

**ADEQUACY OF PREPARATION FOR HIGHER EDUCATION
AS PERCEIVED BY GRADUATES OF IOWA HIGH SCHOOLS**

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**Higher Education Subcommittee
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Introduction

Education, a cornerstone of our society, is an issue of national concern. The national reports released during 1983 point to the need for reform if we are to regain our preeminence in a global society. Virtually every state in the nation has appointed a task force to study its educational system and make recommendations for improvement. Iowa, a state long renowned for its excellent education system, is no exception.

During the summer of 1983, the Legislative Council, a steering committee of the General Assembly, appointed a 7-member citizen task force to conduct an in-depth study of the state's educational system and make recommendations for improvement. The Excellence in Education Task Force formed six subcommittees, with each given the charge of studying a specific area of education in Iowa. One of these areas of study was higher education.

Purpose and objectives of the study

A major issue confronting the Higher Education Subcommittee was the adequacy of preparation for higher education of Iowa high school graduates. To determine adequacy of preparation, data from a number of sources were needed, including information from graduates of Iowa high schools now enrolled at higher education institutions. The purpose of this study, conducted in the Spring, 1984, was to determine how graduates of Iowa high schools who are

currently pursuing postsecondary education perceived their adequacy of preparation to be at the time of graduation from high school. The objectives of the study were to:

1. Determine perceptions of college students regarding adequacy of preparation for higher education in the six academic competency areas identified as necessary for success by the College Board in its publication, Preparation for College.

2. Determine the number of semesters of coursework completed by college students during high school in various content areas in preparation for postsecondary education and how they compare to the number recommended in A Nation at Risk.

3. Determine the frequency with which the discussion method of instruction was used in high school classes, the frequency with which college students participated in class discussion during high school, and the frequency with which essay examinations were utilized as a method of evaluation in the courses they completed in various content areas.

4. Determine the kinds and extent of writing and speaking activities college students performed during high school.

5. Determine the types and number of educational enrichment programs in which college students participated during high school.

6. Determine the perceptions of college students regarding the type and amount of help received from counselors during high school.

7. Determine the kinds and extent of participation in extra- and co-curricular activities by college students during high school.

8. Determine how college students spent their time during high school.

9. Determine the perceptions of college students about other aspects of their secondary education.

Survey Procedure

The target population was defined as the total number of recent Iowa high school graduates currently enrolled at a selected number of three types of higher education institutions in the state, as well as the total number of Iowa high school graduates selected as National Merit Scholar Semifinalists over the past three years currently pursuing higher education.

Students from three types of institutions were included in the survey in an attempt to gather data from a cross section of the state's high school graduates. The three types were: (1) state universities; (2) baccalaureate-granting private colleges or universities; and (3) public two-year colleges (community colleges). Ten institutions were arbitrarily selected to represent the three types. The population was comprised of students from the following institutions:

1. State Universities
 - a. Iowa State University
 - b. University of Iowa
 - c. University of Northern Iowa
2. Baccalaureate-granting private colleges or universities
 - a. Buena Vista College
 - b. Cornell College
 - c. Drake University
 - d. Grinnell College
3. Public two-year colleges (community colleges)
 - a. Des Moines Area Community College
 - b. Iowa Central Community College
 - c. Kirkwood Community College

The data for the study were obtained through a questionnaire. Resource persons participating in the development of the survey procedures and instrument were members of the Higher Education Subcommittee, personnel from the Department of Public Instruction and Heartland Area Education Agency, and faculty from the University of Iowa College of Education. The portion of the instrument related to academic competencies was replicated from the 1983 Educational Equality project publication, Academic Preparation for College with permission from the College Board. A copy of the survey instrument is included in Appendix A. Personnel from the Legislative Service Bureau distributed the survey instruments and prepared the final report. Personnel from the Data Systems Management Division of Pioneer Hi-Bred International, Inc., coded the responses and performed the statistical analysis.

The procedures followed in selecting the survey sample are described below. Presented first is the process used in selecting the students currently attending the ten Iowa higher education institutions. This is followed by the description of the sampling procedures used in selecting the National Merit Scholar Semifinalists.

The first step in selecting the students attending the ten higher education institutions was to calculate the total number of freshmen, both full- and part-time, enrolled at the ten institutions during the fall semester of the 1983-84 academic year. In order to analyze the data by type of college as well as in the aggregate, the next step in selecting the sample was to group the ten institutional totals according to type of

institution. These combined figures were used to calculate the sample size for each of the three types of institutions. The number of students to be surveyed at each institution was determined by prorating the sample size for each type among the individual institutions, based upon the percent of the total of each type the individual college population comprises.

Once this number was determined, one individual at each institution was asked to serve as a contact person and to assume responsibility for distributing and returning the survey instruments. Each contact person was sent the instruments to be completed by students at his or her institution with a cover letter explaining the purpose of the survey and the procedures to follow. These procedures were designed to ensure that the survey would include a representative sample of recent Iowa high school graduates from a variety of major fields of study. The contact person was asked to have instructors distribute and collect the questionnaires in class and to select those instructors who teach a course that is required of all students at the college and that is typically taken early in the student's college career. This individual was also instructed that only graduates of Iowa high schools were to complete the questionnaire. The contact person at each of the community colleges was further instructed to distribute the questionnaires proportionately between students enrolled in liberal arts and vocational/technical programs. Included in the materials to the contact person was a letter to give to each instructor. This letter, in addition to explaining the purpose of the survey, included the directions for distributing the questionnaires to the students, collecting them,

and returning them to the contact person. Once the surveys were completed, the contact person was instructed to return them to the Legislative Service Bureau. Each contact person was assured that the results from his/her college would remain confidential.

The sample of National Merit Scholar Semifinalists was selected from a list of all the students in Iowa who have attained National Merit Scholar Semifinalist status during the past three years. A letter was mailed to the principal of each school from which each student graduated, with a request to indicate whether the student was currently enrolled at a higher education institution, and if so, to provide the student's current mailing address. From the list provided by the principals, a sample of 175 names was randomly selected and a questionnaire, which included a stamped return envelope, was mailed to each student. No attempt was made to exclude from the sample of National Merit Semifinalists students attending higher education institutions outside the state of Iowa.

A cover letter was attached to each of the 1192 questionnaires that were mailed or distributed to the students included in the survey. This letter included background information regarding the general purpose of the survey, a request for the student to willingly participate in the survey, and assurances of confidentiality regarding responses. Copies of the cover letter sent to both the National Merit Semifinalists, as well as to those attending the 10 higher education institutions are included in Appendix A. A total of 639 surveys was returned

for an overall response rate of 54 percent. Breakdowns by group are shown below:

1. State Universities: 159 surveys returned; response rate 43 percent.

2. Baccalaureate-granting private colleges/universities: 153 surveys returned; response rate 53 percent.

3. Community colleges: 219 surveys returned; response rate 60 percent. Forty-five percent of the surveys were from respondents enrolled in liberal arts/transfer programs, while 55 percent were from respondents enrolled in vocational/technical programs.

4. National Merit Scholar Semifinalists: 108 surveys returned; response rate 61 percent.

The data were analyzed in the aggregate, as well as by the variables of type (state university, baccalaureate-granting private college/university, or community college) and National Merit Semifinalist. Presented in this report are the results of the aggregate analysis, as well as the analysis by the four variables. The main body of the report presents the aggregate data and, under the heading of "Subgroup Comparisons" makes mention of notable differences by type and National Merit Semifinalist. The tabulated responses by type and National Merit Semifinalist are included in Appendix B.

CHARACTERISTICS OF THE RESPONDENTS

Demographic information requested from the college students included sex, race, year of graduation from high school, number of students in graduating class, class rank, high school and college grade point averages, and educational attainment of father and mother. These data are presented in Table 1.

The total number of respondents included a somewhat greater percentage of females (53%) than males (47%). Most (96%) of the respondents were white. Of the remainder, 3 percent were black and the remaining 1 percent were either Hispanic, Native American, or "other".

Over three-fourths of the respondents graduated from high school in 1982 or 1983. One percent graduated in 1984, six percent each in 1981 or 1980, two percent in 1979, and 11 percent in 1978 or before.

Nearly forty percent of the respondents reported that there were between 51 and 200 students in their graduating classes. Another 40 percent reported graduating classes of 300 or more students. Less than 20 percent had 50 or fewer students, while almost 10 percent had between 201 and 300 students in their graduating classes.

Thirty-seven percent of the respondents reported that they ranked in the upper 10 percent of their graduating classes. Nearly one-third indicated that they were in the upper 25 percent, while close to one-fourth were in the upper half. Altogether, only 7 percent of the respondents reported that they graduated in the lower half of their classes.

TABLE 1. CHARACTERISTICS OF THE RESPONDENTS (N = 639)

CHARACTERISTIC	PERCENT	NUMBER RESPONDING
Sex		624
Male	47	
Female	53	
Race		623
White	95.8	
Black	3.0	
Hispanic	0.2	
Native American	0.3	
Other	0.5	
Year Graduated from High School		609
1984	1	
1983	56	
1982	20	
1981	6	
1980	6	
1979	2	
1978 or before	11	
Number of Students in Graduating Class		625
25 or fewer	5	
26 - 50	13	
51 - 100	19	
101 - 200	18	
201 - 300	9	
301 - 400	15	
401 - 500	13	
Over 500	10	
Rank in High School Graduating Class		620
Upper 10 percent	37	
Upper 25 percent	32	
Upper 50 percent	23	
Upper 75 percent	7	

TABLE 1. CHARACTERISTICS OF THE RESPONDENTS (CONTINUED)

CHARACTERISTIC	PERCENT	NUMBER RESPONDING
High School Grade Point Average		623
3.51 - 4.00	36	
3.01 - 3.50	30	
2.51 - 3.00	23	
2.01 - 2.50	8	
1.51 - 2.00	2	
1.00 - 1.50	0.3	
College Grade Point Average		609
3.51 - 4.00	26	
3.01 - 3.50	30	
2.51 - 3.00	24	
2.01 - 2.50	16	
1.51 - 2.00	5	
1.00 - 1.50	0.3	
Maximum Educational Attainment of Father		618
Graduate degree	19	
Graduate study	2	
Bachelor's degree	13	
A. A. degree	2	
Some college, but no degree	12	
Vocational/technical graduate	6	
Vocational/technical study	5	
High school diploma	30	
8th grade	11	
Maximum Educational Attainment of Mother		620
Graduate degree	7	
Graduate study	3	
Bachelor's degree	16	
A. A. degree	4	
Some college, but no degree	13	
Vocational/technical graduate	6	
Vocational/technical study	5	
High school diploma	41	
8th grade	6	

Nearly 90 percent reported that on a 4.00 scale, they had a high school grade point average (GPA) of 2.51 or better. (36% reported a GPA between 3.51 and 4.00; 30% a GPA between 3.01 and 3.50; and 23% a GPA between 2.51 and 3.00.) While 8 percent reported that their high school GPAs were between 2.01 and 2.50, only 2 percent reported a GPA between 1.51 and 2.00. Only 0.3 percent of the total number of respondents had an average grade point of 1.50 or less.

The number of respondents reporting a college GPA of 3.51 or above on a 4.00 scale was not as great as the number reporting a high school GPA in this range. Slightly over one-fourth reported a college GPA between 3.51 and 4.00, three out of ten a GPA between 3.01 and 3.50, and slightly less than one-fourth a GPA between 2.51 and 3.00. Sixteen percent reported a college grade point average that was between 2.01 and 2.50, 5 percent a GPA between 1.51 and 2.00, and 0.3 percent a GPA that was between 1.00 and 1.50.

A high school diploma was the predominant level of education for both the fathers and mothers of the respondents (30% and 41%, respectively). The next highest level of attainment for the fathers was a graduate degree, while for the mothers it was a bachelor's degree. Nearly 20 percent of the respondents reported that their fathers have attained a graduate degree, while 16 percent reported that their mothers have a bachelor's degree. The third highest level of education for the fathers was a bachelor's degree (13%), and for the mothers, it was some college, but no degree (13%). Overall, 59 percent of the respondents reported

that their fathers have pursued some type of postsecondary education, compared to 53% for their mothers.

Subgroup Comparisons

The number of females responding from the private colleges (See Table A, Appendix B) outnumbered the males two to one, while the opposite held true for the National Merit Semifinalists. The respondents from the state universities included a somewhat greater percentage of males (53%) than females (47%), while those from the community colleges included more females (58%) than males (42%).

None of the National Merit Semifinalists or state university students reported that they graduated from high school in 1978 or before. However, seven percent of those attending the private colleges and 22 percent of those at the community colleges indicated that they graduated prior to 1979.

Less than one student in five who was a National Merit Semifinalist graduated in a high school class of 100 or fewer students; none had a graduating class of 25 or fewer students. On the other hand, nearly half of the community college respondents had 100 or fewer students in their graduating classes, while 40 percent of those from the private colleges and 30 percent from the state universities graduated with a class of 100 or less students.

In three of the subgroups, the percentage who reported a college GPA between 3.51 and 4.00 decreased from the percentage who reported a high school GPA in this range. The only subgroup to show an increase was community college students; while 15

percent reported a high school GPA between 3.51 and 4.00, nearly one-fourth reported a college GPA in this range.

A high school diploma was the predominant level of educational attainment for both the fathers and mothers of students attending the state universities (33% and 41%, respectively); private colleges (27% and 33%); and community colleges (41% and 56%). However, a graduate degree was the predominant level for the fathers (45%) and a bachelor's degree for the mothers (32%) of the National Merit Semifinalists.

PERCEIVED ADEQUACY OF PREPARATION IN ACADEMIC COMPETENCY AREAS

The respondents were asked to rate their ability upon graduating from high school to perform each of 48 competencies. These competencies comprised the six academic competency areas that the College Board, in its 1983 publication, Academic Preparation for College identified as necessary for success in college. The competency areas are reading, writing, speaking and listening, mathematics, reasoning, and study habits. The students were asked to rate their ability as "poor", "fair", "good", "very good", or "excellent", using a 1 to 5 scale where a rating of 1 indicated that they perceived that their ability was "poor" and a rating of 5 that it was "excellent". Table 2 presents the responses for each skill in the six academic competency areas.

TABLE 2. ADEQUACY OF PREPARATION IN ACADEMIC COMPETENCY AREAS AS PERCEIVED BY IOWA HIGH SCHOOL GRADUATES (N = 639)

COMPETENCY AREA	POOR (%)	FAIR (%)	GOOD (%)	VERY GOOD (%)	EXCEL- LENT (%)	NUMBER RESPOND- ING
<u>Reading Skills</u>						
Identify and comprehend the main and subordinate ideas in a written work and summarize the ideas in one's own words	3	17	34	32	15	631
Recognize the relationship among main ideas and supporting details	3	14	30	36	18	631
Recognize different purposes and methods of writing and interpret a writer's meaning inferentially as well as literally	6	27	34	25	7	630
Separate personal opinions and assumptions from a writer's	4	13	34	33	16	632
Vary one's reading speed and method according to the situation	8	22	29	26	15	631
Use the features of books and other reference materials	2	11	20	31	36	632
Define unfamiliar words by decoding, using contextual clues or a dictionary	5	14	24	29	28	631
Combination of 7 reading skills	1	11	39	40	9	628

TABLE 2. ADEQUACY OF PREPARATION IN ACADEMIC COMPETENCY AREAS AS PERCEIVED BY IOWA HIGH SCHOOL GRADUATES (CONTINUED)

COMPETENCY AREA	POOR (%)	FAIR (%)	GOOD (%)	VERY GOOD (%)	EXCEL- LENT (%)	NUMBER RESPOND- ING
<u>Writing Skills</u>						
Conceive ideas about a topic	3	14	34	35	15	631
Organize, select, and relate ideas and outline and develop them in organized paragraphs	5	20	33	29	14	631
Write sentences using correct grammar, punctuation and spelling	7	18	25	30	21	630
Adjust one's writing to the subject, purpose, and audience	4	21	40	26	9	631
Improve one's writing by restructuring, re-writing, etc.	6	22	36	26	10	631
Gather information from primary and secondary sources and write a report using this research, quoting, paraphrasing, and summarizing accurately and citing sources properly	5	20	31	30	14	631
Combination of 6 writing skills	1	15	40	34	10	630

TABLE 2. ADEQUACY OF PREPARATION IN ACADEMIC COMPETENCY AREAS AS PERCEIVED BY IOWA HIGH SCHOOL GRADUATES (CONTINUED)

COMPETENCY AREA	POOR (%)	FAIR (%)	GOOD (%)	VERY GOOD (%)	EXCEL- LENT (%)	NUMBER RESPOND- ING
<u>Speaking and Listening</u>						
Engage critically and constructively in the exchange of ideas	4	18	30	32	15	630
Answer and ask questions coherently and concisely	3	19	36	28	13	630
Identify, comprehend, and report accurately main and subordinate ideas in lectures and discussions	4	19	41	28	9	630
Conceive and develop ideas about a topic and present items clearly to a group	6	23	35	29	8	630
Vary one's use of spoken language according to the situation	5	19	33	26	17	630
Combination of 5 speaking and listening skills	3	17	42	30	8	630

TABLE 2. ADEQUACY OF PREPARATION IN ACADEMIC COMPETENCY AREAS AS PERCEIVED BY IOWA HIGH SCHOOL GRADUATES (CONTINUED)

COMPETENCY AREA	POOR (%)	FAIR (%)	GOOD (%)	VERY GOOD (%)	EXCEL- LENT (%)	NUMBER RESPOND- ING
<u>Mathematics</u>						
Perform the computa- tions of addition, subtraction, multi- plication, and divi- sion using numbers, fractions, decimals, and integers	2	9	13	29	47	632
Make and use measure- ments in both tradi- tional and metric units	12	20	22	21	25	632
Use effectively the mathematics of inte- gers, fractions, dec- imals, ratios, pro- portions, percentages, roots, powers, alge- bra, and geometry	10	17	20	24	30	632
Make estimates and approximations	5	16	26	31	22	632
Formulate and solve a problem in mathemat- ical terms	7	20	23	25	25	632
Select and use appro- priate approaches and tools in solving problems	10	23	23	25	19	632
Use the elementary concepts of probabili- ty and statistics	17	25	30	16	12	631
Combination of 7 mathematics skills	4	19	29	31	18	631

TABLE 2. ADEQUACY OF PREPARATION IN ACADEMIC COMPETENCY AREAS AS PERCEIVED BY IOWA HIGH SCHOOL GRADUATES (CONTINUED)

COMPETENCY AREA	POOR (%)	FAIR (%)	GOOD (%)	VERY GOOD (%)	EXCEL-LENT (%)	NUMBER RESPONDING
<u>Reasoning</u>						
Identify and formulate problems and propose and evaluate ways to solve them	2	13	38	32	15	628
Recognize and use inductive and deductive reasoning	4	18	38	28	12	628
Draw reasonable conclusions from information found in various sources	2	9	37	37	16	628
Comprehend, develop, and use concepts and generalizations	2	12	40	32	15	628
Distinguish between fact and opinion	1	7	24	36	32	628
Combination of 5 reasoning skills	1	9	40	38	13	628

TABLE 2. ADEQUACY OF PREPARATION IN ACADEMIC COMPETENCY AREAS AS PERCEIVED BY IOWA HIGH SCHOOL GRADUATES (CONTINUED)

COMPETENCY AREA	POOR (%)	FAIR (%)	GOOD (%)	VERY GOOD (%)	EXCEL- LENT (%)	NUMBER RESPOND- ING
<u>Study Habits</u>						
Set study goals and priorities	13	27	27	23	10	629
Locate and use such external classroom resources as libraries, computers, and interviews	10	22	32	25	12	629
Develop and use general and specialized vocabularies	7	26	34	23	11	627
Understand and follow customary instructions for academic work	4	11	36	33	16	626
Prepare for various types of examinations	9	19	34	26	12	627
Accept constructive criticism and learn from it	3	15	38	34	10	627
Budget one's time effectively	19	26	30	19	7	626
Take adequate notes from lectures and texts	9	19	30	28	14	625
Combination of 8 study skills	2	17	46	29	6	623

The data in Table 2 have been summarized in Tables 3, 4, and 5 to make it easier for the reader to identify those specific competencies in which students perceived themselves most, highly, and least able at the time of graduation from high school. In addition, data regarding the respondents' overall perceived ability in each of the competency areas are presented in Table 6. Table 3 presents the competencies in which the college students perceived themselves as most able.

TABLE 3. ACADEMIC COMPETENCIES IN WHICH COLLEGE STUDENTS RATED THEMSELVES AS MOST ABLE AT TIME OF GRADUATION FROM HIGH SCHOOL (N = 639)

COMPETENCY AREA	COMPETENCY	"EXCELLENT" RESPONSES (%)
Mathematics	Perform computations of addition, subtraction, multiplication, and division	47
Reading	Use features of books and other reference materials	36
Reasoning	Distinguish between fact and opinion	32
Mathematics	Use effectively mathematics of integers, fractions, decimals, ratios, proportions, percentages, roots, powers, algebra, and geometry	30
Reading	Define unfamiliar words by decoding, using contextual clues or a dictionary	28

Nearly one-half of the respondents rated their ability to perform the mathematical functions of addition, subtraction, multiplication, and division as "excellent" upon graduating from high school. More than one-third reported that their ability to use features of books and other reference materials was "excellent". Slightly less than one-third perceived their ability to distinguish between fact and opinion as "excellent." Three out of ten rated their ability to use effectively the mathematics of integers, fractions, decimals, ratios, proportions, percentages, roots, powers, algebra, and geometry as "excellent" at the time of graduation. Finally, somewhat less than thirty percent of the respondents reported that their ability to define unfamiliar words by decoding, using contextual clues, or a dictionary was "excellent".

Table 4 presents the six competencies in which the greatest number of college students rated themselves as highly able at the time of graduation from high school. Seventy-six percent of the college students indicated that their ability to perform the functions of addition, subtraction, multiplication, and division was "very good" or "excellent". Over two-thirds responded with "very good" or "excellent" when asked to rate their ability to distinguish between fact and opinion. Two other competencies in which the college students reported that they were highly able were the ability to use features of books and other reference materials (67%) and the ability to use unfamiliar words by decoding, using contextual clues or the dictionary (57%). Finally, fifty-four percent of the respondents perceived their competence both to use integers, fractions, decimals, ratios,

TABLE 4. ACADEMIC COMPETENCIES IN WHICH COLLEGE STUDENTS RATED THEMSELVES AS HIGHLY ABLE AT TIME OF GRADUATION FROM HIGH SCHOOL (N = 639)

COMPETENCY AREA	COMPETENCY	"EXCELLENT" AND "VERY GOOD" RESPONSES (%)
Mathematics	Perform computations of addition, subtraction, multiplication, and division	76
Reasoning	Distinguish between fact and opinion	68
Reading	Use features of books and other reference materials	67
Reading	Define unfamiliar words by decoding, using contextual clues or a dictionary	57
Mathematics	Use effectively mathematics of integers, fractions, decimals, ratios, proportions, percentages, roots, powers, algebra, and geometry	54
Reading	Recognize relationship among main ideas and supporting details	54

proportions, percentages, roots, powers, algebra, and geometry and to recognize the relationships among main ideas and supporting details as "very good" or "excellent".

Presented in Table 5 are the six competencies in which the college students rated themselves as least able at the time of graduation from high school. Nearly one student in five rated his or her ability to budget time effectively as "poor" at the time of

TABLE 5. ACADEMIC COMPETENCIES IN WHICH COLLEGE STUDENTS RATED THEMSELVES AS LEAST ABLE AT TIME OF GRADUATION FROM HIGH SCHOOL (N = 639)

COMPETENCY AREA	COMPETENCY	"POOR" RESPONSES (%)
Study Habits	Budget time effectively	19
Mathematics	Use elementary concepts of probability and statistics	17
Study Habits	Set study goals	13
Mathematics	Make and use measurements in both traditional and metric units	12
Mathematics	Select and use appropriate approaches and tools in solving problems	10
Mathematics	Use effectively the mathematics of integers, fractions, decimals, ratios, proportions, percentages, roots, powers, algebra, and geometry	10

graduation from high school. Nearly as many (17%) perceived their ability to use the elementary concepts of probability and statistics as "poor". Thirteen percent rated their ability to set study goals, a study habits competency, as "poor". The remaining competencies in which the students indicated they were least able were in the area of mathematics: make and use measurements in both traditional and metric units (12%); use appropriate approaches and tools in solving problems (10%); and use effectively the mathematics of integers, fractions, decimals, ratios, proportions, percentages, roots, powers, algebra, and geometry (10%). It is interesting to note that the latter

competency was also one that received the greatest number of "excellent" responses; while 54 percent of the respondents rated their ability to perform these functions as "very good" or "excellent", one respondent in 10 rated his or her ability to do so as "poor."

Table 6 presents the college students' perceptions of their overall ability to function upon graduation from high school in each of the competency areas.

TABLE 6. COLLEGE STUDENTS PERCEPTIONS OF ADEQUACY OF PREPARATION IN EACH COMPETENCY AREA AT TIME OF GRADUATION FROM HIGH SCHOOL (N = 639)

COMPETENCY AREA	POOR (%)	FAIR (%)	GOOD (%)	VERY GOOD (%)	EXCELLENT (%)
Reading	1	11	39	40	9
Writing	1	15	40	34	10
Speaking/Listening	3	17	42	30	8
Mathematics	4	19	29	31	18
Reasoning	1	9	40	38	13
Study Habits	2	17	46	29	6

The college students perceived themselves as most able in the competency area of mathematics; 18 percent rated their ability in this area as "excellent" at the time of graduation from high school. In descending order, the percentage of "excellent" ratings in the other areas were: reasoning (13%), writing (10%), reading (9%), speaking and listening (8%), and study habits (6%).

When the "very good" and "excellent" responses are combined, the data indicate that the college students rated themselves highly able in reasoning (51%), followed closely by their self-ratings in reading and mathematics (49% each). The next highest competency area in which the respondents rated their ability as "very good" or "excellent" was writing (44%). Slightly less than forty percent rated their ability in the area of speaking and listening as "very good" or "excellent". The competency area receiving the lowest percentage of "very good" or "excellent" responses was study habits (35%). In all the competency areas but one (reasoning, 51%), more than half the respondents rated their adequacy of preparation as less than "very good" or "excellent"--their self-assessments fell in either the "poor", "fair", or "good" categories.

While the percentage of students who judged themselves as poorly prepared for higher education was low in all the academic competency areas, the greatest percentage of "poor" ratings were in the area of mathematics (4%), followed closely by speaking and listening (3%), study habits (2%), and reading, writing, and reasoning (1% each).

Subgroup Comparisons

In all six of the academic competency areas, National Merit Semifinalists were more likely to assess their adequacy of preparation as "excellent" than were the students attending either the state universities, the private colleges, or the community colleges. This was particularly the case in the competency areas of reading, writing, mathematics, and reasoning. Approximately

one-fourth of the National Merit Semifinalists rated themselves as "excellent" in the areas of reading and writing, while over one-third gave themselves "excellent" ratings in reasoning, and nearly one-half gave themselves this assessment in mathematics.

When the "excellent" and "very good" responses were combined, National Merit Semifinalists again had the highest percentage of responses in all six of the competency areas. In the competency area of reading, over 80 percent of the National Merit Semifinalists rated themselves as highly able. While a majority of the private college students (54%) perceived themselves as highly able in this area, 40 percent of the community college and state university students assessed their ability in reading as "excellent" or "very good".

Over two-thirds of the National Merit Semifinalists rated their ability in writing as "very good" or "excellent" at the time of graduation from high school, compared to 46 percent of the private college students, 40 percent of the state university students, and 35 percent of the community college students.

Nearly two-thirds of the National Merit Semifinalists also assessed their adequacy of preparation in speaking and listening as "very good" or "excellent", while only about one-third of those attending the Regents institutions, the private, or the community colleges gave themselves one of these ratings.

In the competency area of mathematics, 86 percent of the National Merit Semifinalists perceived themselves as highly able at the time of graduation from high school, compared to 54 percent of the state university students and 36 percent of both the private and community college students.

Almost 80 percent of the National Merit Semifinalists and 60 percent of the private college students rated their reasoning ability as "very good" or "excellent". Somewhat more than 40 percent of the state university students and somewhat less than 40 percent of the community college students assessed themselves as highly able in reasoning at the time of graduation from high school.

In the area of study habits, over half the National Merit Semifinalists (53%) perceived their ability to be "very good" or "excellent" at the time of graduation from high school, compared to a little over 40 percent of the private college students and a little less than 30 percent of both the state university and community college students.

SEMESTERS OF COURSEWORK COMPLETED IN CONTENT AREAS

The respondents were asked to indicate the number of semesters of coursework they completed in 8 content areas during grades 9 through 12. The areas were: language arts, mathematics, science, social science, foreign language, computer skills, vocational, and arts/music. Their responses are presented in Table 7. In addition to the mean, or average, the median and mode responses are also presented. The median indicates the midpoint of the responses that were given; this statistic takes into account any extremely large or small responses that were given. The mode, or most frequently given response, provides information regarding the number of semesters of coursework that the graduates most often cited that they completed.

TABLE 7. NUMBER OF SEMESTERS OF COURSEWORK COMPLETED IN CONTENT AREAS DURING GRADES 9 THROUGH 12 (N = 639)

CONTENT AREA	MEAN	MEDIAN	MODE	NUMBER RESPONDING
Language Arts	6.7	7	8	628
Mathematics	6.0	6	8	631
Science	5.5	6	4	628
Social Science	5.2	6	6	627
Foreign Language	2.5	2	0	626
Computer Skills	.6	0	0	611
Vocational	2.4	1	0	613
Arts/Music	4.7	4	8	627

The average number of semesters of coursework completed by the respondents in the content area of language arts was 6.7, although the response most frequently given was 8 semesters. In other words, the graduates most frequently reported that they completed four full years of language arts coursework, the same number recommended in the report, A Nation at Risk.

In the content area of mathematics, both the mean and median responses were 6.0. However, the number that was most frequently cited by the respondents was 8, two more than the number recommended in A Nation at Risk.

When asked to report the number of semesters of science courses completed, the average response was 5.5, the median was 6, and the most frequent response was 4, two semesters less than the six recommended in A Nation at Risk.

In the area of social science, although the average number of semesters completed was 5.2, both the median and mode were 6. In other words, the respondents most frequently reported that they completed three full years of social science, the same as recommended in A Nation at Risk.

The mean, median, and mode (2.5, 2.0, and 0, respectively) responses regarding the number of semesters of foreign language coursework completed were all well below the two years recommended for college-bound students in A Nation at Risk.

In the area of computer skills, A Nation at Risk recommended one-half year of coursework. The respondents fell short in this area also; the average number of semesters completed was 0.6, while the median and modal responses were both 0.

In the remaining two areas, the respondents reported, on the

average, the completion of 2.4 semesters of vocational coursework and 4.7 semesters of arts/music coursework. The median numbers for these two areas were 1 and 4, respectively, while the respondents most frequently reported that they had completed no semesters of vocational coursework, compared to 8 semesters of arts/music coursework.

Correlations were calculated to determine the extent of the relationship between the number of semesters of coursework completed by the college students during high school in the language arts content area and their self-assessed competency in reading, writing, and speaking and listening. Correlations were also calculated to determine the relationships between number of semesters of math courses they completed during high school and their perceived competency in the areas of mathematics and reasoning. The results are presented in Table 8.

TABLE 8. RELATIONSHIPS BETWEEN NUMBER OF SEMESTERS OF COURSEWORK COMPLETED BY COLLEGE STUDENTS DURING HIGH SCHOOL AND PERCEIVED COMPETENCE IN CERTAIN ACADEMIC AREAS (N = 639)

COMPETENCY AREA	CONTENT AREA		
	Language	Number Responding	Mathematics Number Responding
Reading	.27**	619	
Writing	.27**	621	
Speaking/listening	.12**	621	
Mathematics			.52** 625
Reasoning			.17** 623

** Significant at the .01 level

Although all the correlations are statistically significant at the .01 level, this may be due to the large sample size. Except for the relationship between the number of semesters of coursework completed in mathematics and the students' self-assessed competency in the area of mathematics (.52), the correlations are not high and appear to have little practical significance. In the case of mathematics, it seems that as students take more mathematics coursework, they perceive themselves to be more proficient in mathematics.

Subgroup Comparisons

The modal, or most frequent, responses made by the respondents in each subgroup were compared regarding the number of semesters of coursework completed in each course content area (See Table C, Appendix B). Differences in five course content areas are worthy of note. One, Iowa high school graduates who are attending the state universities and those who were National Merit Semifinalists most frequently reported that they completed 8 semesters of science courses during high school, twice as many as most frequently reported by respondents attending the private colleges or community colleges.

Two, the most frequently reported number of semesters of mathematics courses completed during high school by the National Merit Semifinalists, as well as by those attending the state universities and the private colleges, was 8. However, those attending the community colleges most frequently reported that they completed five semesters of mathematics coursework.

Three, in the content area of foreign language, National Merit Semifinalists most frequently reported that they completed 4 semesters of foreign language coursework during high school, compared to 0 semesters for those attending the state universities, private, or community colleges.

A fourth significant difference was in the vocational course content area. Respondents attending the community colleges most frequently reported that they completed two semesters of vocational courses during high school. While those who were National Merit Semifinalists most often reported the completion of one semester of vocational coursework, the students attending the Regents institutions and the private colleges most frequently reported that they completed no semesters of coursework of a vocational nature.

Finally, there were differences in the area of arts/music. While students attending the state universities most often responded that they completed no coursework during high school in this area, those attending the private colleges in the state were more likely to have completed 8 semesters of coursework in arts/music. The modal responses of the other two subgroups--those who were National Merit Semifinalists and those attending the community colleges--were 6 and 4, respectively.

TEACHING METHODS

The college students were asked, for each content area in which they completed one or more semesters of coursework during high school, to indicate the frequency with which a discussion format was used in class. The response choices were "always", "often", "sometimes", "little", and "never". Using the same response choices, they were then asked to indicate the frequency with which they participated in class discussion. Finally, again using the same response choices, they were asked to indicate the frequency with which essay examinations were used. The results are presented in Tables 9, 10, and 11.

TABLE 9. FREQUENCY WITH WHICH DISCUSSION FORMAT USED IN CONTENT AREAS (N = 639)

CONTENT AREA	ALWAYS (%)	OFTEN (%)	SOMETIMES (%)	LITTLE (%)	NEVER (%)	NUMBER RESPONDING
Language Arts	26	50	19	4	1	609
Mathematics	17	24	26	25	7	621
Science	18	33	30	16	3	617
Social Science	26	43	22	7	2	603
Foreign Language	40	34	15	8	2	372
Computer Skills	11	21	29	27	13	229
Vocational	15	26	25	21	13	350
Arts/Music	9	17	24	33	17	479

The discussion format appeared to be used most frequently in the content areas of foreign language, language arts, and social

science. Two respondents out of five reported that the discussion format was "always" used in their foreign language classes, while a little over one-fourth reported that it was "always" used in their language arts and social science courses. When the "always" and "often" responses were combined, slightly over three-fourths of those who completed coursework in the area of language arts indicated that the discussion format was used "always" or "often". Slightly less than three-fourths of those who completed foreign language coursework gave one of these responses and nearly seven out of ten reported that the discussion format was "always" or "often" used in their high school social science courses. The frequency with which the discussion format was used in high school mathematics and science courses appeared to vary considerably. Most of the responses, however, fell in the "often", "sometimes", or "little" categories.

The discussion format appeared to be used with the least frequency in the three course content areas of arts/music, computer skills, and vocational. Of those respondents who completed coursework during high school in these areas, half reported that the discussion format was used "little" or "never" in the area of arts/music, while forty percent gave one of these responses regarding the frequency with which it was used in the computer skills content area. A little over one-third reported that the discussion format was used "little" or "never" in their vocational courses.

TABLE 10. FREQUENCY WITH WHICH RESPONDENTS PARTICIPATED IN CLASS DISCUSSION IN CONTENT AREAS (N = 639)

CONTENT AREA	ALWAYS (%)	OFTEN (%)	SOMETIMES (%)	LITTLE (%)	NEVER (%)	NUMBER RESPONDING
Language Arts	16	41	32	10	1	610
Mathematics	11	26	30	25	0	620
Science	12	34	28	21	5	617
Social Science	18	37	29	14	2	604
Foreign Language	28	36	22	10	3	372
Computer Skills	15	27	19	23	15	228
Vocational	19	27	25	16	13	348
Arts/Music	19	20	19	24	18	477

In only three of the content areas did more than half the respondents indicate that they "always" or "often" participated in class discussion: foreign language (64%), language arts (57%), and social science (55%). Nearly half reported that they "always" or "often" participated in discussion in their science and vocational courses (both 46%), while approximately 40 percent gave one of these responses regarding the frequency with which they participated in discussion in their computer skills (42%), arts/music (39%), and mathematics (37%) classes.

The areas in which they were most likely to report that they "never" participated in class discussion were arts/music (18%), computer skills (15%), and vocational (13%) courses.

When the "little" and "never" responses were combined, approximately 40 percent gave one of these responses regarding the frequency with which they participated in class discussion in

arts/music (42%) and computer skills (38%) courses. There were nearly 30 percent who reported little or no participation in discussion in their vocational classes, while one-fourth indicated that they participated little or never in class discussion in their mathematics and science courses.

TABLE 11. FREQUENCY WITH WHICH COLLEGE STUDENTS WROTE ESSAY EXAMINATIONS IN CONTENT AREAS (N = 639)

CONTENT AREA	ALWAYS (%)	OFTEN (%)	SOMETIMES (%)	LITTLE (%)	NEVER (%)	NUMBER RESPONDING
Language Arts	14	41	28	13	4	606
Mathematics	2	4	2	12	79	616
Science	3	12	25	34	25	613
Social Science	8	35	33	18	7	599
Foreign Language	8	15	20	31	27	369
Computer Skills	3	6	10	18	63	229
Vocational	4	10	20	21	45	348
Arts/Music	2	3	10	13	71	479

The college students indicated that they most frequently wrote essay examinations in their language arts and social science courses. Fifty-five percent reported that they "always" or "often" wrote essay examinations in their language arts courses, while 43 percent gave one of these responses regarding their social science courses. Nearly 8 out of 10 and 7 out of 10, respectively, reported that essay examinations were "never" used in their mathematics and arts/music courses. Nearly two-thirds said they were never used in their courses in the area of computer

skills, while 45 percent reported that essay examinations were "never" used in their vocational courses.

The frequency with which essay examinations were used in the content areas of science and foreign language varied considerably. Although the respondents were least apt to respond "always", their responses among the four categories of "often", "sometimes", "little", and "never" were fairly evenly distributed.

WRITING ACTIVITIES PERFORMED DURING HIGH SCHOOL

The college students were asked to indicate the number of times they performed the following four types of writing activities during their four high school years: (1) major research paper; (2) critical essay (i.e., position paper, critical analysis); (3) creative writing (i.e., fiction or poetry); and (4) expository writing (i.e., writing that is essentially giving information, such as journalistic or report writing). The mean, median, and modal responses were computed and are presented in Table 12.

TABLE 12. FREQUENCY WITH WHICH COLLEGE STUDENTS PERFORMED SPECIFIC TYPES OF WRITING ACTIVITIES DURING GRADES 9 THROUGH 12 (N = 639)

WRITING ACTIVITY	MEAN	MEDIAN	MODE	NUMBER RESPONDING
Major research paper	4.1	3	2	533
Critical essay	7.5	5	10	522
Creative writing	13.2	7	10	519
Expository writing	11.3	6	2	516

Creative and expository writing activities were performed, on the average, with the most frequency by the respondents during high school (13.2 and 11.3, respectively). The writing of critical essays was performed somewhat less frequently (7.5), while the writing of research papers was performed with the least frequency (4.1). The median responses followed the same trend; creative writing activities were performed 7 times, followed by

expository writing (6), critical essays (5), and major research papers (3). When the modal, or most frequent, responses are examined, the most frequent responses given regarding the number of critical essay and creative writing activities performed were 10. However, the respondents most frequently reported that they wrote two major research papers and performed two expository writing activities during their four years of high school.

Evaluative Feedback on Writing Activities

The college students, given the response choices of "always", "often", "sometimes", "seldom", or "never", were asked to indicate the frequency with which they received evaluative feedback on their writing performance in these four areas. A response category of "did not perform activity" was also included. Their responses are presented in Table 13.

TABLE 13. FREQUENCY WITH WITH EVALUATIVE FEEDBACK RECEIVED ON WRITING ACTIVITIES PERFORMED DURING GRADES 9 THROUGH 12 (N = 639)

WRITING ACTIVITY	ALWAYS (%)	OFTEN (%)	SOMETIMES (%)	SELDOM (%)	NEVER (%)	DID NOT PERFORM ACTIVITY (%)	NUMBER RESPONDING
Major research paper	58	21	11	4	1	5	533
Critical essay	47	28	11	3	1	10	522
Creative writing	46	29	14	4	2	6	510
Expository writing	42	26	19	5	2	6	516

The college students reported that they did not always receive evaluative feedback on their writing performance. Responses indicating that they "always" received feedback hovered around 50 percent in all four of the writing areas, although students were more likely to indicate that they "always" received feedback on their major research papers (58%) than on their expository writing activities (42%). Nearly eighty percent of the respondents reported that they "always" or "often" received evaluative feedback on major research papers they wrote. Three-fourths reported "always" or "often" receiving feedback on their critical essay or creative writing activities, and over two-thirds reported receiving it on their expository writing activities. For all four of the writing activities, there were approximately 1 in 20 who reported "seldom" or "never" receiving evaluative feedback.

The percentage of students who responded with "did not perform activity" for each of the types of writing activities is worthy of note. Five percent reported that they had never written a major research paper during high school. A slightly greater number reported that they had not performed creative or expository writing activities (6% each). One respondent in ten reported that he or she had never written a critical essay during high school.

Correlations were calculated to examine the relationship between the number of times students performed specific writing activities during high school and their perceived competence in writing. The results are presented in Table 14. Three of the four relationships (critical essays, creative writing, and expository writing) are statistically significant at the .01

TABLE 14. RELATIONSHIP BETWEEN NUMBER OF SPECIFIC WRITING ACTIVITIES PERFORMED DURING HIGH SCHOOL AND STUDENTS' PERCEIVED COMPETENCE IN WRITING

WRITING ACTIVITY	WRITING COMPETENCE	NUMBER RESPONDING
Major research papers	.06	527
Critical essays	.25**	516
Creative writing activities	.13**	504
Expository writing activities	.12**	510

** Significant at the .01 level

level. The significance of these correlations, however, can probably be attributed to the large sample size. The correlations are not high and their practical significance is questionable. In other words, there appears to be little relationship between the number of times a student performed a specific type of writing activity and his or her perceived competence in writing.

FORMAL ORAL PRESENTATIONS MADE DURING HIGH SCHOOL

The respondents were asked about the formal oral presentations they made during their high school years. They were given four types of situations and asked to indicate whether they had given one or more formal oral presentations in each. These included presentations in speech class, classes other than speech class, co- or extracurricular activities in which they participated, and nonschool-related activities in which they participated. They could also indicate if they never gave a formal presentation during high school. The results are presented in Table 15.

TABLE 15. SITUATIONS IN WHICH COLLEGE STUDENTS MADE FORMAL ORAL PRESENTATIONS DURING HIGH SCHOOL (N = 639)

ORAL PRESENTATION SITUATION	NUMBER RESPONDING
Speech class	407
Classes other than speech class	500
Co- or extracurricular activities	267
Nonschool-related activities	215
No formal oral presentations given	34*

* If respondent gave this response, he/she could not check any of the other statements

Few of the survey respondents reported never giving a formal presentation of some type during their high school years. Only 34 of those who responded to this survey item reported that they

never gave a formal presentation during their high school years. Five hundred reported giving at least one formal presentation in classes other than speech class, while 407 indicated that they gave one or more formal presentations during speech class. Two hundred fifteen reported giving presentations in nonschool-related activities in which they participated, while 267 indicated that they gave one or more formal presentations in co- or extracurricular activities in which they participated during their high school years.

EDUCATIONAL ENRICHMENT PROGRAMS

The respondents were asked to indicate whether they participated in any summer camps, institutes, or summer programs during their high school years that were educationally enriching. Almost one-fourth reported that they had. Of these, nearly two-thirds participated in one, and slightly over one fourth participated in two. The number in which the remaining ten percent participated ranged from three to six.

Subgroup Comparisons

National Merit Semifinalists reported the greatest and community college students the least participation in educational enrichment programs during high school. Nearly half (47%) of the National Merit Semifinalists indicated that they participated in one or more enrichment programs, compared to 16 percent of the community college students. Approximately 20 percent of the state university and private college students were involved in one or more educationally enriching programs during high school. The enrichment programs were of various types, although community college students tended toward more participation in enrichment activities of a vocational nature, while National Merit Semifinalists reported more participation in college level courses.

HELP FROM COUNSELORS

The respondents were asked to indicate the amount of help they received from counselors during high school. Their responses are presented in Table 16.

TABLE 16. HELP RECEIVED FROM COUNSELORS DURING HIGH SCHOOL (N = 639)

- 1 = A lot of help; would have been difficult to get along without it
 2 = It was helpful
 3 = Sometimes helpful; would have liked more
 4 = Sometimes helpful; didn't really need it
 5 = Asked for help, but never received any
 6 = Never sought any help

AREAS OF COUNSELOR INVOLVEMENT	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	NUMBER RESPONDING
Selecting school subjects	6	26	21	23	3	21	624
Learning ways to study better	1	7	13	7	5	68	624
Planning education after high school	14	23	28	11	8	17	624
Planning for occupational career	9	15	26	10	5	35	624
Learning more about self	5	9	10	9	3	64	624
Getting along with other people	4	11	5	9	2	69	624
Solving a personal problem	5	9	6	7	3	70	624
Changing courses	10	34	13	9	5	30	624

Solving a personal problem, getting along with other people, learning ways to study better, and learning more about self were all areas in which the college students were likely to report they

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never sought any help from counselors during high school. Seventy percent reported that they never sought help in solving a personal problem, while nearly that many responded that they never sought any help in getting along with other people (69%) and learning ways to study better (68%). Sixty-four percent indicated that they never sought help in learning more about self.

Areas where respondents reported that they received or wanted assistance from counselors included planning education after high school (83%), selecting school subjects (79%), changing courses (70%), and planning for occupational career (65%).

Finally, while the percentage of college students who asked for but did not receive any help from their high school counselors was low for all areas, the area where they reported this as occurring most frequently was in planning education after high school (8%).

Subgroup Comparisons

When the responses were broken down by subgroups (See Table D, Appendix B), National Merit Semifinalists were considerably more likely than the students from the other three subgroups to report that they never sought help from counselors during high school in solving a personal problem (89%), learning ways to study better (89%), and getting along with other people (83%). Learning about self was another area in which National Merit Semifinalists, as well as students attending the state universities were likely to indicate that they never sought help from counselors (78% and 71%, respectively). Students from these two subgroups were also somewhat more likely than those attending

the private of community colleges to respond that they never sought help from counselors in planning for an occupational career (43% and 41%, respectively).

PARTICIPATION IN CO- OR EXTRACURRICULAR ACTIVITIES

The college students were asked to indicate how many years they participated in a number of specified co- or extracurricular activities. For each of these activities, even if they reported they did not participate during high school, they were asked to indicate whether they would participate more, the same, or less if they were in high school today. Their responses are presented in Table 17.

Athletics, student/community service organizations, and music appeared to be the activities with the highest rates of participation. Over 60 percent of the respondents reported that they participated in varsity athletics during one or more of their high school years; nearly 40 percent indicated that they participated all four years. Close to half the students surveyed reported participation of one to four years in student/community service organizations (48%) and vocal music (47%). Intramural athletics and band and/or orchestra attracted another 46% and 43%, respectively, of the students during their high school years.

There were four other activity areas in which about one-third of the college students reported that they participated during high school. These included: student government (38%), student publications (35%), drama club (33%), and department clubs (31%).

There were three activities in which the college students reported low participation during high school. More than 90 percent reported that they did not participate in debate at all during high school. Over three-fourths of the college students did not participate in speech contest and nearly three-fourths

TABLE 17. YEARS OF PARTICIPATION IN CO- AND EXTRACURRICULAR ACTIVITIES AND WHETHER COLLEGE STUDENTS WOULD PARTICIPATE MORE, THE SAME, OR LESS IF ATTENDING HIGH SCHOOL TODAY (N = 639)

ACTIVITY	YEARS PARTICIPATED					TODAY WOULD PARTICIPATE . . .			NUMBER RESPONDING
	0 (%)	1 (%)	2 (%)	3 (%)	4 (%)	MORE (%)	SAME (%)	LESS (%)	
Band/Orchestra	57	7	5	5	26	20	71	9	565
Debate	92	4	2	2	1	27	66	7	532
Department Club	69	8	10	6	7	29	65	6	543
Drama Club	66	10	9	8	6	41	55	4	555
Cheerleading/ Pep Club	72	9	6	5	8	18	72	9	543
Intramural Athletics	54	12	9	7	18	42	54	4	551
Publications	65	16	9	5	5	39	56	5	547
Varsity Athletics	37	9	8	8	38	40	57	3	560
Vocal Music	54	12	9	5	21	28	65	8	562
Student/Community Service Organiza- tions	52	10	8	8	22	40	56	4	559
Speech Contest	77	8	7	3	5	35	60	5	546
Student Gov't	62	16	11	6	5	44	51	5	548

reported that they did not participate in cheerleading or pep club during high school.

There were a number of activities in which the college students indicated that they would participate more if they were attending high school today. Among those most frequently mentioned were student government (44%), intramural athletics

(42%), drama (41%), student/community service organizations (40%), varsity athletics (40%), and publications (39%).

There were also a number of activities in which the respondents indicated that they would participate the same today as they did when they were in high school. These included cheerleading/pep club (72%), band/orchestra (71%), debate (66%), and vocal music and department clubs (both 65%).

The percentage of college students who reported that they would participate less in an activity if they were attending high school today was low for all the areas. However, those in which they were most apt to indicate that they would participate less today were cheerleading/pep club (9%), band/orchestra (9%), and vocal music (8%).

Subgroup Comparisons

In six of the twelve activity areas (See Table E, Appendix B), National Merit Semifinalists reported the highest participation rates during their four years of high school. These areas were band (50%), debate (20%), department clubs (44%), drama (37%), speech contest (40%), and student government (45%). Students attending the private colleges reported the highest participation rates in cheerleading/pep club (38%), publications (46%), varsity athletics (70%), student/community service organizations (61%), and vocal music (52%). Those attending the state universities reported the greatest rate of participation in intramural athletics (56%). In none of the areas did community college students have the highest rates of participation.

In eight of the twelve activity areas, the greatest percentage of college students reporting that they had not participated in an activity during any of their high school years were those from the community colleges. These areas and the percentage of community college students reporting that they never participated were: band (63%), debate (96%), department clubs (63%), publications (72%), varsity athletics (44%), student/community service organizations (65%), speech contest (60%), and student government (55%). There was one other activity area in which community college students were tied with the state university students for the lowest rate of participation. Sixty-eight percent from both these subgroups reported that they never participated in drama during their four years of high school. In the remaining three areas, National Merit Semifinalists had the lowest participation rates. The three areas and the percentage of National Merit Semifinalists who indicated that they never participated during any of their high school years were: cheerleading/pep club (87%), intramural athletics (62%), and vocal music (61%).

TIME SPENT IN ACTIVITIES

The respondents were asked to indicate the typical number of hours per week they spent in specific types of activities during each of their high school years. The types of activities included studying, working, reading, participating in nonschool- and school-related activities, and socializing. Their responses regarding the number of hours per week they spent engaged in each of the activities during each of the four years were combined and the mean, median, and mode calculated. These results are presented in Table 18.

TABLE 18. HOURS PER WEEK SPENT IN ACTIVITIES DURING HIGH SCHOOL
(N = 639)

ACTIVITY	MEAN	MEDIAN	MODE	NUMBER RESPONDING
Studying	8.5	7.3	10	605
Working	9.5	8.0	0	597
Reading				
Magazines	2.4	1.8	1	599
Fiction books	3.1	1.8	0	597
Nonfiction books	1.8	1.0	0	591
Newspapers	2.6	2.0	1	599
Participating in nonschool-related activities	3.3	2.0	0	590
Participating in school-related activities	7.8	6.3	0	603
Socializing	14.5	11.0	10	601

The college students reported that they spent the largest amount of time per week during high school socializing. The

average number of hours per week they spent socializing was 14.5, the median was 11.0, and the mode was 10.

Reading, working, studying, and participating in school-related activities also took up a good portion of the students' time during high school. Overall, the college students reported that they spent an average of 9.9 hours per week reading. Of the four types of reading activities, the respondents indicated that, on the average, they spent the most hours per week reading fiction books (3.1), followed by newspapers (2.6), magazines (2.4), and nonfiction books (1.8). An examination of the median responses indicates that the respondents spent two hours per week reading newspapers, 1.8 hours each reading magazines and fiction books, and 1 hour reading nonfiction books. The modal responses indicate that 1 hour each was spent reading newspapers and magazines and 0 hours reading fiction and nonfiction books.

The college students reported that they worked an average of 9.5 hours per week during high school. While the median number of hours spent working was 8.0, the mode was 0 hours. In other words, a majority of the students reported that they did not work at all during high school.

The respondents reported that they studied an average of 8.5 hours per week. The median number of hours they reported in study time was 7.3, while the number of hours most frequently reported was 10.

The average number of hours per week spent participating in school-related activities was 7.8, the median was 6.3, and the most frequently given response was 0.

The students spent considerably less time per week during

high school participating in nonschool-related activities; the average number of hours spent was 3.3. Both the median and modal responses were 0.

Although the data are not presented, when the responses for each year were examined, in all areas except reading fiction books, the mean, or average, response increased every year during high school. In the case of reading fiction books, the average response decreased somewhat from the freshman to sophomore years and then increased during the junior and senior years. The median responses, however, hardly differed for the four years except in the areas of studying and working. The median number of hours spent studying per week was 6 during the freshman year, 7 during the sophomore, and 8 during the junior and senior years. When asked to report the number of hours per week that they worked during each of their four years of high school, the median response was 0 during the freshman year, 3 during the sophomore, 10 during the junior, and 15 during the senior.

Subgroup Comparisons

When the responses for all four years were broken down by subgroups (See Table F, Appendix B), National Merit Semifinalists reported an average of 9.5 hours studying per week during their four years of high school, followed by 9.1 for those attending private colleges, 8.3 for those at the Regents institutions, and 7.7 for the respondents attending the community colleges. The median response for these four groups was 8.0, 8.0, 7.5, and 6.3, respectively.

The responses of the subgroups varied in the hours spent working during high school. Students attending the community colleges reported that during their four years of high school, they worked an average of 11.7 hours per week. Respondents attending the three state universities reported that they worked an average of 9.5 hours per week; those attending the private colleges, 8.5 hours; and National Merit Semifinalists, 6.2 hours. The differences become somewhat more significant if the hours spent working per week by the students in the four subgroups during the senior year are compared. Although the data by year are not included in this report, students attending the community colleges reported an average work week of 17.3 hours, while those attending the state universities and private colleges reported average work weeks of 14.0 and 12.8, respectively. National Merit Semifinalists reported an average work week of 8.8 hours.

On the average, National Merit Semifinalists reported spending the most hours per week during high school reading (12.2), and community college students reported the least (8.4). For National Merit Semifinalists and those attending the private colleges, the greatest share of their reading hours were spent reading fiction books (5.2 and 3.3 hours, respectively). The reading activities that consumed the greatest number of hours per week of the students attending the state universities were fiction and newspapers (2.5 hours each), while for the community college students, reading magazines comprised the greatest amount of their reading time during high school--2.5 hours per week.

Of the four subgroups, students attending the state universities reported spending the most hours per week during high

school involved in nonschool-related activities (3.9), while those who were National Merit Semifinalists spent the least (2.6). Students attending the community and private colleges reported 3.3 and 3.1 hours, respectively. Those attending private colleges in the state, however, reported the greatest number of hours per week involved in school-related activities (9.0), and community college respondents reported the least (6.5). National Merit Semifinalists reported spending 8.6, while those attending the state universities reported 7.9 hours per week.

Finally, students attending the community colleges reported spending more hours per week during their high school years socializing than did those in the other three groups. While they reported an average of 15.7 hours per week, state university students reported 15.6 and private college students, 13.8. National Merit Semifinalists reported that they socialized an average of 11.7 hours during their four years of high school.

FACTORS AFFECTING PREPARATION FOR COLLEGE

The respondents were asked to indicate what effect each of 15 factors had on their preparation for college. They were instructed to respond by using a scale where a response of "1" indicated that the factor was a significant detriment to their college preparation, a response of "2" that it was somewhat of a detriment, a "3" that it had no effect, a "4" that it was somewhat of a benefit, and a "5", that it was a significant benefit.

The responses of those responding with a "1" or a "2" for each item (significant detriment and somewhat of a detriment) were combined, as were the responses of "4" and "5" (somewhat of a benefit and significant benefit). The combined responses for each of the factors are presented in Table 19.

TABLE 19. FACTORS CITED AS BEING DETRIMENTAL, BENEFICIAL, OR HAVING NO EFFECT ON PREPARATION FOR COLLEGE (= 639)

FACTOR	DETRIMENT (%)	NO EFFECT (%)	BENEFIT (%)	NUMBER RESPONDING
Courses offered in high school	15	10	76	621
Courses taken in high school	11	9	80	621
Quality of teaching	14	12	74	618
Physical facilities	15	29	57	621
Quality of academic counseling	22	43	35	621

TABLE 19. FACTORS CITED AS BEING DETRIMENTAL, BENEFICIAL, OR HAVING NO EFFECT ON PREPARATION FOR COLLEGE (CONT.)

FACTOR	DETRIMENT (%)	NO EFFECT (%)	BENEFIT (%)	NUMBER RESPONDING
Conduciveness of school atmosphere to learning	23	29	48	621
Disciplinary environment	17	47	36	619
Attitudes of peers toward academics	26	32	42	620
Parental support	11	14	75	620
Importance of education in community	10	36	55	620
Extra- or co-curricular activities	9	39	52	620
Work activities	11	47	42	618
Nonschool-related activities	9	52	40	618
Social activities	16	44	41	619
Time spent watching TV	26	65	9	619

Of the 15 factors, there were four cited more frequently as being detrimental to the students' preparation for college. These are presented in Table 20.

TABLE 20. FACTORS MOST FREQUENTLY CITED AS BEING DETRIMENTAL TO PREPARATION FOR COLLEGE (N = 639)

FACTOR	DETRIMENT (%)	NUMBER RESPONDING
Time spent watching TV	26	619
Attitude of peers toward academics	26	620
Conduciveness of school atmosphere to learning	23	621
Quality of academic counseling	22	621

There were also some factors that were cited more often than others as being beneficial to the students' preparation for college. The four that were most frequently mentioned are presented in Table 21.

TABLE 21. FACTORS MOST FREQUENTLY CITED AS BEING BENEFICIAL TO PREPARATION FOR COLLEGE (N = 639)

FACTOR	BENEFIT (%)	NUMBER RESPONDING
Courses taken	80	621
Courses offered	76	621
Parental support	75	620
Quality of teaching	74	618

There were also some factors that the college students reported more frequently than others as having neither a positive nor a negative effect on their preparation for college. Those receiving the highest percentage of "no effect" responses are presented in Table 22.

TABLE 22. FACTORS MOST FREQUENTLY CITED AS HAVING NO EFFECT ON PREPARATION FOR COLLEGE (N = 639)

FACTOR	NO EFFECT (%)	NUMBER RESPONDING
Time spent watching TV	65	619
Nonschool-related activities	52	618
Work activities	47	618
Disciplinary environment	47	619
Social activities	44	619
Quality of academic counseling	43	621

As can be seen, the factors most frequently perceived by the college students as being detrimental to their preparation for college included time spent watching TV, attitude of peers toward academics, conduciveness of the school atmosphere to learning, and quality of the academic counseling. The factors most frequently mentioned as beneficial were courses taken, courses offered, parental support, and quality of teaching. Those factors that were most often reported by the students as having no effect on their preparation for college included time spent watching TV, participation in nonschool-related activities, employment, the disciplinary environment of the school, social activities, and the quality of the academic counseling.

Some factors appeared on more than one list. For example, while over one-fourth of the respondents reported that time spent watching TV was detrimental to their preparation for college, nearly two-thirds believed it had no effect. Likewise, although slightly more than one student in five indicated that the quality

of academic counseling was detrimental to his/her preparation for college, more than two students out of five thought it had no effect.

Subgroup Comparisons

When the responses were broken down by subgroups (See Table G, Appendix B), there were some differences, four of which are of particular note. National Merit Semifinalists were more likely to consider the courses taken in high school, quality of teaching, and parental support as beneficial and less likely to consider them as detrimental to their preparation for college than were the students attending the state universities, the private colleges, or the community colleges. While community college students were no more likely than those attending the state universities or the private colleges to consider these three factors as detrimental to their preparation for colleges, they were less likely to perceive them as beneficial and more likely to consider them as having no effect. Community college students were also more likely than the students from the other three groups to report that their high school's disciplinary environment was a benefit and less likely to indicate that it had no effect or was a detriment to their preparation for college.

INFLUENCE OF HIGH SCHOOL FACTORS--PRESENT OPINION

The respondents were asked to assess their high school years in five areas: (1) the extent to which they were given freedom and responsibility for their own learning; (2) the extent to which they were given unscheduled time in which to choose from a wide variety of activities; (3) the standards (expectations) set by their teachers; (4) the amount of homework they were assigned during high school; and (5) the amount of writing they were required to do in high school. Their responses are presented in Table 23.

TABLE 23. PRESENT OPINIONS OF COLLEGE STUDENTS REGARDING FACTORS IN THEIR HIGH SCHOOL PREPARATION (N = 639)

FACTOR	PERCENT	NUMBER RESPONDING
Freedom and responsibility		626
too much	13	
about right	72	
too little	16	
Unscheduled time		627
Too much	9	
About right	60	
Too little	31	
Standards set by teachers		627
Too high	3	
About right	64	
Too low	33	
Amount of homework		623
Too much	5	
About right	53	
Should have been more	43	
Amount of writing		624
Too much	2	
About right	47	
Should have been more	51	

For the most part, the college students indicated that they were accorded the appropriate amount of freedom and responsibility for learning. More than seven out of ten indicated that the amount of freedom and responsibility was about right. However, there were some who either thought they were given too much (13%) or too little (16%).

Three out of five of the students reported that they were given the right amount of unscheduled time during high school in which to choose from a variety of activities. Slightly over thirty percent thought they were given too little unscheduled time, while slightly less than ten percent thought they were given too much.

While one-third indicated that the standards set by their teachers were too low, 64 percent indicated that they were about right. Only three percent reported that they were too high.

When asked about the amount of homework they were assigned during high school, a little over half thought it was about right. While there were a few (5%) who reported that there was too much homework assigned, over forty percent indicated that there should have been more.

The majority (51%) of the college students indicated that they should have been required to do more writing in high school. While 47 percent reported that the amount required was about right, only two percent thought they were required to do too much.

Subgroup Comparisons

When the responses are broken down by subgroups (See Table H, Appendix B), community college and state university students were

more inclined to report that the standards set by their high school teachers were about right (70% and 69%, respectively) than were the private college students or the National Merit Semifinalists (60% and 52%, respectively). On the other hand, the private college students and the National Merit Semifinalists were more inclined to respond that the standards were too low. Thirty-seven percent of those attending the private colleges and 47 percent of the National Merit Semifinalists indicated that the standards set by their high school teachers were too low, compared to 28 percent of the state university students and 27% of those attending the community colleges.

Over half (51%) of the National Merit Semifinalists reported that they thought there should have been more homework assigned during high school, compared to 45 percent of those attending the state universities, 40 percent attending the private colleges, and 38 percent of those at the community colleges. Community college and private college students were somewhat more inclined to report that there was too much homework assigned during high school (7% and 6%, respectively) than were state university students (3%) or National Merit Semifinalists (2%).

Although the percentage of students who thought too much writing was required during high school was low for each of the subgroups, students attending the community colleges were somewhat more likely than those from the other three groups to think too much was required. Six percent of the community college students reported that too much writing was required, compared to 1 percent of both the state university and private college students and none of the National Merit Semifinalists. While a similar percentage

of students from each of the four subgroups indicated that they thought there should have been more writing required during high school, students attending the state universities tended to be somewhat less likely (49%) and National Merit Semifinalists somewhat more likely (56%) than those attending the private or community colleges (51% each) to think there should have been more writing required during high school.

postsecondary education. However, a high school diploma was the predominant level of education for both the fathers and mothers of the state university (33% and 41%, respectively); private college (27% and 33%); and community college (41% and 56%) students. For the National Merit Semifinalists, a graduate degree was the predominant level for the fathers (45%) and a bachelor's degree for the mothers (32%).

The students were asked to assess their ability upon graduating from high school to perform each of 48 competencies. These competencies comprise the six academic competency areas of reading, writing, speaking and listening, mathematics, reasoning, and study habits identified by the College Board as necessary for success in college. Those academic competencies in which over half the students perceived themselves to be highly able at the time of graduation from high school were the ability to perform computations of addition, subtraction, multiplication, and division (76%); distinguish between fact and opinion (68%); use features of books and other reference materials (67%); define unfamiliar words by decoding, using contextual clues or a dictionary (57%); use effectively the mathematics of integers, fractions, decimals, ratios, proportions, percentages, roots, powers, algebra, and geometry (54%); and recognize relationship among main ideas and supporting details (54%).

The academic competencies in which the college students perceived themselves as least able were the ability to budget time effectively (19%); use elementary concepts of probability and statistics (17%); set study goals (13%); make and use measurements in both traditional and metric units (12%); select and use

SUMMARY AND CONCLUSIONS

The intent of this study was to determine how graduates of Iowa high schools who are currently pursuing postsecondary education perceived their adequacy of preparation to be at the time of graduation from high school.

Data for the study, which took place in the spring of 1984, were gathered through a survey instrument distributed to 1192 college students. Included in the survey were students enrolled at a selected number of three types of higher education institutions in Iowa (state universities, baccalarueate-granting private colleges or universities, and public two-year colleges) and students who were recent Iowa National Merit Semifinalists. A total of 639 instruments were returned for an overall response rate of 54 percent. The data were analyzed in the aggregate, as well as by type of institution and National Merit Semifinalist.

A little over half (53%) the college students were female. Most (96%) were white and nearly nine in ten had graduated from high school after 1979. The majority (55%) reported high school graduating classes of 200 or fewer students and over 90 percent ranked in the upper half of their classes. High school grade point averages (GPA) were somewhat higher than college GPAs; while nearly 9 in 10 reported a high school GPA of 2.51 or better, 8 in 10 reported a college GPA in this range. Community college students were the only group to show an increase from high school to college in the percentage reporting GPAs of 2.51 or above.

The majority of the college students reported that their fathers (59%) and mothers (53%) have pursued some type of

appropriate approaches and tools in solving problems (10%); and use effectively the mathematics of integers, fractions, decimals, ratios, proportions, percentages, roots, powers, algebra, and geometry (10%).

Overall, in only one of the six academic competency areas, reasoning, did a majority (51%) of the students perceive themselves to be highly able at the time of graduation from high school. However, nearly half perceived themselves as highly able in the areas of reading (49%), mathematics (49%), and writing (44%). The competency areas in which they were least likely to consider themselves highly able were speaking and listening and study habits; thirty-eight percent judged themselves to be highly able in the former, while only 35 percent judged themselves highly competent in the latter. In all six of the competency areas, National Merit Semifinalists were the most and community college students the least likely to consider themselves highly able.

The college students were asked about the number of semesters of coursework they completed during high school in a number of academic content areas. Their responses were then compared with the recommendations in A Nation at Risk regarding the number of years of coursework high school students should complete in the six areas of language arts, mathematics, science, social science, foreign language, and computers. In three of the six areas, the number of years of coursework that the college students most frequently reported that they completed during high school met or exceeded the number recommended in A Nation at Risk. The content area in which they exceeded the recommended number was

mathematics; while three years were recommended, the respondents most frequently reported that they completed four years of coursework. The two areas in which the college students met the recommended number of years of study were language arts (4 years) and social science (3 years). The three areas in which they did not meet the recommended number of years of coursework were science, foreign language, and computer skills. While 3 years of science coursework were recommended, the college students most frequently reported that they completed two. Two years of foreign language coursework were recommended, but the students most frequently reported that they took no coursework in this area. Finally, while one-half year of computer coursework was recommended, the most frequent response of the students was 0 years.

National Merit Semifinalists and state university students, however, were more likely to report that they completed four years of science coursework during high school (one more than recommended), while community college and private college students were more likely to report that they completed two years. Community college students were most apt to have completed 2.5 years of mathematics coursework, compared to the four years most frequently reported by the National Merit Semifinalists, the state university, and the private college students. National Merit Semifinalists were also more likely to have met the recommended two years of foreign language coursework than were those attending the state universities, private, or community colleges. Students from the latter three groups most frequently indicated no foreign language coursework during high school.

Another area of focus of the survey was the frequency with which the discussion method of instruction was used in high school classes completed by the college students, the frequency with which they participated in class discussion during high school, and the frequency with which essay examinations were used as a method of evaluation in their courses in various content areas. The respondents reported that the discussion format was used most frequently in their foreign language, language arts, and social science courses. These were also the areas in which they were most likely to report that they participated in class discussion. The discussion format occurred with the least frequency in the arts/music, computer skills, and vocational classes completed by the college students during high school. While these were the three areas in which they were least likely to report that they participated in class discussion, there were two other areas in which they indicated relatively low participation rates--mathematics and science. Essay examinations were most likely to be used in the language arts and social science courses that the students completed during high school and least likely to be used in their mathematics, arts/music, computer, and vocational courses.

The college students were also asked about the kinds and extent of writing and speaking activities they performed during high school. The kinds of writing activities performed most often during high school were creative and expository writing; the students most frequently reported performing each 10 times. Those performed least often were critical essays and major research papers; they most frequently reported that they performed each

twice during high school. Not all students performed each of these four types of writing activities. Approximately 1 in 20 reported never writing a major research paper or performing creative or expository writing activities. One in 10 indicated that he or she never wrote a critical essay during high school. The college students did not always receive evaluative feedback on the writing activities they performed; less than half reported that they always received feedback on their critical essay, creative writing, and expository writing activities, while somewhat more than half indicated that they always received it on the major research papers they wrote. The majority (51%) of the college students thought they should have been required to do more writing during high school.

Nearly all the college students reported making one or more formal oral presentations of some type during their high school years. They most likely made their formal presentations in a classroom situation, most often in classes other than speech class, but also very often in speech class. However, they reported giving formal oral presentations with considerable frequency outside the classroom, as well. There were many students who reported giving presentations in the co- or extracurricular, as well as the nonschool-related activities in which they participated during high school.

Educational enrichment programs, such as summer camps, institutes, or summer programs, were a part of some of the college students' high school experiences. Approximately one in four reported participation in one or more enrichment programs.

National Merit Semifinalists were more likely, and community college students less likely, to have participated in such a program than were the students attending either the state universities or the private colleges.

Another area of focus of the study was the amount of help received from counselors during high school. The college students were most likely to have sought or wanted assistance from their high school counselors in resolving academic or vocational concerns and least likely to have sought or wanted it to resolve personal concerns. Areas where the respondents most frequently reported that they received or desired assistance from their high school counselors included planning education after high school (83%), selecting school subjects (79%), changing courses (70%), and planning for occupational career (65%). Areas in which they frequently reported that they never sought any help from their counselors were solving a personal problem (70%), getting along with other people (69%), learning ways to study better (68%), and learning more about self (64%).

The college students were asked about their participation in co- and extracurricular activities during high school and about whether they would participate more, the same, or less if they were attending high school today. The types of activities in which they were most likely to have participated one or more years during high school were athletics, both varsity (63%) and intramural (46%); student/community service organizations (48%); and music, both vocal (47%) and band/orchestra (43%). Activity areas in which they were somewhat less likely to have participated were student government (38%), student publications (35%), drama

(33%), and department clubs (31%). They were least likely to have participated in debate, speech contest, and cheerleading or pep club; 92, 77, and 72 percent, respectively, reported that they did not participate at all in these activities during high school. National Merit Semifinalists were more likely to have the highest and community college students the lowest rates of participation in co- or extracurricular activities during high school.

The types of activities in which the college students indicated they would be most likely to participate more if they were going to high school today included student government (44%), intramural athletics (42%), drama (41%), student/community service organizations (40%), varsity athletics (40%), and student publications (39%).

The college students were also asked about how they spent their time in high school. Socializing took up the greatest number of hours per week of their time (an average of 14.5 hours), but reading (9.9), working (9.5), studying (8.5), and participating in school-related activities (7.8) also took up a good share of their time. Participation in nonschool-related activities took up the least amount of their time, an average of 3.3 hours per week. They worked more hours during their junior and senior years than during their first two years of high school. On the average, National Merit Semifinalists spent the most hours per week studying (9.5) and community college students spent the least (7.7). Conversely, community college students spent the most hours per week working and National Merit Semifinalists the least. On the average, community college students worked nearly

twice as many hours per week as did the National Merit Semifinalists--the average for the community college students over all four years was 11.7 hours per week, compared to 6.2 for the National Merit Semifinalists. During their senior years, however, the average work week of the community college students was 17.3, while for the National Merit Semifinalists it was 8.8.

The study also sought to determine those factors college students perceived to be detrimental to their preparation for college, as well as those which they considered to be beneficial or to have no effect. Those they most frequently perceived to be detrimental included time spent watching TV (26%), attitude of peers toward academics (26%), conduciveness of school atmosphere to learning (23%), and quality of academic counseling (22%). Those most frequently cited as beneficial to their preparation included courses taken (80%), courses offered (76%), parental support (75%), and quality of teaching (74%). The factors most frequently mentioned as having no effect on their preparation for college were time spent watching TV (65%), participation in nonschool-related activities (52%), employment (47%), disciplinary environment of the school (47%), social activities (44%), and quality of academic counseling (43%).

The final area of the survey asked the college students to assess the influence of some other high school factors related to their preparation for college. The majority thought they were accorded the appropriate amount of freedom and responsibility for their own learning, that they were given the right amount of unscheduled time in which to choose from a wide variety of activities, that the standards, or expectations, set by their

teachers were about right, and that they were assigned about the right amount of homework. There were, however, about one-third who thought they were either given too little unscheduled time or that the standards set by their teachers were too low, and over forty percent who thought they should have been assigned more homework during high school.

In conclusion, the college students perceived themselves most competent at the time of graduation from high school in their ability in reasoning and least competent in speaking and listening and study habits. However, learning ways to study better was one of the areas in which they were least likely to have sought or wanted assistance from their high school counselors.

For the most part, the number of years of coursework completed by the college students during high school approximated that recommended in A Nation At Risk. The two major exceptions were in the content areas of computers and foreign language.

The discussion method of instruction did not appear to be used extensively in the courses the college students completed during high school. Courses in which it was most apt to have been used and in which they were most likely to have participated in class discussion were foreign language, language arts, and social science. Essay examinations were utilized as a method of evaluation most often in their language arts and social science courses.

The amount of writing required of the students during high school was not as great as they thought it should have been. In addition, for those writing activities that they did perform,

there were only about half who reported that they always received evaluative feedback on their performance.

Assistance from high school counselors was most sought or desired to resolve career or academic, rather than personal, concerns.

Participation in co- or extracurricular activities by college students during their high school years was greatest in athletics, student/community service organizations, and music; it was least in debate, speech contest, and cheerleading or pep club. If they had it to do over again, they would participate more in student government, drama, intramural athletics, student/community service organizations, student publications, and varsity athletics.

Socializing consumed the greatest number of hours per week of the college students during high school, but many hours of their week were also taken up in reading, working, studying, and participating in school-related activities.

Coursework, both that offered and that taken, as well as support of parents and quality of teaching, were the factors most often cited by the college students as beneficial to their preparation for college. Those most frequently mentioned as detrimental were time spent watching TV, attitude of peers toward academics, conduciveness of school atmosphere to learning, and quality of academic counseling.

Finally, many of the students thought that they should have been required to do more homework during high school. There were also a sizable number who thought they were given too little time in which to choose from a variety of activities and that the expectations of their teachers were too low.

APPENDIX A
Survey Instrument and Cover Letters

GRADUATE FOLLOW-UP SURVEY

SCHOOL CODE _____

INSTRUCTIONS: Please read each of the following statements which were designed to seek your input about the adequacy of your preparation for college. Since most of your responses to this survey will be tabulated by computer, most of your responses will be in the form of a number or a check mark.

1. LISTED BELOW ARE SOME COURSE CONTENT AREAS PROVIDED IN HIGH SCHOOLS. PLEASE INDICATE HOW MANY SEMESTERS OF COURSE WORK YOU COMPLETED IN EACH DURING GRADES 9-12. IF YOU DID NOT COMPLETE ANY COURSES IN A CONTENT AREA, PLACE A "0" IN THE BLANK.

LANGUAGE ARTS	MATHE- MATICS	SCIENCE	SOCIAL SCIENCE	FOREIGN LANGUAGE	COMPUTER SKILLS	VOCA- TIONAL	ARTS & MUSIC
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*EXCLUDE COURSES IN COMPUTER SKILLS IN THE MATHEMATICS & SCIENCE AREAS

A. Total number of semesters of course work in content area.

FOR EACH CONTENT AREA IN WHICH YOU COMPLETED ONE OR MORE SEMESTERS OF COURSEWORK, COMPLETE ROWS B, C, AND D. USE THE FOLLOWING SCALE TO COMPLETE THE THREE ROWS.

1 = ALWAYS 2 = OFTEN 3 = SOMETIMES 4 = LITTLE 5 = NEVER

LANGUAGE ARTS	MATHE- MATICS	SCIENCE	SOCIAL SCIENCE	FOREIGN LANGUAGE	COMPUTER SKILLS	VOCA- TIONAL	ARTS & MUSIC
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B. Frequency with which discussion format used.

C. Frequency with which you participated in discussion.

D. Frequency with which you wrote essay examinations in content area.

2. WE ARE INTERESTED IN KNOWING ABOUT THE KINDS OF WRITING ACTIVITIES YOU PERFORMED DURING GRADES 9-12.

WRITING ACTIVITY	APPROXIMATE NUMBER OF TIMES PERFORMED DURING HIGH SCHOOL	OVERALL FREQUENCY WITH WHICH YOU RECEIVED EVALUATIVE FEEDBACK ON YOUR WRITING PERFORMANCE CHECK ONLY ONE
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		ALWAYS	OFTEN	SOMETIMES	SELDOM	NEVER	DID NOT PERFORM ACTIVITY
A. Major research paper							
B. Critical essay (i.e., position paper, critical analysis)							
C. Creative writing (i.e., fiction or poetry)							
D. Expository writing (writing that is essentially giving information, such as journalistic or report writing)							

3. CHECK EACH OF THE FOLLOWING STATEMENTS REGARDING FORMAL ORAL PRESENTATIONS WHICH APPLIES TO YOU. (CHECK ALL THAT APPLY)

- I never gave a formal oral presentation in any class during high school.
- I gave one or more formal oral presentations in speech class during high school.
- I gave one or more formal oral presentations in classes other than speech class during high school.
- I gave one or more formal oral presentations in the co- or extra- curricular activities I participated in during high school.
- I gave one or more formal oral presentations in the nonschool related activities I participated in during high school.

4. DID YOU PARTICIPATE IN ANY SUMMER CAMPS, INSTITUTES, OR SUPPLEMENTARY PROGRAMS DURING YOUR HIGH SCHOOL YEARS THAT WERE RELATED TO EDUCATIONAL ENRICHMENT?

- No
- Yes (list) _____

5. PRESENTED BELOW ARE SEVERAL EXTRA- OR CO- CURRICULAR ACTIVITIES IN WHICH YOU MIGHT HAVE PARTICIPATED DURING YOUR HIGH SCHOOL YEARS. PLEASE INDICATE IN COLUMN 1 HOW MANY YEARS YOU PARTICIPATED IN EACH ACTIVITY. COMPLETE COLUMN 2 FOR EACH ACTIVITY, EVEN IF YOU INDICATED IN COLUMN 1 THAT YOU DID NOT PARTICIPATE IN IT IN HIGH SCHOOL.

COLUMN 1 INDICATE NUMBER OF YEARS YOU PARTICIPATED WHILE IN HIGH SCHOOL (0-4)	ACTIVITY	COLUMN 2 IF YOU WERE GOING TO HIGH SCHOOL TODAY, WOULD YOU PARTICIPATE IN THAT ACTIVITY...		
		MORE	SAME	LESS
	Band/Orchestra			
	Debate Club			
	Department Club (i.e., French or Science Club)			
	Drama Club			
	Cheerleading/Pep Club			
	Intramural Athletics			
	School/Community Service Organizations			
	Speech Contest			
	Student Government			
	Student Publications			
	Varsity Athletics			
	Vocal Music			

6. PLEASE INDICATE THE TYPICAL NUMBER OF HOURS PER WEEK YOU SPENT INVOLVED IN THE FOLLOWING ACTIVITIES DURING EACH OF YOUR HIGH SCHOOL YEARS. ROUND OFF YOUR RESPONSE TO THE NEAREST HALF HOUR. IF YOU DID NOT SPEND ANY TIME IN AN ACTIVITY, PLACE A "0" ON THE BLANK.

	HOURS PER WEEK			
	FRESHMAN	SOPHOMORE	JUNIOR	SENIOR
Studying				
Working				
Leisure Reading: Magazines				
Fiction Books				
Nonfiction Books				
Newspapers				
Participating in nonschool-related organizations/activities				
Participating in school-related organizations/activities				
Socializing (i.e., talking, spending time with friends)				

7. THE COLLEGE BOARD HAS IDENTIFIED WHAT STUDENTS NEED TO BE ABLE TO DO IN SIX ACADEMIC COMPETENCY AREAS TO BE ACADEMICALLY PREPARED FOR COLLEGE. WE WOULD LIKE TO KNOW HOW ADEQUATELY PREPARED YOU THINK YOU WERE IN THESE AREAS. USING THE SCALE BELOW, RATE YOUR ABILITY UPON GRADUATING FROM HIGH SCHOOL TO DO EACH OF THE ITEMS LISTED UNDER THE SIX AREAS. *

1 = POOR 2 = FAIR 3 = GOOD 4 = VERY GOOD 5 = EXCELLENT

A. Reading Skills

- _____ Identify and comprehend the main and subordinate ideas in a written work and summarize the ideas in one's own words
- _____ Recognize the relationship among main ideas and supporting details
- _____ Recognize different purposes and methods of writing and interpret a writer's meaning inferentially as well as literally
- _____ Separate personal opinions and assumptions from a writer's
- _____ Vary one's reading speed and method according to the situation
- _____ Use the features of books and other reference materials (i.e., table of contents, index, glossary, etc.)
- _____ Define unfamiliar words by decoding, using contextual clues or a dictionary

B. Writing Skills

- _____ Conceive ideas about a topic
- _____ Organize, select, and relate ideas and outline and develop them in organized paragraphs
- _____ Write sentences using correct grammar, punctuation and spelling
- _____ Adjust one's writing to the subject, purpose, and audience
- _____ Improve one's own writing by restructuring, rewriting, etc.
- _____ Gather information from primary and secondary sources and write a report using this research, quoting, paraphrasing, and summarizing accurately and citing sources properly.

C. Speaking and Listening

- _____ Engage critically and constructively in the exchange of ideas
- _____ Answer and ask questions coherently and concisely
- _____ Identify, comprehend, and report accurately main and subordinate ideas in lectures and discussions
- _____ Conceive and develop ideas about a topic and present items clearly to a group
- _____ Vary one's use of spoken language according to the situation

D. Mathematics

- _____ Perform the computations of addition, subtraction, multiplication, and division using numbers, fractions, decimals, and integers
- _____ Make and use measurements in both traditional and metric units
- _____ Use effectively the mathematics of integers, fractions, decimals, ratios, proportions, percentages, roots, powers, algebra, and geometry
- _____ Make estimates and approximations
- _____ Formulate and solve a problem in mathematical terms
- _____ Select and use appropriate approaches and tools in solving problems
- _____ Use the elementary concepts of probability and statistics

E. Reasoning

- _____ Identify and formulate problems and propose and evaluate ways to solve them
- _____ Recognize and use inductive and deductive reasoning
- _____ Draw reasonable conclusions from information found in various sources
- _____ Comprehend, develop, and use concepts and generalizations
- _____ Distinguish between fact and opinion

1 = POOR 2 = FAIR 3 = GOOD 4 = VERY GOOD 5 = EXCELLENT

F. Study Habits

- _____ *Set study goals and priorities*
- _____ *Locate and use such external classroom resources as libraries, computers, and interviews*
- _____ *Develop and use general and specialized vocabularies*
- _____ *Understand and follow customary instructions for academic work*
- _____ *Prepare for various types of examinations*
- _____ *Accept constructive criticism and learn from it*
- _____ *Budget one's time effectively*
- _____ *Take adequate notes from lectures and texts*

8. HERE ARE SOME AREAS IN WHICH COUNSELORS ARE INVOLVED. USING THE SCALE BELOW, PLEASE ANSWER FOR EACH OF THE AREAS THE AMOUNT OF HELP YOU RECEIVED DURING HIGH SCHOOL. PLACE THE NUMBER ASSOCIATED WITH YOUR CHOICE IN THE BLANK SPACES.

1. A LOT OF HELP; IT WOULD HAVE BEEN DIFFICULT TO GET ALONG WITHOUT IT
2. IT WAS HELPFUL
3. SOMETIMES HELPFUL, BUT I WOULD HAVE LIKED MORE
4. SOMETIMES HELPFUL, BUT I REALLY DIDN'T NEED IT
5. I ASKED FOR HELP, BUT NEVER RECEIVED ANY
6. I NEVER SOUGHT ANY HELP

- _____ *Selecting school subjects*
- * _____ *Learning ways to study better*
- _____ *Planning education after high school*
- _____ *Planning for occupational career*
- _____ *Learning more about myself*
- _____ *Getting along with other people*
- _____ *Solving a personal problem*
- _____ *Changing courses*

9. USING THE SCALE BELOW, INDICATE THE EFFECT YOU BELIEVE EACH OF THE FOLLOWING HAD DURING HIGH SCHOOL IN YOUR PREPARATION FOR COLLEGE.

1. IT WAS A SIGNIFICANT DETRIMENT TO MY COLLEGE PREPARATION
2. IT WAS SOMEWHAT OF A DETRIMENT TO MY COLLEGE PREPARATION
3. IT HAD NO EFFECT ON MY PREPARATION
4. IT WAS SOMEWHAT OF A BENEFIT TO MY COLLEGE PREPARATION
5. IT WAS A SIGNIFICANT BENEFIT TO MY COLLEGE PREPARATION

- _____ *Courses offered in your high school*
- _____ *Courses you took in high school*
- _____ *Quality of teaching*
- _____ *Physical facilities (including library)*
- _____ *Quality of academic counseling*
- _____ *Conduciveness of school atmosphere to learning*
- _____ *Disciplinary environment*
- _____ *Attitudes of peers toward academics*
- _____ *Parental support*
- _____ *Importance of education in community*
- _____ *Extra- or co-curricular activities*
- _____ *Work activities*
- _____ *Nonschool-related activities*
- _____ *Social activities*
- _____ *Time spent watching TV*

70. THESE QUESTIONS CONCERN YOUR PRESENT OPINION ABOUT HIGH SCHOOL. THEY COVER VARIOUS AREAS, MOSTLY ABOUT HOW IT WAS IN HIGH SCHOOL AND HOW YOU SEE IT NOW. (CHECK ONE RESPONSE FOR EACH QUESTION)

A. To what extent were students given freedom and responsibility for their own learning (selection of courses, unsupervised study, long-range assignments, etc.)? **CHECK ONLY ONE**

- There was too much freedom
- There was about the right amount of freedom
- There was too little freedom, much regimentation

B. To what extent were students given unscheduled time in which to choose from a wide variety of activities (using the library, leisure-time pursuits, consulting with teachers, socializing with other students, etc.)? **CHECK ONLY ONE**

- There was too much unscheduled time
- There was about the right amount of unscheduled time
- There was too little unscheduled time

C. As you think back about your classes, how would you describe the standards (expectations) set by your teachers.? **CHECK ONLY ONE**

- They were too high
- They were about right
- They were too low

D. As you think back, how would you describe the amount of homework you had during high school? **CHECK ONLY ONE**

- There was too much
- There was about the right amount
- There should have been more

E. How would you describe the amount of writing you were required to do in high school? **CHECK ONLY ONE**

- There was too much
- There was about the right amount
- There should have been more

PLEASE ANSWER THE FOLLOWING QUESTIONS BY PLACING A CHECK MARK NEXT TO THE APPROPRIATE ANSWER. **CHECK ONLY ONE**

1. Male Female

2. White Black Hispanic Native American Other _____

3. WHAT YEAR DID YOU GRADUATE FROM HIGH SCHOOL? 19 _____

4. HOW MANY STUDENTS WERE IN YOUR GRADUATING CLASS?

- | | | |
|--|------------------------------------|--|
| <input type="checkbox"/> Fewer than 25 | <input type="checkbox"/> 101 - 200 | <input type="checkbox"/> 404 - 500 |
| <input type="checkbox"/> 26 - 50 | <input type="checkbox"/> 201 - 300 | <input type="checkbox"/> more than 500 |
| <input type="checkbox"/> 51 - 100 | <input type="checkbox"/> 301 - 400 | |

5. WHERE DID YOU RANK IN YOUR HIGH SCHOOL GRADUATING CLASS?

- Upper 10% Upper 25% Upper 50% Upper 75%

6. ON A 4.00 SCALE, WHAT WAS YOUR HIGH SCHOOL GRADE POINT AVERAGE?

- | | | |
|--------------------------------------|--------------------------------------|--------------------------------------|
| <input type="checkbox"/> 3.51 - 4.00 | <input type="checkbox"/> 2.51 - 3.00 | <input type="checkbox"/> 1.51 - 2.00 |
| <input type="checkbox"/> 3.01 - 3.50 | <input type="checkbox"/> 2.01 - 2.50 | <input type="checkbox"/> 1.00 - 1.50 |

7. WHAT TYPE OF HIGHER EDUCATION INSTITUTION/PROGRAM ARE YOU ATTENDING?

- | | |
|--|---|
| <input type="checkbox"/> Community college liberal arts/transfer | <input type="checkbox"/> Private liberal arts college |
| <input type="checkbox"/> Community college vocational technical | <input type="checkbox"/> State University |

18. ON A 4.00 SCALE, WHAT IS YOUR COLLEGE GRADE POINT AVERAGE? CHECK ONLY ONE

_____ 3.51 - 4.00

_____ 2.51 - 3.00

_____ 1.51 - 2.00

_____ 3.01 - 3.50

_____ 2.01 - 2.50

_____ 1.00 - 1.50

19. WHICH OF THE FOLLOWING INDICATES THE MAXIMUM LEVEL OF EDUCATION ATTAINED BY YOUR FATHER AND MOTHER? (CHECK HIGHEST LEVEL FOR EACH PARENT)

	Father	Mother
8th grade	_____	_____
High School diploma	_____	_____
Vocational/technical study	_____	_____
Vocational/technical graduate	_____	_____
Some college, but no degree	_____	_____
B. A. degree	_____	_____
Bachelor's degree	_____	_____
Graduate study	_____	_____
Graduate degree	_____	_____

THANK YOU FOR YOUR TIME!!

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IOWA LEGISLATIVE COUNCIL
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March 5, 1984

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Dear College Student:

The Iowa Legislative Council, a steering committee of the Iowa General Assembly that determines legislative activities when the General Assembly is not in session, has appointed the Excellence in Education Task Force to study Iowa's educational system and make recommendations for its improvement. One important task of the educational system is to prepare students for post-secondary education. Information from you regarding your preparation for college will be very helpful to the Task Force in developing recommendations. We greatly appreciate your willingness to complete the attached questionnaire.

We are concerned about the importance of protecting your privacy. We do not ask for your name and complete confidentiality of your responses is assured. The school code number that appears in the upper right-hand corner of the questionnaire is used only to identify the name of your college or university.

Once again, we thank you for your cooperation in completing this questionnaire and returning it as soon as possible.

Sincerely,

Tom Urban, Jr.

Tom Urban, Chairman
Excellence in Education Task Force

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Senator Lowell L. Jenkins, Vice Chairperson
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In order to determine if the adequacy of preparation of National Merit Semifinalists differs from that of other students, the Subcommittee selected a random sample of recent National Merit Semifinalists to include in the survey. Your name is included in that sample. Your responses to the questionnaire will be confidential. The number that appears in the upper right-hand corner of the questionnaire is for coding purposes only and merely indicates that you are a National Merit Semifinalist.

Once again, we thank you for your cooperation in completing this questionnaire and for returning it in the enclosed envelope as soon as possible.

Sincerely,



Tom Urban, Chairperson
Excellence in Education Task Force

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APPENDIX B
Tables of Subgroup Comparisons

TABLE A. CHARACTERISTICS OF THE RESPONDENTS: SUBGROUP COMPARISONS

CHARACTERISTIC	STATE UNIVERSITIES (%)	PRIVATE COLLEGES (%)	COMMUNITY COLLEGES (%)	NATIONAL MERIT SEMIFINALISTS (%)
Sex	N = 154	N = 151	N = 211	N = 108
Male	53	33	42	69
Female	47	67	58	31
Race	N = 155	N = 150	N = 210	N = 108
White	96	89	99	99
Black	3	9	1	-
Hispanic	0.6	0.7	-	-
Native American	0.7	0.7	0.5	-
Other	0.6	0.7	-	1
Year Graduated from High School	N = 153	N = 142	N = 206	N = 108
1984	1	1	2	-
1983	76	56	44	51
1982	11	10	18	48
1981	6	9	7	1
1980	2	14	6	-
1979	6	2	3	-
1978 or before	-	7	22	-
Number of Students in Graduating Class	N = 155	N = 151	N = 211	N = 108
25 or fewer	3	7	6	-
26 - 50	7	15	17	10
51 - 100	19	17	25	9
101 - 200	24	13	15	21
201 - 300	12	5	10	9
301 - 400	13	17	12	18
401 - 500	12	10	9	23
Over 500	10	17	6	9
Rank in High School Class	N = 153	N = 151	N = 208	N = 108
Upper 10 percent	34	33	18	85
Upper 25 percent	34	38	37	14
Upper 50 percent	26	22	34	-
Upper 75 percent	6	7	12	1

TABLE A. CHARACTERISTICS OF THE RESPONDENTS: SUBGROUP COMPARISONS
(CONTINUED)

CHARACTERISTIC	STATE UNIVERSITIES (%)	PRIVATE COLLEGES (%)	COMMUNITY COLLEGES (%)	NATIONAL MERIT SEMIFINALISTS (%)
High School Grade				
Point Average	N = 155	N = 150	N = 210	N = 108
3.51 - 4.00	32	31	15	87
3.01 - 3.50	35	35	33	11
2.51 - 3.00	28	21	33	2
2.01 - 2.50	5	11	12	-
1.51 - 2.00	1	2	5	-
1.00 - 1.50	-	-	1	-
College Grade				
Point Average	N = 153	N = 147	N = 202	N = 107
3.51 - 4.00	11	20	24	57
3.01 - 3.50	24	29	37	28
2.51 - 3.00	28	29	23	11
2.01 - 2.50	29	15	13	4
1.51 - 2.00	10	5	3	-
1.00 - 1.50	-	1	-	-
Maximum Educational Attainment of Father				
	N = 154	N = 147	N = 209	N = 108
Graduate degree	16	21	6	45
Graduate study	2	3	1	3
Bachelor's degree	20	16	5	17
A. A. degree	1	2	3	-
Some college, but no degree	11	14	13	7
Voc/Tech graduate	3	5	8	7
Voc/Tech study	5	3	7	3
High school diploma	33	27	41	12
8th grade	10	9	17	7
Maximum Educational Attainment of Mother				
	N = 155	N = 147	N = 210	N = 108
Graduate degree	7	8	3	11
Graduate study	2	3	1	9
Bachelor's degree	18	19	3	32
A. A. degree	1	3	7	4
Some college, but no degree	12	18	10	14
Voc/Tech graduate	6	8	4	7
Voc/Tech study	7	4	6	1
High school diploma	41	33	56	22
8th grade	6	4	11	1

TABLE B. COLLEGE STUDENTS' PERCEPTIONS OF ADEQUACY OF PREPARATION
IN EACH COMPETENCY AREA AT TIME OF GRADUATION FROM HIGH
SCHOOL: SUBGROUP COMPARISONS

COMPETENCY AREA	POOR (%)	FAIR (%)	GOOD (%)	VERY GOOD (%)	EXCELLENT (%)	NUMBER RESPONDING
Reading						
State Universities	-	12	50	33	6	157
Private Colleges	3	8	35	47	7	150
Community Colleges	1	16	46	32	6	215
National Merit Semifinalists	-	5	13	57	26	106
Writing						
State Universities	2	15	43	31	9	156
Private Colleges	1	17	36	38	8	151
Community Colleges	1	20	47	27	6	216
National Merit Semifinalists	-	3	29	45	23	107
Speaking/Listening						
State Universities	2	29	45	26	7	157
Private Colleges	4	13	47	27	9	150
Community Colleges	4	25	42	24	6	216
National Merit Semifinalists	-	4	31	52	13	107
Mathematics						
State Universities	1	15	30	37	17	158
Private Colleges	7	23	35	23	13	151
Community Colleges	5	27	33	28	8	215
National Merit Semifinalists	1	3	10	39	47	107
Reasoning						
State Universities	-	10	47	33	10	156
Private Colleges	1	9	33	49	9	151
Community Colleges	1	12	50	30	8	214
National Merit Semifinalists	-	4	18	44	35	107
Study Habits						
State Universities	1	20	50	25	3	157
Private Colleges	4	15	40	36	5	149
Community Colleges	3	20	50	21	7	211
National Merit Semifinalists	-	9	38	44	9	106

TABLE C. MODAL NUMBER OF SEMESTERS OF COURSEWORK COMPLETED IN EACH CONTENT AREA: SUBGROUP COMPARISONS

CONTENT AREA	STATE UNIVERSITIES (N = 159)	PRIVATE COLLEGES (N = 153)	COMMUNITY COLLEGES (N = 219)	NAT'L MERIT SEMIFINALISTS (N = 108)
Language Arts	8	7	7	8
Mathematics	8	8	5	8
Science	8	4	4	8
Social Science	6	6	5	6
Foreign Language	0	0	0	4
Computer Skills	0	0	0	1
Vocational	0	0	2	1
Arts/Music	0	8	4	6

TABLE D. HELP RECEIVED FROM COUNSELORS: SUBGROUP COMPARISONS

- 1 = A lot of help; would have been difficult to get along without it
 2 = It was helpful
 3 = Sometimes helpful; would have liked more
 4 = Sometimes helpful; didn't really need it
 5 = Asked for help, but never received any
 6 = Never sought any help

AREAS OF COUNSELOR INVOLVEMENT	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	NUMBER RESPONDING
Selecing school subjects							
State Universities	2	22	26	28	3	19	156
Private Colleges	11	28	20	20	2	20	151
Community Colleges	7	30	22	15	5	21	210
Nat'l Merit Semi.	1	24	9	36	3	26	107
Learning ways to study better							
State Universities	1	3	15	8	3	70	156
Private Colleges	2	10	13	9	6	60	151
Community Colleges	-	10	15	7	7	61	210
Nat'l Merit Semi.	-	1	7	3	1	89	107
Planning education after high school							
State Universities	12	21	33	10	8	16	156
Private Colleges	17	25	26	13	8	13	151
Community Colleges	18	20	26	7	9	20	210
Nat'l Merit Semi.	7	27	28	18	4	16	107
Planning for occupational career							
State Universities	4	14	27	9	5	41	156
Private Colleges	13	16	29	9	5	29	151
Community Colleges	13	16	23	10	7	31	210
Nat'l Merit Semi.	-	14	26	13	3	43	107
Learning more about self							
State Universities	5	9	10	4	2	71	156
Private Colleges	7	10	9	12	4	58	151
Community Colleges	6	11	11	10	5	57	210
Nat'l Merit Semi.	2	4	8	8	-	78	107

TABLE D. HELP RECEIVED FROM COUNSELORS: SUBGROUP COMPARISONS
(CONTINUED)

- 1 = A lot of help; would have been difficult to get along without it
 2 = It was helpful
 3 = Sometimes helpful; would have liked more
 4 = Sometimes helpful; didn't really need it
 5 = Asked for help, but never received any
 6 = Never sought any help

AREAS OF COUNSELOR INVOLVEMENT	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	NUMBER RESPONDING
Getting along with people							
State Universities	3	12	6	8	2	70	156
Private Colleges	9	11	5	11	1	64	151
Community Colleges	4	12	6	9	3	65	210
Nat'l Merit Semi.	-	5	4	8	-	83	107
Solving a personal problem							
State Universities	4	8	5	9	2	72	156
Private Colleges	9	11	6	7	2	65	151
Community Colleges	6	11	9	7	5	63	210
Nat'l Merit Semi.	1	6	2	3	-	89	107
Changing courses							
State Universities	6	35	10	12	3	34	156
Private Colleges	10	41	14	8	5	23	151
Community Colleges	11	27	17	8	7	30	210
Nat'l Merit Semi.	10	33	8	8	4	36	107

TABLE E. YEARS OF PARTICIPATION IN CO- AND EXTRACURRICULAR ACTIVITIES AND WHETHER COLLEGE STUDENTS WOULD PARTICIPATE MORE, THE SAME, OR LESS IF ATTENDING HIGH SCHOOL TODAY: SUBGROUP COMPARISONS

ACTIVITY	YEARS PARTICIPATED					TODAY WOULD PARTICIPATE . . .			NUMBER RESPONDING
	0 (%)	1 (%)	2 (%)	3 (%)	4 (%)	MORE (%)	SAME (%)	LESS (%)	
Band/Orchestra									
State Univ.	54	9	4	6	27	17	74	9	137
Private Colleges	58	5	7	5	26	23	64	14	133
Community Colleges	63	9	5	6	17	24	69	7	190
Nat'l Merit Semi.	50	4	3	3	41	14	82	4	105
Debate									
State Univ.	95	5	1	-	-	26	66	8	130
Private Colleges	93	3	2	2	1	36	59	5	121
Community Colleges	96	2	1	-	1	20	69	11	182
Nat'l Merit Semi.	80	6	4	6	4	31	67	2	99
Department Club									
State Univ.	64	11	12	6	7	32	63	5	136
Private Colleges	69	9	11	7	5	26	67	7	122
Community Colleges	80	7	6	3	4	24	69	8	181
Nat'l Merit Semi.	56	7	14	10	13	39	60	1	104
Drama									
State Univ.	68	11	8	7	6	36	61	3	136
Private Colleges	65	10	10	8	7	42	51	7	128
Community Colleges	68	12	8	7	5	42	54	4	185
Nat'l Merit Semi.	63	8	11	11	7	45	53	2	106
Cheerleading/Pepclub									
State Univ.	71	11	5	7	7	20	70	11	133
Private Colleges	62	10	9	5	15	16	73	11	128
Community Colleges	71	11	8	4	7	26	63	11	181
Nat'l Merit Semi.	87	4	2	4	3	5	92	3	101
Intramural Athletics									
State Univ.	44	17	10	6	22	42	56	2	135
Private Colleges	54	8	11	5	21	37	55	8	131
Community Colleges	55	10	8	10	17	44	52	4	187
Nat'l Merit Semi.	62	15	9	4	9	46	53	1	98
Publications									
State Univ.	70	13	8	3	6	35	61	5	132
Private Colleges	54	20	10	9	7	42	53	6	127
Community Colleges	72	13	9	4	3	36	58	6	187
Nat'l Merit Semi.	60	19	12	5	4	47	51	2	101

TABLE E. YEARS OF PARTICIPATION IN CO- AND EXTRACURRICULAR ACTIVITIES AND WHETHER COLLEGE STUDENTS WOULD PARTICIPATE MORE, THE SAME, OR LESS IF ATTENDING HIGH SCHOOL TODAY: SUBGROUP COMPARISONS (CONTINUED)

ACTIVITY	YEARS PARTICIPATED					TODAY WOULD PARTICIPATE . . .			NUMBER RESPONDING
	0 (%)	1 (%)	2 (%)	3 (%)	4 (%)	MORE (%)	SAME (%)	LESS (%)	
Varsity Athletics									
State Univ.	32	12	12	6	38	47	49	4	136
Private Colleges	39	5	7	11	47	33	63	4	135
Community Colleges	44	9	7	7	32	48	50	2	187
Nat'l Merit Semi.	40	12	5	6	37	26	72	2	102
Vocal Music									
State Univ.	53	17	10	4	16	28	60	12	137
Private Colleges	48	11	8	6	27	28	65	7	132
Community Colleges	55	11	9	4	21	39	64	6	188
Nat'l Merit Semi.	61	11	4	4	20	24	70	6	105
Student/Community Service Organizations									
State Univ.	52	11	13	3	22	42	55	3	139
Private Colleges	39	10	11	15	26	47	48	5	133
Community Colleges	65	8	4	6	17	37	58	5	186
Nat'l Merit Semi.	46	11	6	10	28	33	65	2	101
Speech Contest									
State Univ.	77	10	8	2	3	30	65	5	131
Private Colleges	78	4	8	4	6	40	53	7	125
Community Colleges	85	4	4	3	3	31	63	6	185
Nat'l Merit Semi.	60	16	9	6	10	43	55	2	105
Student Government									
State Univ.	56	18	13	7	7	43	51	6	135
Private Colleges	58	19	10	8	4	52	44	5	124
Community Colleges	74	10	8	4	4	36	59	5	186
Nat'l Merit Semi.	55	19	14	4	8	50	48	2	103

TABLE F. HOURS PER WEEK SPENT IN ACTIVITIES DURING HIGH SCHOOL:
SUBGROUP COMPARISONS

ACTIVITY	MEAN	MEDIAN	MODE	NUMBER RESPONDING
Studying				
State Univ.	8.5	7.5	10	151
Private Colleges	9.1	8.0	10	147
Community Colleges	7.7	6.3	10	206
Nat'l Merit Semi.	9.5	8.0	12.5	101
Working				
State Univ.	9.5	8.8	0	150
Private Colleges	8.5	7.0	0	144
Community Colleges	11.7	10.0	0	201
Nat'l Merit Semi.	6.2	5.0	0	102
Reading				
Magazines				
State Univ.	2.3	1.5	1	151
Private Colleges	2.6	2.0	1	144
Community Colleges	2.5	2.0	1	200
Nat'l Merit Semi.	2.2	1.9	1	104
Fiction books				
State Univ.	2.5	1.3	0	149
Private Colleges	3.3	1.5	0	140
Community Colleges	2.3	1.3	0	204
Nat'l Merit Semi.	5.2	3.5	1	104
Nonfiction books				
State Univ.	1.6	1.0	0	148
Private Colleges	2.1	1.0	0	140
Community Colleges	1.5	1.0	0	199
Nat'l Merit Semi.	1.9	1.0	0	104
Newspapers				
State Univ.	2.5	2.0	1	152
Private Colleges	3.2	2.0	1	141
Community Colleges	2.1	1.3	1	201
Nat'l Merit Semi.	2.9	2.0	2	105
Participating in non-school related activities				
State Univ.	3.9	2.0	0	147
Private Colleges	3.1	2.0	0	139
Community Colleges	3.3	2.0	0	200
Nat'l Merit Semi.	2.6	2.0	1	104

TABLE F. HOURS PER WEEK SPENT IN ACTIVITIES DURING HIGH SCHOOL:
 SUBGROUP COMPARISONS (CONTINUED)

ACTIVITY	MEAN	MEDIAN	MODE	NUMBER RESPONDING
Participating in school related activities				
State Univ.	7.9	7.0	10	151
Private Colleges	9.0	7.8	10	144
Community Colleges	6.5	5.0	0	203
Nat'l Merit Semi.	8.6	6.8	10	105
Socializing				
State Univ.	15.6	13.0	10	151
Private Colleges	13.8	10.0	10	143
Community Colleges	15.7	11.3	10	204
Nat'l Merit Semi.	11.7	10.0	10	103

TABLE G. FACTORS AFFECTING PREPARATION FOR COLLEGE: SUBGROUP COMPARISONS

FACTOR	DETRIMENT (%)	NO EFFECT (%)	BENEFIT (%)	NUMBER RESPONDING
Courses offered				
State Univ.	16	8	76	155
Private Colleges	11	13	76	151
Community Colleges	16	13	72	208
Nat'l Merit Semi.	14	4	82	107
Courses taken				
State Univ.	12	6	83	155
Private Colleges	13	9	78	151
Community Colleges	14	15	71	207
Nat'l Merit Semi.	-	4	96	107
Quality of teaching				
State Univ.	14	11	76	155
Private Colleges	17	11	71	150
Community Colleges	16	18	66	207
Nat'l Merit Semi.	5	5	91	106
Physical Facilities				
State Univ.	16	25	60	155
Private Colleges	17	29	54	151
Community Colleges	13	34	53	208
Nat'l Merit Semi.	13	26	61	107
Quality of Academic Counseling				
State Univ.	23	44	34	155
Private Colleges	19	44	37	151
Community Colleges	24	40	36	208
Nat'l Merit Semi.	21	48	32	107
Conduciveness of school atmosphere to learning				
State Univ.	23	28	49	155
Private Colleges	26	29	45	151
Community Colleges	20	29	51	208
Nat'l Merit Semi.	22	31	48	107
Disciplinary environment				
State Univ.	20	48	32	155
Private Colleges	19	51	31	150
Community Colleges	14	40	46	207
Nat'l Merit Semi.	20	53	27	107
Attitudes of peers toward academics				
State Univ.	25	28	47	155
Private Colleges	25	34	41	150
Community Colleges	25	33	42	208
Nat'l Merit Semi.	29	33	38	107

TABLE G. FACTORS AFFECTING PREPARATION FOR COLLEGE: SUBGROUP
COMPARISONS (CONTINUED)

FACTOR	DETRIMENT (%)	NO EFFECT (%)	BENEFIT (%)	NUMBER RESPONDING
Parental support				
State Univ.	11	13	76	155
Private Colleges	11	9	79	150
Community Colleges	15	22	64	208
Nat'l Merit Semi.	4	8	89	107
Importance of education in community				
State Univ.	11	32	57	155
Private Colleges	9	36	55	150
Community Colleges	10	39	52	208
Nat'l Merit Semi.	8	36	57	107
Extra- or cocurricular activities				
State Univ.	12	37	51	155
Private Colleges	9	30	61	150
Community Colleges	10	48	42	208
Nat'l Merit Semi.	1	37	62	107
Work activities				
State Univ.	14	46	40	155
Private Colleges	8	47	45	150
Community Colleges	13	43	44	208
Nat'l Merit Semi.	10	56	34	105
Nonschool-related activities				
State Univ.	8	51	41	155
Private Colleges	10	49	41	149
Community Colleges	12	53	35	208
Nat'l Merit Semi.	4	52	44	106
Social activities				
State Univ.	16	39	45	155
Private Colleges	17	45	38	149
Community Colleges	16	46	39	208
Nat'l Merit Semi.	13	45	42	107
Time spent watching TV				
State Univ.	32	60	8	155
Private Colleges	25	69	7	149
Community Colleges	21	68	11	208
Nat'l Merit Semi.	28	61	11	107

TABLE H. PERCEPTIONS OF COLLEGE STUDENTS REGARDING FACTORS IN THEIR HIGH SCHOOL PREPARATION: SUBGROUP COMPARISONS

FACTOR	STATE UNIVERSITIES (%)	PRIVATE COLLEGES (%)	COMMUNITY COLLEGES (%)	NATIONAL MERIT SEMIFINALISTS (%)
Freedom and responsibility	N = 155	N = 151	N = 212	N = 108
too much	10	14	16	9
about right	74	70	71	70
too little	17	17	13	20
Unscheduled time	N = 155	N = 151	N = 213	N = 108
too much	8	8	10	8
about right	56	62	60	64
too little	36	30	31	28
Standards set by teachers	N = 155	N = 150	N = 214	N = 108
too high	3	3	3	1
about right	69	60	70	52
too low	28	37	27	47
Amount of homework	N = 155	N = 149	N = 211	N = 108
too much	3	6	7	2
about right	52	54	55	47
should have been more	45	40	38	51
Amount of writing	N = 154	N = 150	N = 212	N = 108
too much	1	1	6	-
about right	50	48	44	44
should have been more	49	51	51	56

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