0	24%	23%	30%	33%	34%
1	30%	33%	46%	39%	40%
2 or more	44%	45%	44%	42%	39%
<u>Enjoyment of Art, Music, Drama</u>					
0	7%	10%	11%	14%	12%
1	7%	12%	14%	13%	13%
2 or more	17%	14%	14%	9%	12%
<u>Self Understanding</u>					
0	35%	36%	39%	40%	39%
1	41%	40%	42%	39%	40%
2 or more	44%	44%	45%	44%	45%
<u>Understanding Others</u>					
0	39%	40%	42%	42%	42%
1	42%	43%	43%	40%	41%
2 or more	43%	42%	41%	43%	44%
<u>Critical Thinking</u>					
0	24%	25%	27%	30%	28%
1	27%	30%	35%	32%	30%
2 or more	37%	37%	41%	36%	41%
<u>Put Ideas Together</u>					
0	28%	28%	32%	34%	32%
1	36%	37%	40%	35%	37%
2 or more	40%	40%	43%	40%	44%
<u>Learn on Their Own</u>					
0	41%	42%	44%	44%	44%
1	49%	50%	48%	49%	47%
2 or more	51%	50%	53%	52%	55%
<u>Speak Effectively</u>					
0	13%	13%	16%	17%	17%
1	17%	17%	23%	21%	22%
2 or more	23%	24%	24%	23%	24%
<u>Write Effectively</u>					
0	17%	19%	21%	23%	22%
1	21%	21%	28%	24%	25%
2 or more	28%	27%	27%	26%	26%
<u>Become Aware of Different Viewpoints</u>					
0	33%	35%	38%	39%	40%
1	43%	41%	46%	40%	44%
2 or more	46%	46%	45%	46%	44%
<u>Develop Sense of Values</u>					
0	28%	29%	32%	32%	32%
1	34%	35%	35%	32%	33%
2 or more	36%	36%	34%	36%	35%
<u>Understand Social Issues</u>					
0	13%	13%	18%	19%	20%
1	20%	18%	25%	23%	21%
2 or more	25%	27%	23%	23%	22%
<u>Understand Scientific Developments</u>					
0	13%	13%	14%	20%	17%
1	18%	21%	22%	21%	20%
2 or more	24%	24%	30%	19%	25%

Table 9

Percentage of Students Who Reported That They Made
 "Very Much" Progress Toward Achieving Desired Education Objectives
 (N=6,126)

	Background For Further Education	Gains Broad General Education	Understand Art, Music, Theater	Self- Understanding	Understand Others	Critical Thinking
Anthropology						
No course	43%	35%	12%	46%	42%	30%
One or more courses	49%	47%	17%	44%	42%	42%
Art History/Appreciation						
No course	41%	33%	8%	39%	41%	29%
One or more courses	51%	46%	26%	47%	45%	41%
Biological/Physical Sciences						
No course	38%	30%	11%	39%	42%	27%
One or more courses	51%	45%	14%	44%	42%	38%
Business						
No course	39%	33%	14%	40%	42%	30%
One or more courses	50%	41%	11%	42%	42%	34%
Cultural Geography						
No course	43%	35%	12%	40%	41%	30%
One or more courses	51%	46%	16%	46%	46%	42%
ESL						
No course	44%	36%	12%	41%	41%	32%
One or more courses	40%	39%	14%	43%	49%	30%
Foreign Language						
No course	43%	34%	12%	40%	42%	30%
One or more courses	47%	44%	15%	44%	42%	38%
History						
No course	42%	31%	10%	39%	41%	28%
One or more courses	47%	47%	16%	45%	44%	39%
Humanities						
No course	38%	27%	9%	37%	40%	26%
One or more courses	49%	46%	16%	45%	44%	38%
Literature						
No course	39%	31%	10%	38%	41%	27%
One or more courses	51%	46%	16%	45%	44%	39%
Math/Computer Sciences						
No course	36%	30%	13%	39%	43%	28%
One or more courses	50%	42%	12%	42%	41%	36%
Music History-Appreciation						
No course	43%	34%	9%	39%	41%	30%
One or more courses	48%	48%	28%	48%	46%	39%
Occupational						
No course	36%	34%	12%	39%	42%	28%
One or more courses	58%	39%	12%	43%	43%	38%
Philosophy-Ethics						
No course	42%	34%	11%	40%	42%	29%
One or more courses	51%	46%	17%	45%	42%	42%
Political Science						
No course	42%	34%	12%	41%	42%	30%
One or more courses	49%	45%	14%	42%	43%	41%
Social Sciences						
No course	36%	25%	11%	37%	41%	26%
One or more courses	50%	46%	14%	44%	43%	36%
Theater/Film History- Appreciation						
No course	43%	35%	10%	40%	41%	31%
One or more courses	51%	50%	28%	47%	50%	42%

Table 9 (cont'd.)

	Put Ideas Together	Understand Cultural Heritage	Use Math To Solve Problems	Understand Different Cultures	Read Effect- ively	Write Effect- ively	Speak Effect- ively
<u>Anthropology</u>							
No course	34%	68%	62%	48%	80%	72%	70%
One or more courses	45%	79%	61%	73%	89%	84%	80%
<u>Art History/Appreciation</u>							
No course	34%	67%	62%	48%	80%	72%	69%
One or more courses	43%	76%	60%	65%	85%	79%	76%
<u>Biological/Physical Sciences</u>							
No course	32%	66%	58%	45%	77%	69%	67%
One or more courses	42%	74%	65%	60%	87%	80%	76%
<u>Business</u>							
No course	34%	68%	58%	50%	79%	71%	68%
One or more courses	38%	71%	65%	54%	83%	77%	74%
<u>Cultural Geography</u>							
No course	35%	68%	61%	48%	80%	72%	70%
One or more courses	44%	81%	66%	73%	87%	81%	78%
<u>ESL</u>							
No course	36%	69%	61%	51%	82%	75%	72%
One or more courses	36%	74%	63%	56%	73%	66%	65%
<u>Foreign Language</u>							
No course	35%	68%	61%	48%	80%	72%	70%
One or more courses	41%	76%	63%	67%	86%	79%	75%
<u>History</u>							
No course	33%	65%	62%	45%	78%	70%	68%
One or more courses	42%	78%	61%	65%	87%	80%	77%
<u>Humanities</u>							
No course	30%	65%	60%	43%	76%	68%	66%
One or more courses	42%	75%	62%	61%	86%	79%	76%
<u>Literature</u>							
No course	32%	66%	60%	46%	78%	68%	67%
One or more courses	42%	75%	63%	62%	88%	82%	78%
<u>Math/Computer Sciences</u>							
No course	32%	68%	50%	46%	79%	71%	69%
One or more courses	39%	71%	71%	56%	83%	75%	72%
<u>Music History-Appreciation</u>							
No course	35%	68%	62%	49%	80%	73%	69%
One or more courses	40%	75%	60%	62%	85%	78%	79%
<u>Occupational</u>							
No course	32%	68%	57%	50%	80%	72%	70%
One or more courses	42%	71%	68%	55%	83%	75%	73%
<u>Philosophy-Ethics</u>							
No course	34%	67%	61%	48%	80%	72%	69%
One or more courses	44%	78%	63%	67%	87%	81%	79%
<u>Political Science</u>							
No course	34%	68%	62%	48%	80%	72%	69%
One or more courses	45%	78%	61%	66%	86%	80%	78%
<u>Social Sciences</u>							
No course	30%	65%	60%	43%	77%	67%	67%
One or more courses	41%	73%	63%	59%	85%	79%	74%
<u>Theater/Film History-Appreciation</u>							
No course	35%	68%	62%	50%	81%	73%	70%
One or more courses	45%	78%	59%	64%	86%	81%	81%

TABLE 10
 RELATIONSHIP BETWEEN SCORES ON THE BREADTH INDEX
 AND THE PERCENTAGE OF STUDENTS WHO RATED
 THEIR ABILITIES AS GOOD OR EXCELLENT
 (N=3,937)

SKILL AREA	BREADTH INDEX SCORE*			
	1	2	3	4
READ EFFECTIVELY	71%	80%	84%	86%
APPRECIATE MUSIC	76%	81%	81%	82%
CRITICALLY EXAMINE IDEAS	72%	80%	81%	86%
WRITE EFFECTIVELY	58%	72%	77%	79%
SPEAK EFFECTIVELY	59%	72%	71%	76%
UNDERSTAND ONE'S CULTURAL HERITAGE	59%	68%	73%	75%
APPRECIATE ART	57%	63%	60%	67%
USE MATHEMATICS TO SOLVE PROBLEMS	62%	57%	59%	70%
UNDERSTAND DIFFERENT CULTURES	35%	50%	55%	64%
SPEAK IN A LANGUAGE OTHER THAN ENGLISH	16%	18%	15%	19%

* A SCORE OF FOUR ON THE BREADTH INDEX WAS ASSIGNED TO THOSE STUDENTS WHO HAD COMPLETED COURSES IN EACH OF THE FOLLOWING AREAS: HUMANITIES, SCIENCES, SOCIAL SCIENCES, AND MATHEMATICS. STUDENTS WHO HAD TAKEN COURSES IN THREE OF THESE SUBJECT AREAS WERE ASSIGNED A SCORE OF THREE, AND SO ON

TABLE 11
 PERCENTAGE OF STUDENTS WHO HAVE COMPLETED ONE OR MORE
 COURSES IN A SUBJECT AREA BY PRIMARY REASON FOR ATTENDING COLLEGE*
 (N=3,937)

<u>SUBJECT AREA</u>	<u>PREPARE FOR CAREER</u>	<u>PREPARE FOR TRANSFER</u>	<u>GAIN SKILLS NECESSARY TO ADVANCE IN CAREER</u>	<u>PERSONAL ENRICHMENT</u>
HUMANITIES	79%	92%	84%	91%
MATHEMATICS/COMPUTER SCIENCES	73%	79%	76%	74%
SOCIAL SCIENCES	77%	92%	84%	91%
SCIENCES	56%	71%	61%	76%
BUSINESS	63%	53%	84%	68%
OCCUPATIONAL-TECHNOLOGICAL	60%	36%	64%	61%
<u>NUMBER OF LIBERAL ARTS COURSES COMPLETED</u>				
1-6	44%	23%	34%	23%
7 OR MORE	51%	77%	62%	76%
<u>SCORE ON BREADTH INDEX</u>				
4	40%	54%	51%	59%
3	31%	33%	23%	24%
2	16%	10%	15%	10%
1	10%	2%	7%	6%

*ONLY THOSE STUDENTS WHO COMPLETED 16 OR MORE COLLEGE
 UNITS WERE INCLUDED IN THIS ANALYSIS

THE LIBERAL ARTS CATEGORY CONSISTED OF COURSES IN THE
 HUMANITIES, MATHEMATICS/COMPUTER SCIENCES, SOCIAL SCIENCES,
 AND SCIENCES

THE BREADTH INDEX SCORES CORRESPOND TO THE NUMBER OF
 LIBERAL ARTS CATEGORIES IN WHICH STUDENTS COMPLETED A COURSE

TABLE 12

PERCENTAGE OF STUDENTS WHO REPORTED THAT THEY MADE
 VERY MUCH PROGRESS TOWARD ACHIEVING DESIRED
 EDUCATIONAL OBJECTIVES BY PRIMARY REASON FOR ATTENDING COLLEGE

PRIMARY REASON FOR ATTENDING COLLEGE

	<u>PREPARE FOR CAREER (N=1,406)</u>	<u>PREPARE FOR TRANSFER (N=1,287)</u>	<u>ADVANCE IN CAREER (N=572)</u>	<u>PERSONAL ENRICHMENT (N=265)</u>
BACKGROUND FOR FURTHER EDUCATION IN PROFESSIONAL FIELD	49%	41%	49%	29%
LEARN ON THEIR OWN	50%	48%	49%	37%
SELF UNDERSTANDING	43%	42%	40%	36%
UNDERSTAND OTHERS	45%	42%	37%	29%
BECOME AWARE OF DIFFERENT VIEWPOINTS	41%	47%	38%	32%
PUT IDEAS TOGETHER	36%	38%	37%	28%
DEVELOP SENSE OF VALUES	35%	35%	31%	23%
GAIN A BROAD GENERAL EDUCATION	30%	46%	32%	29%
THINK CRITICALLY	31%	36%	34%	30%
WRITE EFFECTIVELY	21%	29%	22%	15%
UNDERSTAND SOCIAL ISSUES	18%	25%	20%	15%
SPEAK EFFECTIVELY	13%	22%	22%	15%
UNDERSTAND SCIENTIFIC DEVELOPMENTS	18%	24%	18%	15%
ENJOYMENT OF ART, MUSIC, DRAMA	10%	15%	9%	17%

TABLE 13
 PERCENTAGE OF STUDENTS WHO RATED SKILL
 AS "GOOD" OR "EXCELLENT" BY PRIMARY REASON
 FOR ATTENDING COLLEGE

	PREPARE FOR CAREER (N=3,258)	PREPARE FOR TRANSFER (N=2,070)	ADVANCE IN CAREER (N=855)	PERSONAL ENRICHMENT (N=451)
READ EFFECTIVELY	81%	83%	80%	82%
APPRECIATE MUSIC	82%	80%	81%	80%
CRITICALLY EXAMINE IDEAS	76%	82%	79%	82%
WRITE EFFECTIVELY	73%	76%	73%	72%
SPEAK EFFECTIVELY	71%	72%	70%	69%
UNDERSTAND CULTURAL HERITAGE	66%	74%	72%	69%
APPRECIATE ART	62%	63%	63%	66%
USE MATHEMATICS TO SOLVE PROBLEMS	60%	64%	65%	55%
APPRECIATE THEATER AND DRAMA	57%	57%	56%	59%
UNDERSTAND DIFFERENT CULTURES	46%	60%	41%	52%
SPEAK IN A LANGUAGE OTHER THAN ENGLISH	13%	20%	15%	13%

TABLE 14

REASONS STUDENTS GAVE FOR NOT TAKING COURSES *

	<u>NOT REQUIRED</u>	<u>NOT INTERESTED</u>	<u>TOO MUCH READING</u>	<u>TOO MUCH WRITING</u>
ART/MUSIC/THEATER	68%	30%	1%	1%
FOREIGN LANGUAGES	63%	31%	4%	1%
LITERATURE/HUMANITIES/PHILOSOPHY	51%	30%	13%	5%
POLITICAL SCIENCE/HISTORY	57%	32%	9%	2%
SCIENCES	54%	31%	12%	3%
MATHEMATICS	49%	46%	5%	1%

* ONLY THOSE STUDENTS WHO HAD COMPLETED 16 OR MORE COLLEGE UNITS WERE INCLUDED IN THIS ANALYSIS

TABLE 15
 REASON STUDENTS GIVE FOR NOT ENROLLING IN COURSES BY
 PRIMARY REASON FOR ATTENDING COLLEGE*

	PREPARE FOR CAREER (N=1,396)	PREPARE FOR TRANSFER (N=1,291)
<u>ART, MUSIC, THEATER</u>		
NOT REQUIRED	73%	69%
NOT INTERESTED	26%	29%
TOO MUCH READING/WRITING	1%	2%
<u>FOREIGN LANGUAGE</u>		
NOT REQUIRED	70%	66%
NOT INTERESTED	26%	29%
TOO MUCH READING/WRITING	4%	5%
<u>LITERATURE/HUMANITIES/PHILOSOPHY</u>		
NOT REQUIRED	60%	31%
NOT INTERESTED	27%	37%
TOO MUCH READING/WRITING	13%	32%
<u>MATHEMATICS</u>		
NOT REQUIRED	60%	34%
NOT INTERESTED	30%	49%
TOO MUCH READING/WRITING	10%	17%
<u>SCIENCES/SOCIAL SCIENCES</u>		
NOT REQUIRED	67%	31%
NOT INTERESTED	23%	40%
TOO MUCH READING/WRITING	10%	29%
<u>POLITICAL SCIENCE/HISTORY</u>		
NOT REQUIRED	65%	49%
NOT INTERESTED	29%	31%
TOO MUCH READING/WRITING	6%	20%

* ONLY THOSE STUDENTS WHO COMPLETED 16 OR MORE COLLEGE
 UNITS WERE INCLUDED IN THIS ANALYSIS

TABLE 16

REASONS STUDENTS GAVE FOR
ENROLLING IN A PARTICULAR COURSE

COURSE IN WHICH STUDENTS WAS ENROLLED

<u>REASONS FOR ENROLLING IN COURSE</u>	<u>SOCIAL SCIENCES (N=808)</u>	<u>HUMANITIES (N=591)</u>	<u>SCIENCES (N=584)</u>	<u>MATH/COMP. SCI. (N=737)</u>	<u>BUSINESS (N=868)</u>	<u>OCCUPATION TECH. (N=664)</u>
GENERAL EDUCATION REQUIREMENT	35%	35%	30%	19%	10%	5%
MAJOR FIELD REQUIREMENT	30%	18%	43%	44%	35%	33%
DEVELOP JOB-RELATED SKILLS	6%	7%	11%	20%	35%	42%
PERSONAL ENRICHMENT	16%	26%	10%	10%	14%	13%
COURSE DESCRIPTION SOUNDED INTERESTING	6%	6%	2%	2%	3%	3%
ENCOURAGED BY COUNSELOR OR FACULTY MEMBER	4%	5%	2%	4%	3%	3%
RECOMMENDED BY ANOTHER STUDENT	3%	2%	2%	<0	1%	1%

TABLE 17
 PERCENTAGE OF STUDENTS WHO PARTICIPATED
 IN VARIOUS COURSE-RELATED ACTIVITIES
 (N=6,162)

WRITING ACTIVITIES

SPENT FIVE HOURS OR MORE WRITING A PAPER FOR THIS CLASS	27%
DEVELOPED A BIBLIOGRAPHY FOR PAPER	25%
ASKED INSTRUCTOR FOR HELP TO IMPROVE WRITING	13%

STUDENT-INSTRUCTOR CONTACTS

RECEIVED HELPFUL FEEDBACK ON ASSIGNMENTS FROM INSTRUCTOR	80%
MET WITH INSTRUCTOR IN OFFICE	35%
DISCUSSED CAREER PLANS WITH INSTRUCTOR	27%
DISCUSSED IDEAS FOR A TERM PAPER OR OTHER CLASS PROJECT WITH MY INSTRUCTOR	25%

ACADEMIC ACTIVITIES

THOUGHT ABOUT PRACTICAL APPLICATIONS OF CLASS MATERIAL	90%
TRIED TO EXPLAIN THE COURSE MATERIAL TO ANOTHER PERSON	79%
TRIED TO SEE HOW DIFFERENT FACTS AND IDEAS FIT TOGETHER	73%
WORKED ON ASSIGNMENT WHERE I INCORPORATED IDEAS FROM COURSE	71%
RELATED COURSE READINGS TO MY PERSONAL EXPERIENCES	61%
THOUGHT ABOUT SOME OF THE POLITICAL, RELIGIOUS, SOCIOLOGICAL, AND/OR ECONOMIC MEANINGS OF SOMETHING I READ	57%

Table 18

Percentage of Students Who Participated in Various Course-Related Activities by Subject Area

	Humanities (N=591)	Social Sciences (N=808)	Sciences (N=584)	Math/ Comp.Sci. (N=737)	Business (N=822)	Occ-Tech (N=667)
Writing Activities						
Spend five hours or more writing a paper for the class	38%	32%	17%	19%	24%	22%
Develop a bibliography for a paper	31%	35%	19%	15%	21%	23%
Asked instructor for help to improve writing	15%	6%	5%	8%	8%	14%
Student-Instructor Contacts						
Received helpful feedback on assignments from instructor	80%	71%	76%	84%	78%	88%
Met with instructor in office	38%	35%	36%	30%	24%	46%
Discussed career plans with instructor	20%	19%	24%	20%	26%	47%
Discussed ideas for a term paper or other class project with my instructor	29%	30%	14%	13%	19%	33%
Academic Activities						
Thought about practical applications of class material	89%	87%	90%	93%	94%	95%
Tried to explain the course material to another person	83%	81%	84%	79%	80%	84%
Tried to see how different facts and ideas fit together	62%	81%	84%	85%	85%	80%
Worked on assignment where I incorporated ideas from course	70%	65%	62%	71%	74%	78%
Related course readings to my personal experience	66%	72%	62%	36%	66%	67%
Thought about some of the political, religious, sociological, and/or economic meanings of something I read	75%	89%	55%	31%	61%	48%

Table 19

Percentage of Students Who Participated in Various Course-Related Activities by Type of Course

	Art History/ Appreciation (N=50)	Foreign Languages (N=191)	History (N=110)	Humanities (N=40)	Literature (N=174)	Philosophy (N=62)
<u>Writing Activities</u>						
Spent five hours or more writing a paper for the class	47%	11%	37%	38%	56%	50%
Developed a bibliography for a paper	46%	10%	40%	40%	38%	44%
Asked instructor for help to improve writing	8%	14%	9%	10%	27%	6%
<u>Student-Instructor Contacts</u>						
Received helpful feedback on assignments from instructor	75%	84%	80%	65%	88%	63%
Met with instructor in office	29%	36%	45%	33%	48%	27%
Discussed career plans with instructor	32%	22%	26%	18%	21%	8%
Discussed ideas for a term paper or other class project with my instructor	33%	7%	37%	60%	45%	27%
<u>Academic Activities</u>						
Thought about practical applications of class material	88%	93%	70%	78%	84%	90%
Tried to explain the course material to another person	82%	76%	76%	85%	82%	92%
Tried to see how different facts and ideas fit together	73%	39%	80%	78%	61%	81%
Worked on assignment where I incorporated ideas from the course	73%	57%	70%	78%	78%	64%
Related course readings to my personal experiences	69%	44%	51%	70%	78%	74%
Thought about some of the political, religious, sociological, and/or economic meanings of something I read	78%	45%	92%	90%	86%	92%

Washington State Board for Community College Education and The Center for the Study of Community Colleges

STUDENT SURVEY

DEAR STUDENT:

Your college, the Center for the Study of Community Colleges, and the State Board for Community College Education are engaged in a three-year project to revitalize the humanities in Washington. This project, sponsored by the National Endowment for the Humanities, involves all 27 Washington colleges and many students, instructors and administrators.

This survey is designed to obtain information about what students gain from their courses. Your responses are confidential and will not reveal your identity in any way. This survey will not become part of your college record. It will, however, help in planning programs and designing courses for students enrolled in community colleges. Please respond as accurately as possible according to the directions given for the various items.

Thank you very much for participation in this important project.

DIRECTIONS

Your responses to this questionnaire will be read by a machine. It is important that you follow a few simple rules:

- Use a pencil - No. 2 or softer. (Do not use ink)
- Make heavy black marks that fill the oval.
- Erase cleanly **any** response you wish to change.
- Make no stray markings of any kind.

Example:

 Wrong

 Wrong

 Wrong

 Right

1. Your instructor will tell you the survey number for this class. Please write the number in the boxes and fill in the corresponding ovals.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Are you:

- Male 46%
- Female 54%

3. How old are you?

- 18 or younger 15%
- 19 - 22 38%
- 23 - 29 22%
- 30 - 39 15%
- 40 - 59 9%
- 60 or older 1%

4. At this or any other college, how many credits have you completed?

- 0 22%
- 1 - 3 3%
- 4 - 15 12%
- 16 - 30 12%
- 31 - 60 24%
- Over 60 25%

5. For how many credits are you enrolled this quarter?

- 22% 0 - 9
- 78% 10 or more

6. What is the primary reason that you are attending college? (Mark only one answer)

- 38% To prepare for a career
- 14% To gain skills necessary for advancement in my career
- 34% To prepare for transfer to a four-year college or university
- 2% To develop basic learning skills (for example, reading, writing, math)
- 3% To obtain a general education
- 7% To satisfy a personal interest

7. How would you rate your ability in each of the following areas? Fill in one oval for each item.

	Excellent	Good	Fair	Poor
a. Critically examine ideas	19	60	21	1
b. Speak in a language other than English	7	10	23	60
c. Appreciate art	23	40	31	7
d. Appreciate music	39	41	16	3
e. Appreciate theater and drama	19	38	33	10
f. Understand my culture and heritage	19	50	27	3
g. Use mathematics to solve problems	18	43	30	9
h. Understand different cultures	11	41	41	7
i. Read effectively	33	48	17	2
j. Write effectively	25	51	23	4
k. Express myself in speaking	21	49	25	4

8. How many college courses have you completed in each of the areas listed below?

	0	1	2 or More
a. Anthropology	86	11	3
b. Art History and/or Appreciation ...	75	15	10
c. Biological/Physical Sciences	56	18	26
d. Business	54	16	30
e. Cultural Geography	86	11	3
f. English as a Second Language ...	84	7	9
g. Foreign Language	78	11	11
h. History	65	19	16
i. Humanities	50	16	34
j. Literature	63	20	17
k. Math/Computer Sciences	45	22	34
l. Music History and/or Appreciation	81	13	6
m. Occupational - Technical'	63	11	26
n. Philosophy - Ethics	78	15	7
o. Political Science	80	14	6
p. Social Sciences (e.g., Economics, Psychology, Sociology)	45	20	35
q. Theater/Film History and/or Appreciation	89	8	3

9. Why did you enroll in this course? (Mark the one most important reason)

- 21 It fulfills a general education or breadth or distribution requirement.
- 32 It is required for my major!
- 20 To develop job-related skills
- 18 Personal enrichment/self-enrichment
- 3 The course description sounded interesting.
- 4 A counselor or faculty member encouraged me to take this course.
- 1 Another student recommended that I take this course.

10. In this class, please indicate whether or not you have done each of the following activities. Please mark one oval for each statement.

In this class I:

	Yes	No
a. Developed a bibliography or set of references for a term paper or other class assignment ...	25	75
b. Tried to see how different facts and figures fit together.	73	27
c. Thought about practical applications of class material	90	10
d. Worked on an assignment where I incorporated ideas from this course	71	29
e. Tried to explain the course material to another person	79	21
f. Met with my instructor in his/her office	35	65
g. Received helpful feedback on class assignments, papers, and tests from my instructor	80	20
h. Discussed my career plans and ambitions with my instructor	27	73
i. Spent at least five hours or more writing a paper for this class	27	73
j. Asked my instructor for help to improve my writing	13	87
k. Discussed ideas for a term paper or other class projects with my instructor	25	75
l. Related course readings to my personal experiences	61	39
m. Thought about some of the political, religious, sociological, and/or economic meanings of something I read	57	43

11. For each of the following areas in which you HAVE NOT taken courses, please mark the one most important reason.

	Not Required For My Program	Courses Do Not Interest Me	Too Much Required Reading	Too Much Required Writing
Art/Music/Theater	68	30	1	1
Foreign Languages	63	31	4	1
Literature/Humanities/Philosophy	51	30	13	5
Mathematics	49	39	5	8
Social/Natural/Biological/Physical Science	54	31	12	3
Political Science/History	57	32	9	2

12. In thinking about your experiences at this college, how much progress have you made in each of the following areas? Please respond to each item.

I have made progress in:

	None	Little	Some	Very Much
a. Acquiring background for further education in some professional field	5	11	41	43
b. Gaining a broad general education	4	15	45	36
c. Developing an understanding and enjoyment of art, music, drama	48	23	17	12
d. Understanding myself, my abilities, interests, and personality	5	14	41	41
e. Understanding and getting along with different kinds of people	5	12	41	42
f. Thinking critically	5	15	48	32
g. Putting ideas together to see relationships, similarities, and differences	5	15	45	36
h. Learning on my own	2	9	41	47
i. Expressing ideas effectively in speaking	12	26	43	19
j. Expressing ideas effectively in writing	12	23	42	24
k. Becoming aware of different points of view	5	13	41	41
l. Developing my sense of values	10	18	39	33
m. Understanding social issues	13	24	42	21
n. Understanding the social implications of scientific developments	21	26	34	20

THANK YOU FOR COMPLETING
THIS SURVEY

