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# High-School Teachers' and College Faculty Members' Perceptions of Students' Preparedness for College

Report prepared for  
*The Chronicle of Higher Education*

February 17, 2006

NOTE: This report is a working document for internal use by the Project Consultant, Alvin Sanoff, and *Chronicle of Higher Education* staff. It is not for general distribution.

This version contains a small number of annotations/modifications.

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## PROJECT OVERVIEW AND METHOD

### ***Introduction***

How well prepared for college are today's high school graduates? This question is an urgent national concern. Perhaps this has always been so, as each succeeding generation has taken a critical look at the one that followed it. After all, an earlier generation lamented the fact that students no longer arrived at college proficient in classical Latin and Greek. However, in an era of unprecedented global competition, the question has become even more important and has drawn widespread attention.

Both the states and the federal government, in the "No Child Left Behind" Act, have responded with varied educational reform initiatives and requirements for students and teachers alike<sup>1</sup>. High stakes testing, with a measure of accountability, has become a centerpiece of these initiatives. However, implementation of these initiatives has been spotty, sometimes underfunded, and always controversial.

Often, in the debates over these issues, the voices of those most involved—high-school teachers, college faculty, students and their parents—are not heard. This study is an effort to redress that imbalance by learning more about the perspectives of two of the most involved groups, high school teachers and college and university faculty members. Sponsored by *The Chronicle of Higher Education*, the research has been conducted by Maguire Associates, Inc., an educational research and consulting firm located in the Boston area.

### ***Method***

Maguire Associates staff, in conjunction with consultant Alvin Sanoff, designed the surveys to be conducted online. The survey for each group included questions on teaching duties, classroom practices and expectations for student work, characteristics of their school or college, how well students are prepared in a variety of areas, the impact of high stakes testing, and demographic characteristics of the respondent.

In order to recruit participants for the study, we utilized the services of a mailing house that targets the education market exclusively. For the college faculty sample, we selected from the 1,338 public and non-profit colleges and universities that have substantial bachelor's level programs whose presidents were invited to participate in the 2005 *Chronicle of Higher Education* Survey of College and University Presidents. From those institutions, we requested a random sample of 7,000 faculty members in the following fields: English Language and Literature; Natural/Physical Sciences; Social Sciences (including History,

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<sup>1</sup> See, for example, "States Target High Schools for Changes," *Education Week*, February 8, 2006

Philosophy and Theology); Mathematics; Foreign Languages and Literature; Interdisciplinary Studies; Business; and Engineering.

For high-school teachers, we requested a random national sample of 9,000 teachers from the following core academic areas: English/Language Arts; Science; Mathematics; Social Studies/History; and Foreign Languages.

The 16,000 potential participants received a letter from *The Chronicle of Higher Education* explaining the study, providing the website at which they could complete the survey, and offering them the option of completing a paper version of the survey if they preferred. As an incentive, participants were offered the opportunity to enter into a drawing for one of several cash prizes. Participants for whom the mailing house had email addresses received notification about the study at their school or college email address in addition to the letter. Potential participants also received a reminder postcard and email. The data collection period for both samples was just under three weeks.

Complete responses were received from 746 high-school teachers and 1,098 college faculty members; the response rates were 8.3% and 15.7%, respectively. For a survey of this type, these are good response rates. College faculty members may have been more likely to respond because of their greater familiarity with *The Chronicle of Higher Education* and a work location and schedule that permit them easier access to the Internet.

In order to assess the degree to which the respondents were representative of the larger samples from which they came, we compared them in a number of respects. The 746 teachers fairly closely resembled the randomly chosen sample of 9,000 teachers as follows: U.S. Census region of the country of their school; type of school community (urban, rural, suburban); percentage of white students in the school; percentage of students eligible for free/reduced lunch at the school; the school's size; the respondent's gender; and the subject area taught by the respondent. The 1,098 college faculty members who replied were compared to the 7,000 randomly chosen faculty members and found to be essentially similar in the following areas: U.S. Census region of the institution; affiliation of the institution (public, private non-sectarian); highest level of degree offered (bachelors, masters, doctorate); respondent's gender; and subject area taught by the respondent. In addition, we compared responses partway through the data collection period with data at the end and found similar response patterns. Based on these analyses, we are confident that the respondents in both surveys are representative of the populations from which they were drawn.

## WHO RESPONDED TO THE SURVEYS?

As a supplement to this report, we are providing copies (electronically) of the analyses on which our conclusions are based. In the reports of our findings below, either the Table number from the statistical output (for group comparisons) or the Question number from the appropriate Annotated Survey Instrument (for descriptive statistics about the groups separately) is shown in square brackets for ease of reference.

### Gender

Not surprisingly, the two groups differ by gender: 61% of the high-school teachers are female, while 39% of the college faculty members are female. [Table 1.12a]

### Racial/Ethnic Group

The two groups are roughly similar to each other, though teachers are significantly less likely to be Asian/Pacific Islanders and to prefer not to report their ethnicity. The difference in percentages of white respondents is not statistically significant.. [Table 1.12a]

**Table A: Ethnic Composition of Survey Respondents**

Ethnicity	High School	College
Asian/Pacific Islander	1%	4%
Black/African-American	3%	3%
Hispanic/Latino	3%	2%
White	87%	82%
Multi-racial	1%	2%
Prefer not to report	3%	6%
Other	1%	1%

### Number of Years Teaching at the Current Teaching Level

As the table below documents, both groups are experienced in their professions. Approximately two-thirds (64% of high-school teachers and 68% of college faculty members) have been teaching for at least nine years. There are no statistically significant differences in experience level between the two groups. [Table 1.10a]

**Table B: Years of Teaching Experience among Survey Respondents**

<b>Years of Experience</b>	<b>High School</b>	<b>College</b>
This is my first year	0.7%	1%
1 to 3 years	11%	8%
4 to 8 years	24%	22%
9 to 12 years	13%	15%
13 to 20 years	20%	20%
More than 20 years	31%	33%
Not Reported	0.4%	0.3%

### Number of Years Teaching at the Current Institution

Over half of the college faculty (53%) and somewhat under half of the high-school teachers (44%) have been teaching for at least nine years at their current institution. Teachers are a bit less likely to be in their first year at their institution or to have been at their institution more than 20 years than is the case for the college and university faculty. They are more likely to have been at their institution for 4 to 8 years. [Table 1.10a]

**Table C: Years Teaching at Current Institution among Survey Respondents**

<b>Years at Current Institution</b>	<b>High School</b>	<b>College</b>
This is my first year	3%	6%
1 to 3 years	18%	15%
4 to 8 years	34%	26%
9 to 12 years	13%	11%
13 to 20 years	16%	19%
More than 20 years	15%	23%
Not Reported	0.5%	0.5%

### Highest Level of Education

Given the different entrance requirements for the two professions, it is not surprising to see that there are very large differences in the highest degree attained by the two groups of respondents. Eighty percent of the college faculty members have a doctorate (alone or combined with a professional degree), while only 4% of the high-school teachers report having a doctorate. Just over one-third of the teachers report having a bachelor's degree only. [Table 1.11a]

**Table D: Highest Degree Held among Survey Respondents**

Highest Degree Held	High School	College
Bachelor's (B.A., B.S., etc.)	35%	1%
Master's (M.A., M.S., M.Ed., M.Div., etc.)	29%	8%
Master's plus 15 or more additional credits	28%	8%
Certificate of Advanced Graduate Study (CAGS)	1%	0.3%
Doctorate (Ph.D., Ed.D., etc.)	4%	78%
Professional (J.D., M.D., Psy.D., etc.)	0.1%	1%
Both doctoral and professional	0%	2%
Other	2%	1%
National Board Certification	0.6%	0%
Not Reported	0.3%	0.3%

**Teaching Area**

Among the **high school teachers**, the subject areas in which they report doing all or most of their teaching are shown below. [Q1]

**Table E: Teaching Areas among High-School Teachers**

Subject Area	Percent
English/Language Arts	26%
Sciences	25%
Mathematics	22%
Social Studies/History	16%
Foreign Languages	9%
Other	2%

Among the **college and university faculty members**, the distribution across teaching areas<sup>2</sup> is as follows: [Q1]

**Table F: Teaching Areas among College Faculty**

Subject Area	Percent
Social Sciences/History/Philosophy/Theology	32%
Natural and Physical Sciences	22%
English Language and Literature	12%
Business	9%
Mathematics	8%
Foreign Languages and Literature	6%
Other	5%
Engineering	4%
Interdisciplinary Studies (e.g., International Studies)	2%

<sup>2</sup> Others might group the disciplines in different ways or under different names. These are the categories and names used by the mailing house whose database was the source of the samples.

A comparison of the two groups (eliminating Business, Engineering and Interdisciplinary Studies, since no high school teachers in these areas were sampled) revealed that there was a lower percentage of college faculty members in English and a higher percentage in the social sciences and “other” areas than among the high school teachers. [Table 1.1a]

### **Other Characteristics of the High School Teachers**

Approximately three quarters of the teachers teach in each of the grades 10 through 12, while just over half (54%) teach in grade 9. [Q2]

Over two thirds of teachers (69%) teach general curriculum classes, while 56% teach college preparatory courses and 50% teach advanced courses (honors, AP, etc.). Twenty percent also teach remedial courses or special education. [Q3]

### **Other Characteristics of the College and University Faculty**

The vast majority (98%) teach undergraduates. [Q2]

The great majority (86%) teach courses primarily for students majoring or minoring in their field, and 60% also teach general education courses. Smaller percentages report teaching “honors” courses or sections (20%), developmental/remedial courses (5%), and Freshman Seminar/Orientation/Transition courses (1%). [Q3]

Twenty percent of the college faculty respondents did not teach freshmen/first-year students. Among those who did teach freshmen, for most (76%), the percentage of students they taught during a year who were freshmen was 50 percent or less. [Q4]

Most college faculty members (78%) report no involvement with programs that work with high-school teachers to increase their effectiveness in preparing students for college; another 16% report slight involvement, and only 6% report substantial involvement. [Q5, frequencies – separate output] Similarly, most (81%) report no involvement with programs designed to help high-school students themselves become better prepared for college, while 14% report slight involvement and 5% report substantial involvement. [Q5, frequencies – separate output]

## AT WHAT TYPES OF INSTITUTIONS DO THE RESPONDENTS TEACH?

### Comparison of High Schools and Colleges: Region of the Country

A smaller percentage of the high schools than of the colleges and universities was located in the Northeast. An examination of the data by the more detailed Census Division (of which there are nine) showed that there were more college faculty represented from the middle Atlantic states and more teachers from the West South Central states. [Table 1.13a]

**Table G: U.S. Census Region for Respondents' Institutions**

Census Region	High School	College
Northeast	16%	23%
Midwest	29%	27%
South	39%	35%
West	16%	16%
Not Reported	0%	0.1%

### Characteristics of the High Schools

The schools represented by the high-school teachers constitute a cross-section of types of community. The single largest group was suburban schools (33%), followed closely by small cities or towns (31%). Rural schools (20%) and urban schools (15%) made up smaller percentages of the schools. [Q13]

The great majority of the schools (84%) had the traditional 9-12 grade structure, while another 6% included grades 10-12. [Q14]

The size of the high schools varied widely: 34% were relatively small (fewer than 900 students); 43% were medium-sized (900 to 1,999); and the remaining 22% were large (2,000 or more students). At the extremes, 9% of the schools had fewer than 300 students and 1% had 4,000 or more students. [Q15]

The vast majority (92%) of the high schools were regular, comprehensive high schools, while another 3% were magnet schools [Q18], and very few of them (2%) had an entrance requirement such as an examination or audition [Q19].

The average estimated percentage of white students in the school was 66%, while the average estimated percentages for other groups were: Black/African-American, 16%; Hispanic/Latino, 13%; Asian/Pacific Islander, 4%; and Other, 1%. These averages mask a great deal of variability, as the estimates for white students ranged from 0-100% and the estimates for both Black and Hispanic students ranged from 0-99%. [Q16]

There was a wide range of reported poverty (as indicated by the percentage of students eligible for free or reduced price lunch). Twenty percent of the schools were reported to be low in poverty (defined here as 0 to 10% eligible for free or reduced price lunch), while 22% of the schools were reported to be high poverty (over half of the students eligible for free or reduced lunch). [Q20]

**Table H: Teachers' Reports of the Level of Poverty in their Schools**

Percentage of Students Eligible for Free or Reduced Lunch	Percent
0%	1%
1 – 10%	19%
11– 25%	28%
26 – 50%	28%
51 – 75%	15%
Over 75%	7%
Not Reported	2%

Just over half (53%) of the teachers came from schools whose district or state required an exit exam in order for students to receive a regular high school diploma. [Q21]

Schools ranged widely in the percentage of students reported to go directly on to a four-year college or university after completing high school. For two-thirds (66%), the percentage of students going directly to higher education at a four-year school was 50% or less. [Q23 – this one is great for a pie chart]

### Characteristics of the Colleges and Universities

Among the schools represented by college faculty respondents, 56% awarded doctoral degrees as their highest degree, 32% awarded a master's degree, and 12% awarded baccalaureate degrees only. [Q13 – good for pie chart] Among the institutions, 60% were public, 18% were private, non-sectarian, and 22% were private with a religious affiliation.<sup>3</sup> [Q14 – good for pie chart]

Fifty percent of the college faculty felt that their institution had become at least somewhat more selective over the last five years, while only 16% believed that their institution had become less selective. [Q15]

<sup>3</sup> These percentages differ greatly from the percentages of institution type in the presidents' survey because these data are affected by the size of the institution as well as the prevalence of institutional types. The public colleges and universities are, on average, larger and therefore have proportionally more faculty in this sample. In addition, doctoral institutions tend to be larger than baccalaureate institutions.

**HOW DO THE PERCEPTIONS OF HIGH-SCHOOL TEACHERS AND COLLEGE/UNIVERSITY FACULTY CONCERNING STUDENTS' PREPAREDNESS FOR COLLEGE COMPARE?**

In order to be able to compare high-school teachers' and college faculty members' classroom practices, expectations of their students, and perceptions of students' preparedness for college-level work, we asked a number of questions in common across the two groups.

**Expectations for Students**

High-school teachers were asked to estimate how many hours of homework across all subjects per 7-day week their college preparatory students did. Seventy-seven percent of them reported the homework total as 15 or fewer hours per week, and about half of them reported 10 or fewer hours per week as the average load. This finding suggests that the average college preparatory student does only one to two hours a day of homework.<sup>4</sup> [Q22, teachers]

Not surprisingly, college and university faculty expect much more work outside of class than high-school teachers do. [Table 1.2a]

**Table I: Expectations for Students' Homework**

<b>Hours of Work Outside of Class Expected of Students Per Week</b>	<b>Respondent Type</b>	
	<b>High School</b>	<b>College</b>
Zero to 2 hours	28%	6%
3 to 5 hours	55%	46%
6 hours or more per class	17%	48%

However, high-school teachers and college faculty are equally disappointed in the amount of work students actually do. About two-thirds of each group report that students do "somewhat less" or "much less" than expected, and very few (5% of high-school teachers

<sup>4</sup> According to an Associated Press-AOL Learning Services online poll of 1,085 parents and 810 teachers, as reported in the February 8 issue of *USA Today*, both groups of adults agree that the amount of homework assigned is "about right" (57% of parents and 63% of teachers). Parents (19%) are more inclined than teachers (12%) to think that the amount of homework is "too much," while about one quarter of each group feels that the amount of homework is "too little." In view of widespread concern about the U.S.'s competitiveness in the world, this level of satisfaction problematic.

and 4% of college faculty) report that students do “somewhat more” or “much more” than expected. [Q5 teachers, Q8 faculty]

**Table J: Comparison of Expectations and Actual Student Effort**

<b>What Students do as Compared to Expectations</b>	<b>Respondent Type</b>	
	<b>High School</b>	<b>College</b>
Much more or somewhat more	5%	4%
About what I expect	30%	32%
Somewhat less or much less	66%	65%

### Classroom Practices

Writing is a core part of many college-level classes. Overall, compared to high-school teachers, college faculty were much more likely to require students to write papers that were more than five pages long, as the table below indicates. [Table 1.5a-1; see also 1.5a-2] However, it is worth noting that, even in college, the vast majority require an over five-page paper less than once a month. By contrast, the differences between the two groups in requiring a 1 to 5 page paper were small and not generally statistically significant. [Table 1.5a-1; see also 1.5a-2]

**Table K: Expectations for Writing Papers**

<b>Classroom Practice in Typical Class</b>		<b>Respondent Type</b>	
		<b>High School</b>	<b>College</b>
<b>Write a paper of more than 5 pages</b>	Never	61%	28%
	Less than once a month	37%	67%
	A few times a month	2%	5%
	Weekly or more often	.1%	.4%
<b>Write a 1 to 5 page paper</b>	Never	19%	16%
	Less than once a month	48%	44%
	A few times a month	24%	32%
	Weekly or more often	9%	8%

Because it seemed possible that differences in the disciplines represented in the two samples might explain some of the difference in classroom requirements, we repeated the analysis looking at each of the five comparable subject areas separately. This analysis revealed that for English, Sciences, Social Studies/Social Sciences, and Foreign Languages, though not for Mathematics, there were sharp (and statistically significant) differences in the percentages that “never” required students to write a paper of more than five pages.

While for Foreign Languages the difference may reflect a more advanced level of language and literature study (in which the focus turns from learning the language to studying and writing about its literature), there is no equivalent reason to expect the writing requirements for English, Social Studies/Social Science and the Natural Sciences to differ by such a great amount.<sup>5</sup> {Tables 1.5a-1, English, Mathematics, Sciences, Social Studies/History, and Foreign Languages; see also the equivalent Tables 1.5a-2 for each subject area.}

**Table L: “Never” Requiring a Long Paper: by Subject Area**

Percentage “Never” Requiring Students to Write a Paper of More than Five Pages	Respondent Type	
	High School	College
English	25%	6%
Mathematics	91%	81%
Sciences	65%	43%
Social Sciences/History	54%	13%
Foreign Languages	80%	38%

Another classroom practice that reflects a relatively high level of intellectual demand, “analyze basic elements of an idea, experience or theory,” was also slightly more likely to characterize college faculty than high school teachers. [Table 1.5a-1; see also 1.5a-2]

**Table M: Classroom Practice: “Analyze Basic Elements of an Idea, Experience or Theory”**

Classroom Practice in Typical Class		Respondent Type	
		High School	College
Analyze basic elements of an idea, experience or theory	Never	2%	2%
	Less than once a month	12%	10%
	A few times a month	30%	26%
	Weekly or more often	56%	63%

Three classroom practices that reflect a relatively nontraditional approach were more likely to characterize high school teachers than college faculty members: making a presentation in class (though not typical in either group); requiring frequent class participation (relatively common in both groups, though more so in high school); and working with other students in groups. The fourth practice that is more common in high-school than in college classrooms, “memorize facts, ideas or methods,” is a lower-order cognitive task that one might reasonably expect to be required in high school more often than in college. [Table 1.5a-1; see also 1.5a-2]

<sup>5</sup> There were few differences in the requirement of a 1 to 5 page paper. Only for Foreign Languages did the two groups differ; 77% of high school teachers and 56% of the college faculty in Foreign Languages assigned a 1 to 5 page paper less than once a month.

**Table N: Classroom Practices More Characteristic of High-School Teachers than College Faculty**

Classroom Practice in Typical Class		Respondent Type	
		High School	College
<b>Make a presentation in class</b>	Never	11%	21%
	Less than once a month	59%	62%
	A few times a month	24%	14%
	Weekly or more often	6%	3%
<b>Participate in class discussion</b>	Never	1%	7%
	Less than once a month	4%	6%
	A few times a month	9%	17%
	Weekly or more often	86%	71%
<b>Work with other students on projects</b>	Never	4%	20%
	Less than once a month	29%	36%
	A few times a month	36%	26%
	Weekly or more often	31%	18%
<b>Memorize facts, ideas or methods</b>	Never	5%	12%
	Less than once a month	18%	23%
	A few times a month	28%	23%
	Weekly or more often	50%	42%

Finally, there were several additional classroom practices that did not differ greatly between the two groups. It is interesting that all three of these practices call for relatively higher-order thinking. [Table 1.5a-1; see also 1.5a-2]

**Table O: Classroom Practices that do not Strongly Differentiate High-School Teachers and College Faculty**

Classroom Practice in Typical Class		Respondent Type	
		High School	College
<b>Work on a paper or project that requires integrating ideas or information from various sources</b>	Never	12%	12%
	Less than once a month	52%	54%
	A few times a month	26%	24%
	Weekly or more often	10%	10%

Classroom Practice in Typical Class		Respondent Type	
		High School	College
<b>Make judgments about the value of information, arguments, or methods</b>	Never	2%	3%
	Less than once a month	18%	14%
	A few times a month	31%	30%
	Weekly or more often	49%	53%
<b>Apply theories or concepts to practical problems or in new situations</b>	Never	.7%	2%
	Less than once a month	11%	14%
	A few times a month	33%	30%
	Weekly or more often	55%	54%

## The Impact of Testing

While college entrance tests such as the SAT and the ACT and the Advanced Placement Tests have been around for a long time, in recent years there has been an increased emphasis on testing to enforce educational accountability in pre-college education.

As noted earlier, 53% of the high-school teachers came from schools whose district or state required an exit exam in order for students to receive a regular high school diploma. [Q21] High stakes testing, whether required for a diploma or not, most often occurs in Grade 10 (67%), followed by Grade 11 (58%), Grade 9 (44%), and Grade 12 (26%). [Q8]

High-school teachers express a great deal of ambivalence about the impact and usefulness of testing. For example, on a 5-point scale (1 = “strongly disagree” to 5 = “strongly agree”) their average rating for the statement: “High scores on the tests indicate that a student is well prepared for college” is 3.01 – almost exactly the midpoint on the scale. However, the teachers are more likely to agree somewhat that “Test items do not reflect the kinds of intellectual demands expected in college” (average rating 3.56). [Q9]

High-school teachers whose students were affected by such tests were asked to indicate how often state or district high-stakes testing has affected their teaching. These findings also reflect teachers’ ambivalence. While they report being helped by having clearly specified learning goals, they also report having to cut out some of the more creative elements of their teaching. They are least likely to report that they must teach material that is too difficult for their students. [Q10] (See table P, below.)

**Table P: Impact of High-Stakes Testing on High-School Teachers' Classroom Practices**

Ways that High-Stakes Testing has Affected Teaching	1 = Never 2 = Sometimes 3 = Often	
	n	mean
I am helped by having clearly specified learning goals for students.	678	2.32
I have to cut out some of the more creative elements of my teaching.	688	2.29
I "teach to the test."	676	2.11
I have to "dumb down" the material in order to concentrate on basics.	685	1.95
I must teach students material that is too difficult for them.	678	1.77

High-school teachers vary widely in their reports of the number of hours that they spend directly preparing their students in a typical class for high-stakes testing (e.g., by reviewing test-taking strategies, using practice items, etc.). While 28% of them spend five hours or fewer (the equivalent of one instructional day), 20% report spending more than 30 hours in direct test preparation. Multiplied across several classes taught by each teacher, the time devoted to test preparation can become a substantial part of class time. [Q11]

**Table Q: Time that High-School Teachers Report Spending on Directly Preparing Students for High States Testing**

Time Spent in Direct Test Preparation in a Typical Class	Percent
Zero hours	7%
1 to 5 hours	21%
6 to 10 hours	16%
11 to 20 hours	14%
20 to 30 hours	13%
More than 30 hours	20%
Not applicable – my students don't take high-stakes tests	9%
Not Reported	0.4%

Among college faculty, 59% believed that the states from which their institution draws most heavily require some kind of outcomes testing for high-school students. (Another 37% did not know [Q22]). Like the high-school teachers, the college faculty members who thought their students were subject to outcomes testing were ambivalent about its impact. While the biggest group (45%) felt that the testing had had "no impact," they were nearly evenly split in their view of the impact as positive or negative. [Q23 – good for a pie chart]

**Table R: College Faculty Members' Perceptions of High-Stakes Testing's Impact on Students' Level of Preparedness**

<b>Impact of High-School Outcomes Tests on College Students' Preparedness</b>						
		Substantial Positive Impact	Slight Positive Impact	No Impact	Slight Negative Impact	Substantial Negative Impact
n	mean	1	2	3	4	5
457	3.04	3%	26%	45%	15%	11%

Both groups were asked to evaluate the SAT/ACT and Advanced Placement (AP) tests as indicators of students' readiness for college-level work, using a scale where 1 = "disagree strongly" and 5 = "agree strongly." While both groups tended to slightly agree that scores on these tests reflect students' level of preparation, high-school teachers had a substantially more favorable view of the AP tests than college and university faculty did. [Table 1.9a]

**Table S: Respondents' View of the SAT/ACT and Advanced Placement Tests**

<b>Statement on Testing</b>	<b>Respondent Type</b>	
	<b>High School</b>	<b>College</b>
SAT or ACT scores are good indicators of the preparedness of students for the academic demands of [my] college [or university].	3.21	3.33
Students who pass Advanced Placement ("AP") tests have already indicated that they can do college-level work.	3.83	3.20

**How Well Prepared are High-School Graduates for College?**

Neither high-school teachers nor college faculty members believe that students are especially well prepared for college level work. However, college faculty members have an even more negative view than high-school teachers do. [Table 1.7a. Could do these as side-by-side pie charts]

**Table T: Respondents' Rating of How Well Prepared Students are for College Level Work**

<b>Preparation of Students for College Level Work</b>	<b>High School</b>	<b>College</b>
Not well - large gaps in preparation, struggling	12%	24%
Somewhat well - there are some gaps	53%	60%
Very well - students are generally able to do what's expected	31%	13%
Extremely well - they are prepared for almost anything	5%	2%
Not Reported	.1%	.5%

In addition to the global question about level of preparation, both groups were asked to rate how well prepared high-school graduates are for a list of specific college level demands, using a three-point scale (1 = “Not well prepared”; 2 = “Somewhat well prepared”; and 3 = “Very well prepared”). As the table below indicates, most of the averages for the high-school teachers were near or above 2.0 (“Somewhat well prepared”). By contrast, all of the college faculty ratings were below 2.0. For every dimension except “motivation to work hard,” which both groups rated low, the differences between the two groups were statistically significant. The single largest difference between the means (0.66 of a scale point) was for writing, an area in which high-school and college demands diverge dramatically, as noted earlier. The two groups also differed by half a scale point or more on mathematics, science, and research skills. Not far behind was “reading/understanding difficult materials,” for which the difference was .43 of a scale point. [Table 1.8a]

**Table U: Ratings of Students' Preparation for College Level Demands in Various Areas**

<b>Students' Preparation for College Level Demands</b>	<b>Respondent Type</b>	
	<b>High School</b>	<b>College</b>
Oral communication	2.13	1.96
Science	2.34	1.75
Mathematics	2.30	1.59
Writing	2.27	1.61
Reading/understanding difficult materials	2.12	1.69
Study habits (organization, planning)	1.85	1.65
Motivation to work hard	1.91	1.92
Ability to seek and use support resources (e.g., tutoring, counseling)	2.04	1.85
Research skills	2.08	1.52

The table shown on the previous page in some ways obscures the size of the gap in high-school teachers' and college faculty members' perceptions of the level of student preparedness in the five areas where the two groups differ the most. The table below serves to highlight these differences. While up to or slightly over one third of high-school teachers believe that their students are "very well prepared" in these areas, no more than 10% of college faculty members share that belief. [New table derived from 1.8a-1 by Jack]

**Table V: Comparisons of Percentages of Students "Not Well Prepared" and "Very Well Prepared" for College Level Work in Various Areas**

Level of Student Preparedness in...		High School	College	Ratio
Writing	Not Well	10%	44%	1 to 4.4
	Very Well	36%	6%	6.0 to 1
Math	Not Well	9%	32%	1 to 3.6
	Very Well	37%	4%	9.3 to 1
Science	Not Well	8%	19%	1 to 2.4
	Very Well	38%	5%	7.6 to 1
Research Skills	Not Well	18%	49%	1 to 2.7
	Very Well	25%	4%	6.3 to 1
Reading/Understanding Difficult Material	Not Well	14%	40%	1 to 2.9
	Very Well	26%	10%	2.6 to 1

College and university faculty were asked to rate how well prepared current students are in comparison to five years ago and 10 years ago, using a three-point scale where 1 = "Not as well prepared," 2 = "Prepared about the same," and 3 = "Better prepared." The mean for five years ago was 1.94, and the mean for 10 years ago was 1.76, suggesting that college faculty believe their current students are less well prepared than they were in the past (especially relative to 10 years earlier). [Q19] As noted earlier, about 50% of college faculty members think that their institution has become more selective over the last five years, while only 16% think it has grown less selective. It is difficult to see how the institution could be becoming *more selective* in five years while students are becoming slightly *less well prepared* over that same time period (and definitely less well prepared than 10 years before).<sup>6</sup>

<sup>6</sup> One possible explanation is that high-school students now typically apply for admission to substantially more schools than they used to. The result of this change could be that some colleges are accepting a smaller proportion of their applicants, even as the actual quality of their applicant pool may have declined.

## SETTING THE FINDINGS ON STUDENT PREPAREDNESS IN CONTEXT

### Time Spent Teaching Material that Should Have Been Learned Earlier

Both groups were asked to estimate the percentage of time in a typical class that they spent reviewing materials and skills that “should have been learned” earlier – in an earlier grade for the high-school teachers, and in high school for the college faculty. Perhaps surprisingly, given the teachers’ less negative views of students’ preparedness for college, they report spending somewhat *more* time in class reviewing material that should have been learned earlier. Over half of the high-school teachers but only one third of college faculty members spend 21% or more of their time engaging in review. Perhaps some of this difference occurs because of the substantial proportion of college faculty who teach courses past the freshman year, by which time the least well prepared students may have dropped out of college. [Table 1.4a]

**Table W: Amount of Class Time Spent Reviewing Material  
that Should Have Been Learned Earlier**

Percentage of Class Time Spent Reviewing Materials and Skills that Should Have Been Learned Earlier*	High School	College
0%	1%	11%
1 to 20%	43%	57%
21 to 40%	37%	22%
41 to 60%	13%	7%
61 to 80%	3%	2%
More than 80%	2%	1%
Not Reported	0.3%	0.1%

\*Earlier grade for high-school teachers; in high school for college faculty

### Communication of Expectations between High School and College

High-school teachers and college faculty were asked somewhat similar questions concerning how well high schools and colleges are communicating what students need in order to be well prepared for college.

When high-school teachers were asked how well they personally understood “the level of preparation that is required for your students to succeed in college,” 30% said “somewhat well,” and 68% said “very well.” By contrast, when college faculty members were asked if they believed that “public secondary schools are adequately conveying to their students what colleges will expect of them academically,” 60% said “Somewhat,” 37% said “Not at all,” and only 2% said “Very much so.” The questions were phrased differently, but they

are similar enough to reflect a disconnect between the two groups. [Q25 teachers; Q26 faculty]

When asked the degree to which they believed that colleges and universities are successfully making their academic expectations clear to high-school teachers, the teachers and the college faculty members gave similar, somewhat positive responses. [Q26 teachers, Q25 faculty] Given the disconnects between the two groups in their actual perceptions of students' preparedness, this general degree of agreement is surprising.

**Table X: College and University Communication of Academic Expectations**

<b>College and University Success in Communicating Academic Expectations</b>	<b>High School</b>	<b>College</b>
Very much so	11%	5%
Somewhat	60%	62%
Not at all	29%	31%
Not Reported	0.3%	3%

### High School Factors Supporting Students' Preparedness

High-school teachers believe that parents play a small-to-moderate role in helping students to be prepared for college. [Q28]

**Table Y: Role Parents Play in Preparing Students According to High-School Teachers**

n	mean	No Role	Small Role	Moderate Role	Large Role	Very Large Role
		1	2	3	4	5
737	2.84	4%	36%	38%	18%	4%

High-school teachers gave lukewarm ratings to the role guidance counselors play in helping students prepare for college. On a four-point scale, where 1 = "Not effective" and 4 = "Extremely effective," the ratings given by teachers were: [Q30]

**Table Z: High-School Teachers' Ratings of the Effectiveness of High School Counselors**

<b>Guidance Counselor Role</b>	<b>n</b>	<b>mean</b>
Providing appropriate advice on courses and preparation for college	741	2.29
Providing good advice concerning college options	739	2.37

## College and University Faculty Members' Attitudes Concerning Student Preparedness

College and university faculty were asked to use a four-point scale (where 1 = “Disagree strongly” and 4 = “Agree strongly”) to indicate their reaction to a series of five statements. They were most likely to agree that college faculty members care about the academic problems of undergraduates and least likely to endorse the notion that promoting diversity leads to the admission of too many under-prepared students. [Q20]

**Table AA: College Faculty Members' Ratings of Agreement with Selected Statements**

<b>Statement about Students' Preparation for College</b>	<b>n</b>	<b>mean</b>
Faculty members here are strongly interested in the academic problems of undergraduates.	1,094	3.17
Most of the students I teach lack the basic skills for college level work.	1,093	2.22
This institution should not offer remedial/developmental education.	1,085	2.01
Faculty members feel that most students are well-prepared academically.	1,087	1.92
Promoting diversity leads to the admission of too many under-prepared students.	1,086	1.78

Although college faculty members feel that their colleagues (and, presumably they themselves) are strongly interested in the academic problems of undergraduates, they do not feel that their institution rewards this interest. They were asked the degree to which the following statement is descriptive of their institution: “Faculty members are rewarded for their efforts to work with under-prepared students,” and over two thirds reported that the statement did not describe their institution. [Q21]

**Table BB: Degree to which the Statement: “Faculty Members are Rewarded for their Efforts to Work with Under-prepared Students” Describes their Institution**

<b>Degree to which the Statement is Descriptive</b>	<b>Percent</b>
Not descriptive	69%
Somewhat descriptive	28%
Very descriptive	2%
Not Reported	1%

One third of the faculty members felt that their institution had very good services to support students who need extra academic help, while another 62% felt that the services were “moderately” adequate – meeting some needs but not all. Only 5% felt that the services were not at all adequate. [Q16]

## INSIGHTS FROM HIGH-SCHOOL TEACHERS' AND COLLEGE FACULTY MEMBERS' COMMENTS

Conducting this survey struck a nerve with the nation's high-school teachers and college faculty members. Completely separately from the survey itself, we received emails like the following:

"I hope you will send a copy of your results to [the state superintendent of instruction]. You would think with all the money we pour into education that our kids would be better off, but it seems to have no impact because the focus is on standardized testing, not learning. I wish we could find a way to change the culture in high schools so that students would value what they are being offered. It is very obvious here at the college level that the foundations are not being created for the students to learn how to learn (which is critical). Thanks for asking." (Faculty member)

"Thanks for inviting me to take the study. The questions were very relevant and gave me a chance to reflect on the education process." (High school teacher)

"...Also when asking questions about homework, preparation, etc., one of the problems is that amounts of homework and preparation for college vary a great deal depending on the students' course choices and also on the parental oversight. I have actually had parents tell me when I called that they did not want me to call and could care less. I have also had parents call me repeatedly, ask for conferences and request weekly reports. One of the greatest stressors of teaching is the incredible variability of circumstance, student motivation, faculty support, etc. Just wanted to add these notes." (High school teacher)

"At this time in my university, I am aware of statistics that are going up. In my classroom, at the elementary level, the students are not better. Today I taught to dead wood. More than half had not yet purchased the textbook -- and they seem to think this is OK ("I'll get the cash soon."). Even those who had it had not yet really used it. I had to launch into the unpopular lecture about not wasting our time. It seems there is a *culture* that cuts off the first and last weeks of the semester in the student mentality (while these are very important times in the professorial mentality).

"Is it that textbooks were supplied to students in secondary school but must be purchased at the college/university level? Why on Day 2 would students come unprepared to settle in to the serious learning experience?"

"Bottom line: my most serious worry about incoming freshmen is that many do not assume responsibility for their learning, including the work they hand in--which

often demonstrates no understanding of the text/exercises. Many are passive to inert. They hand in work that is not at all correct, either in content or form. They do not seem acculturated to what is expected of them--which really is not that difficult if they follow directions. But they don't read written directions, or explanations, and sometimes do not change their ways even after it has been spelled out orally in class (at a great waste of time in terms of content). --Yet they argue, "I handed it in." It would seem they are accustomed to getting credit for signing their name to a page. These comments pertain only to the core level [subject area] courses I teach. Students who place higher are clearly more savvy and motivated." (College faculty member)

Within the survey itself, when invited to comment on issues related to how students could be better prepared academically for college study, astounding proportions of the respondents chose to do so:

High-school teachers – 574 comments out of 746 respondents (77%).  
College Faculty – 833 comments out of 1098 respondents (76%).

Among the high-school teachers, the following topics were mentioned the number of times shown:

Write; writing; written: n = 60 (10%)  
Effort: n = 13 (2%)  
Motivation: n = 15 (3%)  
Math: n = 32 (6%)  
Parent: n = 80 (14%)  
Test: n = 89 (16%)  
Read; reading: n = 72 (13%)  
Homework: n = 15 (3%)  
Study: n = 77 (13%)  
Expectations: n = 69 (12%)

Among the college faculty, the following topics were mentioned the number of times shown:

Write; writing; written: n = 302 (36%)  
Math: n = 145 (17%)  
Read; reading: n = 188 (23%)  
Test: n = 105 (13%)  
Study: n = 91 (11%)  
Expectations: n = 62 (7%)  
Parent: n = 48 (6%)  
Motivation: n = 23 (3%)  
Effort: n = 23 (3%)

That over *one third* of the college faculty commented on writing further reinforces the conclusion that inadequate writing skills among high school graduates are a predominant concern among college and university faculty. The high occurrence of mentions of mathematics and reading underscore the depth of college faculty members' worry about students' preparedness in these core skills.

## Themes in the High-School Teachers' Comments

Additional themes among the teachers' comments include the following:

- Standardized and/or high-stakes tests not only do not help, they may hurt.
- There should be less emphasis on sports and other non-academic activities.
- The curriculum should be more rigorous; there would be more AP courses, etc.
- "Back to basics."
- Heterogeneous grouping hinders the more capable and ambitious students; some teachers support tracking.
- Students need to be held more accountable, and the school administration needs to back up teachers when they confront students or their parents about student accountability.
- Colleges and universities should not accept students who cannot do the work.
- Colleges and universities could do more to communicate their expectations.

## Themes in the College Faculty Members' Comments

Additional themes in the college faculty members' comments include the following:

- Students are not necessarily well served by Advanced Placement courses, specifically in mathematics (let colleges teach calculus and high schools give an in depth preparation in trigonometry).
- "Back to basics."
- Students need to learn how to write something other than the "five-paragraph essay."
- Students need to do research by means other than extracting items from the internet and uncritically using the material.
- Students need to understand what plagiarism is – and that included downloading items from the internet and using them without attribution.
- Students typically underestimate the amount of effort and time organization it takes to succeed in college.
- High-school teachers need to have a degree in the area that they teach (especially for mathematics and science).
- Students need to improve in a number of higher order thinking skills: analysis, analytic reading, problem solving, etc.
- Grade inflation at all levels needs to be curbed.

## CONCLUSIONS

- High-school teachers and college faculty differ substantially in their expectations for student work, both in quantity and in type.
- Both groups find that students do substantially less work than they are expected to do.
- While both groups feel that students are not well prepared, either in general or in a number of specific areas, college faculty have a much more negative view of students' preparedness than high-school teachers do.
- Both high-school teachers and college faculty are ambivalent at best about the impact of high-stakes outcomes testing for students.
- Both groups have a somewhat more positive view of the old standbys, the SAT/ACT and the AP tests. However, college faculty members are less inclined to believe that passing an AP test means that a student has already demonstrated college level work.
- Both groups report having to review material and skills that should have been learned earlier, but high-school teachers report more time spent this way than faculty members do.
- Writing is the single most critical disconnect between high-school teachers' and college faculty members' expectations, perceptions of student preparedness, and identification as an issue in the open-ended comments; for college faculty members, writing seems to trump all other issues.