

Teachers and Top Students Address a Career in Education

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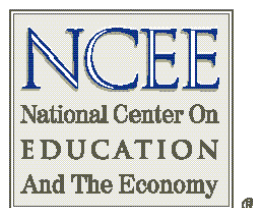


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1. Executive Summary

This survey examined the attitudes, perceptions and beliefs of teachers and top students with regard to a career in professional teaching. Two separate random national samples of teachers were interviewed in this survey – those with five years or less of classroom experience (N = 200) and those with fifteen years or more in the classroom (N = 200). A national random cross section of students was interviewed to determine their scores on the verbal and math portions of the SAT. Only students with a combined math and verbal score of 1100 or higher were accepted for interview (students in the top third of the SAT percentile ranks; N = 200). Key findings from the results of from these three audiences follow.

- a. Looking at the national perspective of the teaching profession today, views in both cohorts of teachers were evenly divided between those who felt the profession was going in the right direction (47%) and those who felt it had somehow gotten off track (47%). In contrast, nearly all top students (98%) believed that their college education was taking them in the right direction.
- b. Despite the large number of teachers who felt their profession had gotten off on the wrong track (47%), most teachers (83%) believed that the personal rewards they were receiving from teaching met their expectations. Among those who disagreed (17% of all teachers), they blamed a lack of support from administrators (27%); poorly motivated students (19%); too much pressure to raise student achievement (19%); and, low pay (18%) for their negative feelings.
- c. Top students measured the overall desirability of nearly a dozen possible career paths. Listed among these possible career choices was a career as a classroom teacher. Classroom teaching was tied with business as the most desirable career path (Classroom Teaching Mean = 5.9, Top box score (top two boxes on a ten point scale) = 26%; Business Mean = 5.9, Top box score = 26%). However, a gap existed between the high overall desirability of classroom teaching as a career path and the number who would actually choose teaching as their job or college major.

- i. Less than one student in fifteen (7%) described teaching as their ideal job.
 - ii. Only one student in fifteen (7%) believed that students in the top third of their class would choose a teaching career.
 - iii. One in seven (14%) reported that education was their likely college major.
 - iv. Only one out of five (21%) said they might be likely to choose a classroom teaching career at some point.
- d. Teachers were asked for their views on the best things about a career in teaching. In both teacher cohorts, the best things about teaching included:
 - i. Seeing children learn, grow, and progress (58% of new teachers and 45% of those with fifteen years or more experience)
 - ii. Working with and interacting with the kids (39% new teachers; 51% seasoned teachers)
 - iii. Influencing, impacting students' lives (27% new teachers; 25% seasoned teachers)
 - iv. Having a career that was personally rewarding, fulfilling, enjoyable, satisfying (7% new teachers; 12% seasoned teachers)
 - v. Continuing to learn as part of their job (7% among new teachers)
 - vi. Having time off (8% among seasoned teachers)
- e. When top students were asked their opinion about the best things in a teaching career, nearly two out of three (65%) mentioned "making a difference / influencing others." Other top mentions included: a) "a personally rewarding / enjoyable career" (14%); b) "summers off / vacation time off" (10%); c) "can share knowledge / experience" (10%); d) "able to get kids off on the right track" (9%).
- f. On the flip side, the things which teachers in both cohorts found difficult about teaching included:
 - i. Too many demands (paperwork, meetings, certification) leaving too little time to teach (32%)
 - ii. Bureaucracy, politics, teaching to the tests (27%)
 - iii. Lack of parental support, dealing with parents (22%)
 - iv. Classroom discipline, behavior and motivational problems (19%)

- v. Lack of funding, supplies (10%)
- vi. To this list, teachers with fifteen years or more experience added students were not ready to learn when they arrived in class (7%)
- g. When asked about the obstacles and / or downsides to choosing a teaching career, six out of ten (62%) top students mentioned “low pay.” Other downsides to a teaching career included: a) “undisciplined / disrespectful / difficult kids” (14%); b) “hard to find a job” (9%); c) “high stress / frustrating; over-worked” (8%); d) “amount of school required / certification” (7%); e) “lack of respect from parents / lack of respect in the community” (7%).
- h. Teachers and top students were asked whether they agreed or disagreed with the following statement: “Skilled teachers make the most important difference in a student’s education.” Teachers in both cohorts expressed overwhelming agreement (92%) on the role of teachers. While somewhat less enthusiastic, two out of three (66%) among top students nevertheless also agreed with this statement on the importance of skilled teachers.
- i. Ways to attract more top students into the teaching profession were explored among both students and teachers. Nine different possible incentives that might attract highly skilled student into teaching were tested. The degree of motivation to seriously consider a teaching career was measured for each incentive. The four, most highly motivating incentives to consider in a teaching career for students included:
 - i. A system in which teacher pensions would be mobile, that is, a teacher could take their pension with them to any other school or college in the country (Top Students: Mean = 8.0; top two box = 44%)
 - ii. Top salaries of about \$95,000 per year recognizing that today, on average, teachers' salaries typically top out much lower (Mean = 7.6 ; top two box = 33%)
 - iii. A teacher could earn more for accepting greater responsibilities and working more weeks in the year than regular teachers, up to \$110,000 per year (Mean = 7.1; top two box = 29%)

- iv. Higher teacher salaries based on the quality of your teaching instead of years of service (Mean = 7.1; top two box = 21%)
- j. Teachers were given the same series of statements reflecting different incentives that could be offered in the teaching profession. The degree to which each was considered motivating to top college students to seriously consider a career in teaching was measured. The four most highly motivating incentives as viewed by teachers included:
- i. Top salaries of about \$95,000 per year recognizing that today, on average, teachers' salaries typically top out much lower (New Teachers Mean = 8.7; top two box = 64%; Seasoned Teachers Mean = 8.9, top two box = 69%)
 - ii. A system in which teacher pensions would be mobile, that is, a teacher could take their pension with them to any other school or college in the country (New Teachers Mean = 8.4; top two box = 53%; Seasoned Teachers Mean = 8.8, top two box = 71%).
(Comparing student and teacher views on these two alternatives it should be noted that these are the same top two motivators chosen by both. Students are somewhat less enthusiastic about each alternative; nevertheless, they rank these two incentives at the top of their list of incentives that would motivate them to consider a teaching career.)
 - iii. A starting salary of about \$45,000 per year recognizing that today, on average, teachers start at approximately \$32,000 (New Teachers Mean = 8.1; top two box = 42%; Seasoned Teachers Mean = 8.4, top two box = 55%)
 - iv. A teacher could earn more for accepting greater responsibilities and working more weeks in the year than regular teachers, up to \$110,000 per year (New Teacher Mean = 7.1; top two box = 33%; Seasoned Teacher Mean = 7.4, Top two box = 40%).
(Unlike teachers, students do not place starting salaries of about \$45,000 among their top four motivating incentives. On the other hand, students and teachers both agree that earning more for accepting greater responsibilities should be included in the top four incentives for attracting skilled students into the teaching

profession. Top students placed more motivating incentive value on higher teacher salaries based on the quality of your teaching instead of years of service than teachers in either cohort.)

- k. The least motivating change for both top students and teachers was pay that reflects how much your students learn, not based on one test, but using multiple criteria for student performance. (Students Mean = 5.9; top two box = 17%; New Teachers Mean = 5.2; top two box = 15%; Seasoned Teachers Mean = 4.7, top two box = 16%)
- l. When teachers were asked if they believed implementing performance based pay for teachers would attract more of the top third of college students into the teaching profession, the majority (57%) in both cohorts responded that it would have no effect on attracting top students. Thirty seven percent (37%) disagreed and believed such action would motivate more top students to select a career in education.
- m. Top students were asked to assume that all of these incentives had been implemented. They were then asked how likely they would be to choose a classroom teaching career. One out of three (34%) indicated they would be very likely to consider a classroom teaching career if these incentives were in place. Compared to the pre-measure where only 21% indicated they were very likely to choose a career in classroom teaching at some point, this is a significant increase of 13%.
- n. When asked why these changes would make them more likely to choose a career in classroom teaching, nearly four in ten (38%) skilled students mentioned the motivating impact of better life time pay and portable benefits.

2. Introduction

The advent of China and India as major players on the world's economic stage makes it clear that it is now possible for large nations to offer high skills at low wages. To keep pace with the growing economic strength of India and China as well as other third world countries, the United States must meet three challenges:

- to increase the earning power of individual wage earners
- to employ everyone of a working age who wants to be employed and
- to grow the economy as a whole.

A large share of the economic dominance this country now enjoys is a result of the very large lead we had for virtually the whole first half of the 20th century in educational attainment. The United States has enjoyed a decisive edge in education and skills over the rest of the world through the entire century. But this is rapidly changing. In a few short decades, the United States' share of the global college-educated workforce has fallen from 30 percent to 15 percent. Looking to the future, just remaining economically competitive with the rest of the world depends on our workers — not just the professionals, but most of us — matching the skills of our leading competitors in the core curriculum — math, science and command of our native language. To thrive economically, the United States would have to offer something else, something our competitors could not offer. Adding creativity and innovation to sheer competence will give us this edge.

If we want students graduating our high schools with the core skills, as well as the creativity and innovation skills needed to keep us ahead of the rest of the world, teachers are needed who can write well, who read a lot and well and who are themselves good at mathematical reasoning. And we will need teachers who are very comfortable with ideas. We need teachers who have the kind of creative skills and abilities that we want their students to have. To attract teachers of this caliber we will have to offer compensation and working conditions on a par with what the better employers in the country are now offering, because that is the competition. The country needs the best teachers it has ever had.

The overriding objective of this study was to examine responses from top students and teachers to a series of incentives designed to attract highly skilled students into classroom teaching. These incentives included:

- A starting salary of about \$45,000 per year
- Top salaries of about \$95,000 per year
- A system where a teacher could earn more for accepting greater responsibilities and working more weeks in the year than regular teachers, up to \$110,000 per year
- Having the option of choosing higher starting and top salaries with a reduction in retirement benefits to a level offered by better private employers
- Higher pay for certain types of teaching such as teaching in inner-city schools or teaching tough subjects like math and science
- Higher teacher salaries based on the quality of teaching instead of years of service
- A system in which teacher pensions would be mobile
- A system in which teachers could assume more responsibility for running the schools in which they teach
- Pay that reflects how much students learned, not on one test, but using multiple criteria for student performance

In the sections which follow, findings on these and other questions will be presented from top students and teachers.

3. Methodology

This research was conducted in three phases as follows:

- Phase One – Gathered and reviewed previous research on teachers and college students
- Phase Two – Conducted in-depth interviews (each 2 hours long) in Southern California among 40 college students (USC 20 students and UCLA 20 students). Verbal and math SAT scores of those interviewed were in the top 1/3 of all students (Low SAT = 1120; Average SAT = 1360)
- Phase Three – Conducted random sample surveys by telephone with:
 - College students in the top third of all college students (N=200; Low SAT = 1120; Average SAT = 1245)
 - Teachers with five years or less teaching experience (New teachers N=200)
 - Teachers with 15 years or more of teaching experience (Seasoned teachers N=200)

Some of the defining characteristics of the sample of top students included:

- Top students were drawn from 165 colleges and universities spread across four regions of the country
- A majority (60%) of those who completed this survey were lower classmen (freshmen and sophomores)
- Seven out of ten were between the ages of 18 and 20
- Six out of ten (63%) had already selected their career path.

Some of the defining characteristics of the two teacher's cohorts included:

- A strong majority (80%) of those who completed this survey were women
 - Women were more likely to be found among new teachers than those with fifteen years or more experience (84% vs 76%)
 - Men were found among seasoned teachers (24%) more often than among new teachers (15%).
- The median age for those with five years or less experience was 30. The median age for those with fifteen years or more experience was 53.
- A majority (50%) of all teachers in the sample were teaching at an elementary school.

- Among new teachers, fifty-five percent (55%) taught at an elementary school. Only forty-six percent (46%) of seasoned teachers taught at an elementary school.
- Middle school teachers accounted for one out of five (20%) teachers in both cohorts.
- One out of five (21%) new teachers were high school teachers. Seasoned teachers were more likely to be found teaching high school (31%).
- A quarter of all teachers (25%) were teaching in schools where 75% or more of the student body were eligible for the free or reduced lunch program.
- A large number of new teachers (44%) had worked full time in another field before taking up their teaching career. The comparable figure for older teachers was 16%.

4. Characteristics of a Teaching Career

The discussion of a teaching career began by asking top students to talk about their ideal job. When asked to describe their ideal job, top students at USC and UCLA mentioned four key attributes: a) Good money / great pay (53%); b) Challenging / fulfilling work (35%); c) Time for family / myself (33%) and d) Making a difference in the lives of people (30%).

Telephone interviews with 200 top students from around the country produced similar but not identical results. The top mentioned attribute in the national sample was the same found among USC and UCLA students, namely a decent salary / good money / a salary I can live on (23%).

Two attributes – A job where I enjoy what I do (13%) and a challenging job (8%) were frequently mentioned by the national sample of students. When combined, these two mentions total 21% of all responses. This compares well to the number two ideal attribute found among students at USC and UCLA -- A challenging / fulfilling job.

Students sampled in this survey also talked about the value of time in defining their ideal job. Thirteen percent (13%) wanted their ideal job to provide good hours / flexible time. Other frequently mentioned attributes of an ideal job for top students interviewed by telephone included: A job with good benefits (10%); and, A job where I can be independent / be my own boss (10%).

The most attractive career paths for top students in the random sample included Business (top two box = 26%), Classroom Teaching (top two box = 26%), Law (top two box = 19%) and Medicine (top two box = 18%). A career in teaching was held in high regard. Two out of three (66%) of top students also gave credit to skilled teachers as making the most important difference in a student's education.

When reacting to statements made by others when choosing a career, the student sample placed top importance on a) making a difference in the lives of people (top two box = 71%) and b) service to the community (top two box = 49%). Top students

also placed great importance on a job a) where outstanding performance is rewarded in the form of bonuses or higher salaries (top two box = 35%) and on a job with b) high levels of responsibility with accompanying pay increases for accepting greater responsibilities (top two box = 29%).

When asked to choose between a job with higher on-the-job compensation or one with higher than average retirement benefits, a majority (55%) of top students in the sample chose higher than average retirement benefits.

A gap existed between the desirability of classroom teaching as a career and the number who chose teaching as their ideal job or their major.

- Less than one student in fifteen (7%) described teaching as their ideal job.
- One student in fifteen (7%) believed that students in the top third of their class would choose a teaching career.
- One in seven (14%) reported that education was their likely college major.
- One out of five (21%) say they might be very likely to choose a classroom teaching career at some point.

When asked their opinion about the good things in a teaching career, nearly two out of three top students (65%) mentioned making a difference / influencing others. Other top mentions included: a) a personally rewarding / enjoyable career (14%); b) summers off / vacation time off (10%); c) can share knowledge / experience with others (10%); d) able to get kids off on the right track (9%).

On the flip side, when asked about the obstacles and / or downsides to choosing a teaching career, six out of ten top students (62%) mentioned low pay. Other downsides to a teaching career included: a) undisciplined / disrespectful / difficult kids (14%); b) hard to find a job (9%); c) high stress / frustrating; over-worked (8%); d) amount of school required / certification (7%); e) lack of respect in the community (7%).

Teachers in the national sample were asked for their views on the best things about being a teacher. The answers of both younger and older teacher cohorts were similar but not identical.

- For teachers with five years or less of experience, top mentions of best things about teaching included:
 - Seeing children learn, grow, progress (58%)
 - Working with, interacting with the kids (39%)
 - Influencing, impacting students' lives (27%)
 - Having a career that was personally rewarding, fulfilling, enjoyable, satisfying (7%)
 - Continuing to learn as part of their job (7%).
- In the second cohort of teachers with fifteen years or more experience, most of the same good things about being a teacher reappeared but the rank order is different. A majority of teachers in this cohort mentioned:
 - Working with, interacting with the kids (51%)
 - Seeing children learn, grow, progress (45%)
 - Influencing, impacting students' lives (25%)
 - Having a career that was personally rewarding, fulfilling, and enjoyable (12%)
 - Having time off (8%).

The things which teachers in both cohorts found difficult about teaching included:

- Too many demands (paperwork, meetings, certification) leaving too little time to teach (32%)
- Bureaucracy, politics, teaching to the tests (27%)
- Lack of parental support, dealing with parents (22%)
- Discipline, behavior and motivational problems in the classroom (19%)
- Lack of funding, shortage of supplies (10%)

To this list, teachers with fifteen years or more experience added students are not ready to learn when they arrive in class (7%).

5. Incentives for Attracting Top Students into Teaching

Top students and both teacher cohorts were given a series of statements presenting different incentives that could be offered to attract the most skilled students into teaching. For each incentive, top students and teachers in both cohorts rated how motivating it would be to cause top students to seriously consider a career in classroom teaching. The following table presents the mean scores on a 1 to 10 point rating scale where 1 = not at all motivating and 10 = very motivating. The data have been sorted by the overall results for all three cohorts.

Incentives for Choosing a Teaching Career

Incentives that Might Motivate Top Students into the Teaching Profession	Top Students	Teachers Five years or less	Teachers Fifteen years or more	All
Top salaries of about \$95,000 per year recognizing that today, on average, teachers' salaries typically top out much lower.	7.6	8.7	8.9	8.4
A system in which teacher pensions would be mobile, that is, a teacher could take their pension with them to any other school or college in the country. (P<.10)	8.0	8.4	8.8	8.4
A starting salary of about \$45,000 per year recognizing that today, on average, teachers start at approximately \$32,000. (P<.10)	6.8	8.1	8.4	7.8
A teacher could earn more for accepting greater responsibilities and working more weeks in the year than regular teachers, up to \$110,000 per year.	7.1	7.1	7.4	7.2
Higher pay for certain types of teaching such as teaching in inner-city schools or teaching tough subjects like math and science.	6.6	7.1	6.9	6.8
A system in which teachers could assume more responsibility for running the schools in which they teach. Teams of teachers could actually run whole schools. (P<.05)	6.9	6.5	7.0	6.8
Higher teacher salaries based on the quality of your teaching instead of years of service. (P<.05)	7.1	6.4	5.6	6.4
Having the option of choosing higher starting and top salaries with a reduction in retirement benefits to a level offered by better private employers.	5.9	6.1	5.8	5.9
Pay that reflects how much your students learned, not on one test, but using multiple criteria for student performance. (P<.05)	5.9	5.2	4.7	5.3

- In the above table, there is considerable consistency in the rating given each of the nine possible incentives for attracting skilled students into the teaching profession.
- For teachers, the two most motivating factors were a) top salaries of about \$95,000 per year recognizing that today, on average, teachers' salaries typically top out much lower (Mean = 8.8; top two box = 67%) and b) a system in which teacher pensions would be mobile, that is, a teacher could take their pension with them to any other school or college in the country (Mean = 8.6; top two box = 62%).
- These were the same top two motivators chosen by skilled college students.
 - Top salaries of about \$95,000 per year recognizing that today, on average, teachers' salaries typically top out much lower (Mean = 7.6; top two box = 33%)
 - A system in which teacher pensions would be mobile, that is, a teacher could take their pension with them to any other school or college in the country (Mean = 8.0; top two box = 44%)
 - New and seasoned teachers were significantly more enthusiastic ($p < .05$) about both than top students
- Two other highly motivating changes in the view of teachers were:
 - A starting salary of about \$45,000 per year recognizing that today, on average, teachers start at approximately \$32,000 (New teachers Mean = 8.1; top two box = 42%; Seasoned teachers Mean = 8.4, top two box = 55%)
 - A teacher could earn more for accepting greater responsibilities and working more weeks in the year than regular teachers, up to \$110,000 per year (Mean = 7.1; top two box = 33%; Seasoned teachers Mean = 7.4, top two box = 40%)
 - For both incentives, teachers with fifteen years or more in the profession expressed stronger support.
- Unlike teachers, students do not place starting salaries of about \$45,000 among their top four incentives. For skilled students, their third and fourth ranked incentives were:

- A teacher could earn more for accepting greater responsibilities and working more weeks in the year than regular teachers, up to \$110,000 per year (Mean = 7.1; top two box = 29%)
- Higher teacher salaries based on the quality of your teaching instead of years of service (Mean = 7.1, top two box = 21%)
Top students placed significantly more motivating incentive value on higher teacher salaries based on the quality of your teaching instead of years of service than teachers in either cohort ($p < .05$).
- Students and teachers agreed that earning more for accepting greater responsibilities should be included among the top four incentives for attracting skilled students into the teaching profession.
- The least motivating change for both top students and teachers was pay that reflected how much students learn, not based on one test, but using multiple criteria for student performance. (Students Mean = 5.9; top two box = 17%; New teachers Mean = 5.2, Top two box = 15% ; Seasoned teachers Mean = 4.7, Top two box = 16%)
- Top students were asked to assume that all of these incentives had been implemented. They were then asked how likely they would be to choose a classroom teaching career. One out of three (34%) indicated they would be very likely to consider a classroom teaching career if these incentives were in place. Compared to the pre-measure where only 21% indicated they were very likely to choose a career in classroom teaching at some point, this is a significant increase of 13%.
- When asked why these changes would make them more likely to choose a career in classroom teaching, four in ten (38%) skilled students mentioned the impact of better life-time pay and portable benefits.
- A majority (57%) of teachers in both cohorts, rejected performance based pay for teachers as an incentive that would attract more of the top third of college students into the teaching profession. Thirty seven percent (37%) disagreed and believed such action would motivate more top students to select a career in education.

6. Teachers Discuss Other Challenges in a Teaching Career

Looking at the national perspective of the teaching profession today, views in both cohorts are evenly divided between those who feel the profession is going in the right direction (47%) and those who feel it has somehow gotten off track (47%).

- Those who believe their profession is headed in the right direction mention the following: New and improved technology, better teaching tools, more research on teaching (16%); better educated, more qualified, more enthusiastic teachers (15%); positive changes in the national direction of education (15%); and, implementing standards based education (11%).
- Those who believe the teaching profession has gotten off track express the following reasons: Too many tests, teaching to the tests (34%); the bureaucracy and politics of education (26%); education isn't meeting the needs of students who are progressing faster due to "No Child Left Behind" (NCLB) (12%); lack of parental involvement (7%); and, the inability to discipline effectively (6%).
- Teachers with fifteen years or more of experience are more likely than younger teachers to mention the bureaucracy and politics of education as a negative. They also mention more often better educated and qualified teachers and more technology and tools as a positive in education.

Despite the large number who feel the teaching profession has gotten off on the wrong track (47%), most teachers (83%) believe their personal rewards from teaching are meeting their expectations. Those who disagreed (17% of all teachers) blamed a) lack of support from administrators (27%); poorly motivated students (19%); too much pressure to raise student achievement (19%); and, low pay (18%).

The following table presents six statements reflecting different attitudes toward teaching. The percent agreement with each statement is shown for both teacher cohorts.

Attitudes Toward Teaching

Attitude Statement	5 Years or Less Agree	15 Years or More Agree	All Agree
I don't see why teachers should not be paid as much as other professions requiring the same education	95%	91%	93%
I love teaching but I don't like the bureaucracy that goes along with it	89%	90%	89%
It is discouraging to work in a place where good teaching gets the same recognition as bad teaching	70%	72%	71%
I would love to be able to put a school together with a few close colleagues and show them all how it ought to be done (p < .05)	50%	57%	54%
Some teachers in my school are just staying around only to get the best retirement pay possible (p < .05)	52%	40%	46%
It is unfair that the best students get the best teachers	33%	31%	32%

The above table has been sorted on the percent agreement across both cohorts. Concerns over pay and the educational bureaucracy dominated the feelings of both teacher cohorts. Negative feelings about the bureaucracy were significantly more intense (p < .05) among teachers with 15 years or more experience. Still, between the two cohorts there was considerable similarity of views on pay, the bureaucracy surrounding teaching and teacher recognition.

Two statements showed significant differences between the new and more seasoned teachers. The seasoned cohort expressed more support for starting their own school while the new teacher cohort believed some teachers just stayed in teaching to

obtain their retirement benefits.

Both cohorts were asked their views on the role of teachers today and in the future. The following table presents the percent agreement with each of four statements.

The Role of Teachers

The Role of Teachers	5 Years or Less Agree	15 Years or More Agree	All Agree
Skilled teachers make the most important difference in a student's education	92%	92%	92%
In the future, teachers at all levels will be required to have stronger core competencies particularly in science, math and language	87%	82%	85%
To improve the preparation of all students, we need to employ teachers in elementary schools who specialize in math, science and languages	75%	67%	71%
To get the best and most skilled teachers into the classroom, teachers in the future must come from the top one third of college students ($p < .05$)	36%	47%	42%

Agreement among both cohorts was widespread for two statements regarding the role of teachers; teachers make the difference in education and teachers in the future must have stronger core competencies in science, math and language. Feeling was mixed over whether or not teachers in the future must come from the top one third of college students. Teachers with fifteen years or more of experience were significantly more likely to agree than less experienced teachers.

Some of the changes in education currently under discussion among the community of teachers are presented in the following table. Each was tested among teacher cohorts who were asked if the change was a good or a bad change. The following

table presents the results for this series of questions.

Other Changes in Education

Other Changes in Education (% Good Change)	Five years or less	Fifteen years or more	All
Treat teachers the same as other professionals with similar educational background. (p<.05)	96%	96%	96%
Mentor new teachers with those most successful at producing outstanding student performance	96%	96%	96%
Set going market rates of compensation for teachers in shortage subjects such as science and math (P<.05)	88%	76%	82%
Retrain teachers who are not able to do the job expected of them; fire those who fail after retraining	78%	83%	81%
Provide cash incentives to the best teachers to teach the hardest to teach students	69%	66%	68%
Compensate teachers based on their actual classroom performance	63%	54%	58%
Eliminate seniority as a principle of teacher assignment (P,.05)	60%	50%	54%

Both teacher cohorts were in favor of equal treatment with other professionals. Those with fifteen or more years of teaching experience were significantly more intense in their views. Views in both cohorts were very similar on mentoring new teachers, retraining teachers who aren't performing and providing cash incentives to teach the hardest students. Strong majorities in both cohorts felt these were good changes. Teachers with five years or less experience were significantly more supportive of setting market rates for teachers in shortage subjects compared to more experienced teachers. Nevertheless, strong majorities in both groups

supported this step as a good change.

Compensation based on performance and eliminating seniority as a principle of teacher assignment received mixed reviews. Both were more favorably received by teachers with five years or less experience but still rank at the bottom of possible changes.

Teachers in both cohorts were asked several questions about teacher certification. Only one out of three (34%) experienced teachers believed that certification guaranteed teachers have what it takes to be successful. Less experienced teachers were even less sure – only 21% held a similar view.

The results from two additional questions on certification showed the following results:

- Strong majorities in both cohorts believed it would be a good step to base licensure on demonstrated teaching ability rather than on a set of education courses taken (69% among all teachers).
- A majority of teachers felt that requiring elementary teachers to specialize in teaching math and science, or languages and social studies, and to minor in one of these would be a good step (57% among all teachers). Experienced teachers held significantly stronger view points on this question than new teachers.

Finally, teacher views were probed on a variety of questions which dealt with compensation issues. Teacher views tended to favor the status quo but not in every case. For example, when asked their preference between keeping the current salary schedule or offering teachers higher salaries with slightly reduced benefits, a majority in both cohorts opt for keeping the current salary schedule unchanged (Teachers with five years or less 50%; Teachers with fifteen years or more 57%). It was surprising that one out of three teachers (34%) felt teachers should be offered higher salaries for slightly reduced benefits. This view was particularly strong among new teachers where nearly four in ten (39%) supported it.

The following table presents the selections made by teachers of the best ways to determine teachers' salaries.

Best Ways to Determine Teachers Salaries

Which of the following ways is the best way to determine the salaries of teachers?	Five years or less	Fifteen years or more	All
Their education and formal qualifications	17%	23%	20%
Their years of experience	21%	22%	21%
How well they do their work	57%	43%	50%
Don't know (NOT READ)	6%	13%	9%

A significant majority of teachers with five years or less experience believed the best way for determining salaries was how well a teacher does their work (57%).

Teachers with more experience were not so sure (43%). The experienced teacher cohort was more inclined to opt for educational background and formal qualifications as determinates of compensation.

Teachers were probed for their views on a variety of criteria for providing additional financial incentives. For each, they were asked to indicate whether they favored or opposed providing additional financial incentives for that criteria. The following table presents the results for these questions.

Incentives for Additional Financial Support

Criteria for Additional Financial Incentives	Five years or less	Fifteen years or more	All
Work in tough neighborhoods with low performing schools	91%	84%	87%
Teach difficult classes with hard to reach students	85%	80%	82%
Consistently work harder, putting in more time and effort than others	83%	73%	77%
Consistently receive outstanding evaluations by their teaching peers ($p < .05$)	80%	69%	74%
Specialize in hard to fill subjects such as math and science ($p < .05$)	80%	68%	74%
Consistently receive outstanding evaluations by their principals ($p < .05$)	79%	57%	68%
Routinely produce kids who score higher than similar students on high quality achievement tests	64%	59%	62%

Support for additional compensation based on the above criteria was widespread. Even the criteria tied to test performance received a majority of support (62% among all teachers).

Consistently, teachers with five years or less experience expressed more support for each criteria leading to additional compensation. For new teachers, six out of seven criteria for additional compensation received support from eight out of ten (79%) or more. For experienced teachers, only two criteria received the support of eight out of ten: a) Work in tough neighborhoods with low performing schools; and, b) Teach difficult classes with hard to reach students. These two criteria were the most widely

accepted for additional teacher compensation.

The largest differences between new and more experienced teachers were found on criteria that involved evaluations by teaching peers and principals.

- Consistently receive outstanding evaluations by their principals (New teachers (79% favored); Experienced teachers (57% favored))
- Consistently receive outstanding evaluations by their teaching peers (New teachers (80% favored); Experienced teachers (69% favored))

Faced with favoring or opposing financial rewards to teachers who produced more academic progress in terms of improved reading levels, math skills, teacher evaluations and classroom tests when compared to similar students taught by other teachers, nearly two thirds of all teachers (64%) favored additional financial rewards. Seven out of ten teachers (70%) with five years or less experience would approve additional financial incentives in this situation.

7. Conclusions and Recommendations

1. There is no “bad” incentive for motivating top students to consider a career in classroom teaching. Some of the incentives tested are just OK, some are good and a few are exceptional. From in-depth conversations with top students at UCLA and USC, it is clear that not all incentives are equally clear and understandable. Each incentive needs a follow-up paragraph which illustrates the impact it would have on a teaching career.
2. Teachers are evenly divided over the condition of their profession. Those who express dismay at the direction teaching is taking focus on the role of testing and the related issues, the bureaucracy and politics of education. Experienced teachers are the most dissatisfied with the status quo.
3. Top students see much to be desired in a classroom teaching career (classroom teaching is tied with a career in business as the most desirable career choice). Some indication of what drives this positive view is found in answers to the question “what are the best things about teaching?” The strongest positive for top students is making a difference in the lives of others. Making a difference is a view with strong gender implications. Women are more likely than men to see this as a driving force in their career selection. Men, on the other hand, are more likely to emphasize a challenging and fulfilling job. These two orientations are the keys to attracting more top students into the teaching profession. More learning is needed on how best to communicate these benefits of a teaching career. And, most importantly, tie the suggested incentives for top students to both psychological benefits.
4. Despite the overall appeal of a career in classroom teaching, the choice to pursue teaching is seldom made. Some indication of why may be found in the obstacles and barriers seen in classroom teaching. Pay is the single greatest obstacle to choosing teaching as a career. Yet, for top students, it doesn’t appear that starting pay is the issue. Rather, lifetime salary potential is the more important driver. Further, the role of benefits as part of overall salary potential is

an important driver. The dynamic interaction of lifetime salary potential, benefits and starting salaries requires further study for top students and for new teachers.

5. Given the limits of time and money, changes within the teaching profession must be carefully targeted to new teachers as well as students enrolled in or considering a teaching major. Top students still looking at alternative career paths need to be reached in their senior years in high school and first years in college. Both rational and emotional arguments that touch personal values are needed. The arguments must show how the proposed changes outweigh the negative perceptions associated with making tests and classroom performance more central to the evaluation of teachers.

Appendix One

Key Findings from Group Sessions With 40 College Students in the Top Third of their Class

Key Findings from Group Sessions With 40 College Students in the Top Third of their Class

1. These students from the top third of their class at UCLA and USC seem to know where they are going and what they want out of life. Of the 40 participants, 20 have made their career choices. And, overall, they are very happy with their college experience and feel like it is taking them in the right direction.

One female student said her college experience *has “opened up so many opportunities for me. Even though I’ve decided to not use my Biology major to go on to med/dent/pharm/opt school, I still know that the complete college experience has prepared me to do greater things in my future. There is so much I have learned inside and outside the classroom.”*

Another student noted the role that the university has played in making available resources to help students select a career and find a job--something to take note of! *“Because whenever I need a resource regarding career, friends etc., I can find it on campus. Concerning my job search, I have a thorough business education, the confidence from my school and the network from my school to find a great job.”*

One female student, came seeking one career, and actually switched to teaching... *“although my original plan to become an actuary was changed after I noticed the difficulty and loss of interest in that track, it led me to find a new career path--that of teaching, and becoming a high school math teacher. I knew my career would be a scientific one, and specifically a math-oriented one, and becoming a teacher, I discovered, suits me best.”*

“In general do you feel that your college education is taking you in the right direction or has it gotten off on the wrong track?”

		Count	%
1	Right Direction	39	97.50%
2	Wrong Track	1	02.50%

2. The students in our two sessions basically have four key motivators as they talk about their ideal job....

- Making money (53%)**
- A challenging, personally fulfilling career (35%)**
- Quality lifestyle—work/life balance (33%)**
- Making a difference (30%)**

It appears from their responses to open ended questions that, at this stage of their life, if they had to choose, they would choose money—which in their minds translates into part of the quality lifestyle equation. However, when given the list of statements others have made about the attributes of an ideal job and asking them to rate each one in terms of importance to them personally....making a difference (8.8) slightly outranks pay (8.78). These students clearly care about their ability to leave a mark on society.

In one of the questions, students were allowed to list as many attributes or characteristics of their ideal job as they could think of. We then categorized their responses and asked them to pick their top 3. Listed below are their responses.

Attributes or characteristics of your ideal job

Top Characteristic / Attribute Drivers

		Count	%
1	Money / Great Pay	21	53%
2	Challenging / Personally fulfilling / Self Actualizing	14	35%
3	Spend Time with my Family / Balance Work & Personal Life	13	33%
4	Make difference in the lives of people / Want to help people	12	30%

Secondary Drivers

		Count	%
5	Flexible hours / Working the hours I want	8	20%
6	Prestige / Power / CEO Status	8	20%
7	Ability to be Creative	7	18%
8	Fun / Friendly / People Centered Work Environment	7	18%

Other Drivers

		Count	%
9	Self employed - being my own boss / Independence	6	15%
10	Financial Stability	5	13%
11	Travel	4	10%
12	Good Benefits	4	10%
13	Low stress	2	5%
14	Entrepreneurial spirit	2	5%
15	Promoted and rewarded based on performance	2	5%
16	Ability to do research / A high tech environment	2	5%
17	I want my own school	1	3%
18	Live In a big city	1	3%
19	Diverse clientele	1	3%

3. Before talking about the possible changes to the teaching profession, there is not a lot of interest in pursuing classroom teaching as a career. Only 1 of the 40 participants had decided upon teaching as a career choice. And in terms of it being an attractive career choice when given options in several other fields it ranked 4.73 on a 10 point scale---placing it number 5 out of 11 choices.

Results (Sorted by Mean)

	Rate Career Path on a 10 point scale	Mean			
1	Business	8.00			
2	Law	5.73			
3	Technology	4.73			
4	Social Service work such as a social worker or working for a non-profit group	4.55			
5	<i>Classroom Teacher</i>	4.35			

6	Medicine	4.33		
7	Government Service	4.28		
8	Science	4.10		
9	Architecture	3.55		
10	Mathematics	3.15		
11	Engineering	3.03		

- 4. When rating the importance of eight specific job characteristics in choosing a career, three characteristics rise to the top of the list:**
- a) Making a difference in the lives of people (Mean 8.8)**
 - b) An overall lifetime salary in the top third of comparable professions (Mean 8.78)**
 - c) Outstanding performance is rewarded in the form of bonuses or higher salaries (Mean 8.75)**

These three track well with the top mentions of the characteristics and attributes of the ideal job. Note that “an overall lifetime salary in the top third of comparable professions” is rated significantly higher in importance than “a starting salary comparable to other professions.”

Results (Sorted by Mean)

	Rate Item on a 10 point scale	Mean		
1	Making a difference in the lives of people.	8.80		
2	An overall lifetime salary in the top third of comparable professions.	8.78		
3	Outstanding performance is rewarded in the form of bonuses or higher salaries.	8.75		
4	High levels of responsibility with accompanying pay increases for accepting greater responsibilities.	8.23		
5	The chance to share responsibility for running the business or professional partnership where you work.	7.88		
6	Being of service to the community.	7.83		
7	A starting salary comparable to other professions.	7.65		
8	Pensions that are mobile, that is, you could leave one profession for another line of	7.03		

5. In terms of the motivation of having their money now or later—the majority want it now. Talking about pensions isn’t high on their list of personally relevant things—at this point in their lives. For the overwhelming majority of top college students in this study, higher on-the-job compensation is more important than higher than average retirement benefits. They are motivated by money, understand the power of money and want to choose what they do with it and when!

Which of the following is more important to you, higher than average compensation while you are in the job or higher than average retirement benefits?

		Count	%
1	Higher on the job compensation	32	80.00%
2	Higher than average retirement benefits	8	20.00%

A male student from USC said, *“I would rather be compensated early. It would allow me to do more while I’m young.”*

A female from UCLA had a little different perspective, *“Because while you’re on the job, you are able to invest and save for retirement, so not necessarily important afterwards.”*

And a 21 year old female from UCLA probably summarized it best when she talked about choice.... *“Because you can create retirement benefits by saving more at a higher salary. Plus, then you have the option of what type of lifestyle you want at different period,. one of high consumption or high saving and investment”*

Another female student said, *“with higher pay during my job, I can invest my money HOW I CHOOSE. I can choose which financial instruments are best to make my money grow. I fortunately have that discipline to save and cultivate my wealth.”*

A male student admits however that this isn’t something he’s really thought about. He said, *“I’ve always been good with saving money, and what with retirement plans being what they are right now, I feel I could save more money during my actual time working to help fund myself when I am older. It could also be the fact that, being so [relatively] young in the job market, retirement seems a long way off and hasn’t come across my*

mind as something to start planning for. Admittedly though, this question has made me begin to worry about it.”

6. Based on their previous responses about making a difference, it wasn’t surprising that 40 % of the responses focusing on the positive elements of a teaching career centered on having influence with kids/making a difference. The only other significant mentions were about vacations/time off—which ties back to their desire for a quality lifestyle. In the following table, the top two “good things about classroom teaching” are displayed—followed by their other choices.

In this question, students were allowed to list as many positive attributes or characteristics of teaching as they could think of. We then categorized their responses and asked them to pick their top 3. Listed below are their responses.

Good Things About Teaching

Top Two Good Things About Teaching

		Count	%
1	Making a difference / Influencing the future of our kids / Giving back to the community	32	80%
2	Good work-life balance / Weekends & holidays off / Summers off / Time for family / Flexibility	29	73%

Next Three Good Things About Teaching

		Count	%
3	Sense of pride and fulfillment / Rewarding / Sense of accomplishment / Respect	10	25%
4	Ability to pass knowledge on to others / Mentoring /	9	23%
5	Creativity / Life long learning	9	23%

Other Good Things About Teaching

		Count	%
6	You're the boss / Position of leadership	5	13%
7	Good benefits	4	10%

8	Watching kids grow	3	8%
9	Lifelong connections and memories	3	8%
10	Surrounded by other caring people / Diverse co-workers	3	8%
11	Stability / Steady pay	3	8%
12	Pushing the limits of traditional curriculum	2	5%
13	Teaching is fun	1	3%
14	Requires less schooling than other careers	1	3%
15	Casual dress	1	3%
16	Appear before an audience	1	3%
17	Work in any city	1	3%

7. The barriers to a classroom teaching career are displayed in the following table. And, the biggest drawback or downside of the teaching profession is pay!

In this question, students were allowed to list as many negative attributes or obstacles to teaching as they could think of. We then categorized their responses and asked them to pick their top 3. Listed below are their responses.

Obstacles to a Teaching Career

<i>Top Four Obstacles</i>			
		Count	%
1	The money / the horrible pay	29	73%
2	Bureaucracy / Poor Administration / Politics / Poor system	15	38%
3	Little to no upward mobility / Under valued / No opportunity for growth	15	38%
4	Bad / annoying kids / Violence at work / Bad neighborhoods	11	28%

Other Strong Obstacles

		Count	%
11	Monotonous / Boring / Not mentally challenging / No interaction with outside world	8	20%
13	Not well respected / Not appreciated / Not prestigious	8	20%
12	Inflexible or long hours / Helping outside of class is time consuming	5	13%

Other Obstacles Mentioned

		Count	%
7	Students apathetic	4	10%
8	Not enough resources	4	10%
27	Stress / Pressure of being perfect role model / Someone is always critical of you	4	10%
9	Need a lot of patience	3	8%
16	Teaching instead of doing / Don't face realistic situations	3	8%
18	Takes too much energy / Difficult	3	8%
33	Can't work from home / Not much mobility	2	5%
25	Poor benefits	1	3%
34	Too many kids in classes	1	3%
36	Popularity not based on credentials	1	3%
40	Requires extensive schooling for pay increases	1	3%
42	Dealing with difficult parents	1	3%

8. While 90% agree that skilled teachers make the most difference, 93% say that their peers (top 1/3 of their classes) will not choose teaching as a profession.

When asked why they didn't think their classmates would choose a teaching career, one of the respondents said *"If they are doing so well, then they're obviously very hardworking and like to be challenged. A teaching career would not seem so appealing to these kinds of people. Plus, the fact that they can earn so much more money in another field poses another obstacle. Some students might want to be a lawyer for 30 years for example, and then when they retire from that job then they'll teach. But I don't know of anyone in the top who do not want other jobs."*

Other responses as to why these students don't believe the top 1/3 of their class would choose teaching as a career—most talk about money.

"The top 1/3 may not decide to take the career path because it is a huge self sacrifice-low pay, long hours, high stress, and low recognition."

"They are in the top third probably because they worked extremely hard to get where there are. Thus said, why would they choose an un-financially rewarding career?"

"The current costs of living are far too high for many to aspire to have low paying jobs. Top students attend top universities in order to get good careers. It is somewhat unlikely that these students will become teachers, with the exception of those who truly have a passion to serve the community by teaching students."

"Most students in the business school do not want to pursue a career in education. Mainly because the pay is so low and it has nothing to do with the corporate world. Also, students in the business school want prestige and recognition for their work."

"Students in the top third of my class would not choose a teaching career because they are looking to "go far in life" -- the top students, we have goals set, expectations to meet, and results to generate. Society does not hold teaching as one of those jobs that the most intelligent, respected, and forward thinking individuals would aspire to. Teaching generates long term results from the root of the tree of knowledge, inspiring students at an early age and continuing to foster that interest in learning. However, America wants instant gratification, short term results, that power/prestige and wonderful pay will go to. Teaching is not one of those professions. Therefore, the best and the brightest will not go into teaching."

When asked about themselves, 80% said they wouldn't choose a teaching career either. And, based on their other responses— money is in the picture.

How likely is it that students in the top one third of your class will choose a teaching career?

		Count	%
1	<i>Very Unlikely</i>	23	57.50%
2	Somewhat Unlikely	14	35.00%
3	Somewhat Likely	3	07.50%

How likely is it that you personally will choose a classroom teaching career?

		Count	%
1	<i>Very unlikely</i>	17	42.50%
2	Somewhat unlikely	15	37.50%
3	Somewhat likely	5	12.50%
4	Very likely	3	07.50%

- 9. When presented with the suggested changes to teaching, two changes surfaced as most important in terms of motivating them to seriously think about the teaching profession.**
- A teacher could earn more for accepting greater responsibilities....up to \$110,000 (7.58 on a 10 point scale)**
 - They could make salaries up to \$95,000 (7.33)**

While, the concept of being able to run a school with your peers was appealing to some (it received a mean score of 6.30 on a 10 point scale), it still appears that to this group of participants— money is the key driver.

Attracting Graduates into Classroom Teaching

I'd like you to rate each proposed change on a scale from 1-10 in terms of how likely this change or benefit would be to motivate you to seriously consider classroom teaching as a career. One (1) means it would not motivate you at all to choose teaching as a career and ten (10) means it would be very motivating -- the higher the number the more motivating the change is for you.

Results (Sorted by Mean)

	Rate Item	Mean			
1	A teacher could earn more for accepting greater responsibilities and working more weeks in the year than regular teachers, up to \$110,000 per year.	7.58			
2	Top salaries of about \$95,000 per year recognizing that today, on average, teachers' salaries typically top out much lower.	7.33			
3	A system in which teachers could assume more responsibility for running the schools in which they teach. Teams of teachers could actually run whole schools.	6.30			
4	Higher teacher salaries based on the quality of your teaching instead of years of service.	6.28			
5	Higher pay for certain types of teaching such as teaching in inner-city schools or teaching tough subjects like math and science.	6.25			
6	A system in which teacher pensions would be mobile, that is, a teacher could take their pension with them to any other school or college in the country.	5.68			
7	A starting salary of about \$45,000 per year recognizing that today, on average, teachers start at approximately \$32,000.	4.73			
8	Pay that reflects how much your students learned, not on one test, but using multiple criteria for student performance.	4.60			

- 10. The final, and most compelling question, was asking these students if the changes discussed were actually implemented, would it motivate them to consider the teaching profession?**
--Of those 20 who said they had already chosen a career, the proposed changes could potentially move 4 of them.

Here is the reasoning of one of female student... *“a starting salary of 45,000 a year is a great benefit, especially knowing that it can increase over time. I would accept greater responsibilities for a pay increase as well. However, tying students’ performance to pay alone doesn't sound very intriguing. Knowing that teachers also have the opportunity to work all year, creating a full job, they wouldn't have to go searching for other jobs during the summer, which is what most teachers I've known have had to do. Also being able to take the pay you make anywhere with you is a great benefit. This sounds much better than it was before and could alter my decision”*

Another female said, *“I might consider it more because I want to be at a job that pays well and is well respected and is prestigious in our society. I would want to help more if I knew that the government felt the same (I would be assuming this since they would be increasing pay and benefits) and if they were willing to focus on our children then I would consider that field because without the help of the government teachers will never be able to fully help students.”*

“I might consider it more because I want to be at a job that pays well and is well respected and is prestigious in our society. I would want to help more if I knew that the government felt the same (I would be assuming this since they would be increasing pay and benefits) and if they were willing to focus on our children then I would consider that field because without the help of the government teachers will never be able to fully help students.”

- Of the 20 who said they haven't yet chosen a career, the proposed changes could potentially move 7 of them,**

Here is a verbatim from one of those 7... *“I feel that the pay increase would definitely make me consider teaching. I am interested in the many rewarding facets of education, however the negatives such as low salary dissuade me from this career. With the aforementioned changes in effect, salary would be competitive with many other professions, there would be opportunity to choose how involved you would like to be and be compensated accordingly. I think these are important changes that would dramatically*

affect the profession and the amount of qualified teachers would increase thus affecting our nation's education as a whole. I would like to be part of such a change, if these utopian ideals were in fact realized.”

Other comments....” I have always felt that teachers are one of the most underpaid careers, and raising their salary would be a big factor in drawing me more towards choosing a career in teaching. By getting more recognition for me and my students' performance, I would be more attracted to the job. The biggest factor in my mind, however, would be the increase in pay.”

“I feel that these changes would help bring the best and the brightest individuals into teaching careers and increase the prestige, respect, appreciation, and recognition that those in teaching careers deserve to receive. With better pay, compensation for better teaching skills, and ability to design a curriculum or not deal with school bureaucracy/politics as much, teaching would be much more enjoyable. I am currently considering medicine as a career path, but I also love teaching. I would love to see these changes happen so that students become taught by some fraction of the best former students, now teachers.”

Have you chosen your career?

		Count	%
1	No	20	50.00%
2	Yes	20	50.00%

If you have chosen a career other than teaching, and all these changes below were implemented, how likely is it that you would choose teaching instead?

- salaries beginning at \$45,000 and going up to \$95,000 on the regular salary schedule with benefits comparable to those offered by America's better employers;
- pay increases for accepting greater responsibility and/or teaching the hardest to teach students;
- pay tied to student performance using multiple criteria;
- higher top pay for working the whole year and taking major responsibility in a school;
- being able to create and run a school with your peers;
- mobile teacher pensions

		Count	%
1	Somewhat unlikely	8	42.11%
2	Very unlikely	7	36.84%
3	Somewhat likely	4	21.05%

If you have not chosen a career and these changes were made, how likely is it you would choose teaching?

		Count	%
1	Somewhat unlikely	9	45.00%
2	Somewhat likely	5	25.00%
3	Very unlikely	4	20.00%
4	Very likely	2	10.00%

11. It appears that making money is the driver for these bright students....who know where they are going and what they want out of life. At the same time, these students want to leave their mark in life and make a difference. This is very important to them. And, they realize and can articulate that classroom teaching makes a difference in kids' lives and in the communities. They also talk about a teaching career possibly filling their other driver—quality lifestyle (with more vacations and summers off).

If the changes being proposed can be articulated in such a way that these students feel that teaching is a career that in fact allows them to fulfill their dreams it could potentially move between 20 to 35% to choose it as their profession--depending on whether or not they have already chosen a career path. Clearly it's to our advantage to reach them before they have chosen their careers—possibly while still Juniors and Seniors in High School.

In closing, here are the comments from one student when at the end of the group session the students were asked if there was anything else they would like to add to the discussion.

“I am absolutely passionate about making institution wide changes so that classroom teaching will become a desired career path for more graduates from college. I have been so strongly influenced by the teachers that I have come across during my life that I believe better teachers in schools would be so helpful for society as a whole. Teaching is such an honorable profession and a noble cause, and I feel that if society comes to appreciate its teachers, its roots of intellectual inspiration, then everyone would be so much better off. I love teaching. I feel that anyone who loves teaching should become a teacher. But the things that hold me back from teaching are the monotony of the routine and curriculum, bad pay, and lack of prestige/recognition/appreciation for what teachers do. If these changes could be implemented to fix these, then I would love teaching, and I know others of my peers would too.”

Appendix Two

**Talking Points for
Top Third College Students**

Talking Points for Top Third College Students November, 2006

About the Top Students interviewed:

1. The definition of Top Student is based upon SAT scores.
 - a. All students were asked for their scores on the verbal and math portions of the test. Most of the students in this survey reported their math and verbal scores. Only students with a combined math and verbal score of 1100 or higher were accepted for interview.
 - b. A small number of students who took the new three part SAT could not precisely remember scores for the math and verbal tests. If they reported a three part combined score of 1650 or higher, we accepted them as top students.
 - c. Average SAT scores on the math and verbal tests were 1245 with a median point of 1200. Based on the SAT percentile ranks for the 2005-2006 combined math and verbal tests, half of our students were in the 78th percentile or above and half were in the 62nd to the 76th percentile.
 - d. Average SAT scores for all three tests were 1925 with a median point of 1900.
2. A majority (60%) of those who completed this survey were lower classmen (freshmen and sophomores).
3. Seven out of ten were between the ages of 18 and 20.
4. Top students were drawn from 165 colleges and universities spread across four regions of the country.
5. Nearly all (98%) believe that their college education is taking them in the right direction.
6. Six out of ten (63%) have already selected their career path.

Career Choice Points of View

7. When asked to describe their ideal job, the top four mentions include: a) A decent salary / a salary I can live on (23%); b) A job where I enjoy what I do (13%); c) A job that has good hours / flexible time (13%); d) A job with good benefits (10%); and e) A job where I can be independent / be my own boss (10%).
8. The most desirable career paths include Business (top two box = 26%), Classroom Teaching (top two box = 26%), Law (top two box = 19%) and Medicine (top two box = 18%).

9. When reacting to statements others have made about choosing a career, students place top importance on a) making a difference in the lives of people (top two box = 61%) and b) service to the community (top two box = 49%).
10. Top students also place great importance on a job a) where outstanding performance is rewarded in the form of bonuses or higher salaries (top two box = 35%) and b) with high levels of responsibility with accompanying pay increases for accepting greater responsibilities (top two box = 24%). (Comment: It seems important to find a way to equate something in teaching with “higher levels of responsibility” so people have both a sense of accomplishment and a means of measuring success.)
11. When asked to choose between higher on the job compensation and higher than average retirement benefits, a majority (55%) of top students chose higher than average retirement benefits.

Perceptions of a Teaching Career

12. A gap exists between the desirability of classroom teaching as a career and the number who choose teaching as their ideal job or their major.
 - a. Less than one student in fifteen (7%) describes teaching as their ideal job.
 - b. One student in fifteen (7%) believes that students in the top third of their class will choose a teaching career.
 - c. One in Seven (14%) report that education is their likely college major.
 - d. Classroom teaching is tied with business as the most desirable career path and 26% give classroom teaching a top two box score for desirability.
 - e. One out of five (21%) say they might be very likely to choose a classroom teaching career (before incentives were tested).
13. Teachers are held in high regard. Two out of three (66%) of top students believe that skilled teachers make the most important difference in a student’s education.
14. When asked their opinion about the good things of having a teaching career, nearly two out of three (65%) mention “making a difference / influencing others.” Other top mentions include: a) “a personally rewarding / enjoyable career” (14%); b) “summers off / vacation time off” (10%); c) “can share knowledge / experience” (10%); d) “able to get kids off on the right track.” (9%).
15. On the flip side, when asked about the obstacles and / or downsides to choosing a teaching career, six out of ten (62%) mention “low pay.” Other downsides to a teaching career include: a) “undisciplined / disrespectful / difficult kids” (14%); b) “hard to find a job” (9%); c) “high stress / frustrating ; over-worked” (8%); d) “amount of school required / certification” (7%); e) “lack of respect / lack of respect in the community” (7%). (Comment: Maybe the “Marine” approach would be useful...the one, the proud, the Marine...Leader, Difference Maker, Teacher)

Changes That Motivate

16. Students were given eight different changes that could be made in the teaching profession. For each, the students rated how motivating it would be to cause them to seriously consider a career in classroom teaching.
 - a. The two most motivating factors for attracting top college graduates into classroom teaching are a) a system in which teacher pensions would be portable, that is, a teacher could take their pension with them to any other school or college in the country (Mean = 8.0; top two box = 44%) and b) top salaries of about \$95,000 per year recognizing that today, on average, teachers' salaries typically top out much lower (Mean = 7.9; top two box = 33%).
 - b. Two other highly motivating changes are a) a teacher could earn more for accepting greater responsibilities and working more weeks in the year than regular teachers, up to \$110,000 per year (Mean = 7.1; top two box = 29%) and b) higher teacher salaries based on the quality of your teaching instead of years of service (Mean = 7.1; top two box = 21%).
 - c. The least motivating change is pay that reflects how much your students learn, not on one test, but using multiple criteria for student performance. (Mean = 5.9; top two box = 17%) (Comment: It was clear in the UCLA/USC interviews that top students don't believe they can control this. They are skeptical of being held accountable for things which they can't control.)
17. Asked to assume that all of these changes have been implemented, students were asked how likely they would be to choose a classroom teaching career. One out of three (34%) indicate they would be very likely to consider a classroom teaching career. Compared to the pre measure where only 21% indicated they were very likely to choose a career in classroom teaching, this is a significant increase of 13%.
18. When asked why these changes would make them more likely to choose a career in classroom teaching, nearly four in ten (38%) mention the motivating impact of better pay and benefits.

Appendix Three
College Students Questionnaire

College Students Questionnaire September 2006

1. In general do you feel that your college education is taking you in the right direction or has it gotten off on the wrong track?
 - a. Right Direction
 - b. Wrong Track
 - c. Don't know / Refused

2. I want you to think about being able to create your ideal job after graduation. List all the attributes or characteristics that would describe your ideal job. Be as specific as possible. (ACCEPT UP TO THREE RESPONSES)

Let's talk about some of the different career paths that may be open to you. For each career I mention, please rate it on a scale from 1-10 in terms of it's desirability to you personally. 1 means it isn't a desirable career path at all and 10 means it's a very desirable career path. You can rate each one anywhere between 1 and 10 in terms of the career path being desirable to you personally. (RANDOMIZE ORDER OF PRESENTATION)

3. Business
Not desirable career 1 2 3 4 5 6 7 8 9 10 Very desirable career
4. Science
Not desirable career 1 2 3 4 5 6 7 8 9 10 Very desirable career
5. Classroom Teacher
Not desirable career 1 2 3 4 5 6 7 8 9 10 Very desirable career
6. Law
Not desirable career 1 2 3 4 5 6 7 8 9 10 Very desirable career
7. Mathematics
Not desirable career 1 2 3 4 5 6 7 8 9 10 Very desirable career
8. Technology
Not desirable career 1 2 3 4 5 6 7 8 9 10 Very desirable career
9. Engineering
Not desirable career 1 2 3 4 5 6 7 8 9 10 Very desirable career
10. Medicine
Not desirable career 1 2 3 4 5 6 7 8 9 10 Very desirable career
11. Architecture
Not desirable career 1 2 3 4 5 6 7 8 9 10 Very desirable career
12. Government Service
Not desirable career 1 2 3 4 5 6 7 8 9 10 Very desirable career

13. Social Service work such as a social worker or working for a non-profit group
Not desirable career 1 2 3 4 5 6 7 8 9 10 Very desirable career

I am going to read you some statements that others have made about what is important to them in choosing a career. For each of these statements please rate how important it is to you personally when making a career choice. Again, we'll use a scale from 1-10 where one (1) means it's not at all important and ten (10) means it's very important. You can rate it anywhere between 1 and 10 in terms of how important it is to you personally when choosing a career. (RANDOMIZE ORDER OF PRESENTATION)

14. A starting salary comparable to other professions.
Not at all important 1 2 3 4 5 6 7 8 9 10 Very Important
15. An overall lifetime salary in the top third of comparable professions.
Not at all important 1 2 3 4 5 6 7 8 9 10 Very Important
16. High levels of responsibility with accompanying pay increases for accepting greater responsibilities.
Not at all important 1 2 3 4 5 6 7 8 9 10 Very Important
17. Outstanding performance is rewarded in the form of bonuses or higher salaries.
Not at all important 1 2 3 4 5 6 7 8 9 10 Very Important
18. Pensions that are portable, that is, you could leave one profession for another line of work and take your pension with you.
Not at all important 1 2 3 4 5 6 7 8 9 10 Very Important
19. The chance to share responsibility for running the business or professional partnership where you work.
Not at all important 1 2 3 4 5 6 7 8 9 10 Very Important
20. Making a difference in the lives of people.
Not at all important 1 2 3 4 5 6 7 8 9 10 Very Important
21. Being of service to the community.
Not at all important 1 2 3 4 5 6 7 8 9 10 Very Important
22. Which of the following is more important to you, higher than average compensation while you are in a career job or higher than average retirement benefits?
- a. Higher on the job compensation
 - b. Higher than average retirement benefits
 - c. Don't know / Refused (DO NOT READ)

Let's focus on a few minutes on the career path of classroom teaching.

23. In your opinion what are the good things about having a teaching career?
(ACCEPT UP TO THREE ANSWERS) What else? What else?

24. And for you personally, what are the obstacles or the down sides of choosing a teaching career? List all the obstacles or down sides to teaching you can. Be as specific as possible. (ACCEPT UP TO THREE ANSWERS) What else? What else?

Please tell me if you agree or disagree with the following statement.

25. “Skilled teachers make the most important difference in a student’s education.”

- a. Strongly agree
- b. Somewhat agree
- c. Somewhat disagree
- d. Strongly disagree
- e. Don’t know / Refused (DO NOT READ)

26. How likely is it that students in the top one third of your class will choose a teaching career? (READ AND RECORD ANSWER)

- a. Very likely
- b. Somewhat likely
- c. Somewhat unlikely
- d. Very unlikely
- e. Don’t know / Refused (DO NOT READ)

27. And, how likely is it that you personally will choose a classroom teaching career?

- a. Very likely
- b. Somewhat likely
- c. Somewhat unlikely
- d. Very unlikely
- e. Don’t know / Refused (DO NOT READ)

There has been a lot of discussion about ways to attract the top college graduates into school classroom teaching. I’m going to read you some of the suggestions for attracting skilled teachers (i.e. changes in the way teachers work and in the benefits they receive).

I’d like you to rate each proposed change on a scale from 1-10 in terms of how likely this change or benefit would be to motivate you to seriously consider classroom teaching as a career. One (1) means it would not motivate you at all to choose teaching as a career and ten (10) means it would be very motivating -- the higher the number the more motivating the change is for you.

28. A starting salary of about \$45,000 per year recognizing that today, on average, teachers start at approximately \$32,000.

Not motivating at all 1 2 3 4 5 6 7 8 9 10 Very motivating

29. Top salaries of about \$95,000 per year recognizing that today, on average, teachers' salaries typically top out much lower.
Not motivating at all 1 2 3 4 5 6 7 8 9 10 Very motivating
30. Higher pay for certain types of teaching such as teaching in inner-city schools or teaching tough subjects like math and science.
Not motivating at all 1 2 3 4 5 6 7 8 9 10 Very motivating
31. Pay that reflects how much your students learned, not on one test, but using multiple criteria for student performance.
Not motivating at all 1 2 3 4 5 6 7 8 9 10 Very motivating
32. A teacher could earn more for accepting greater responsibilities and working more weeks in the year than regular teachers, up to \$110,000 per year.
Not motivating at all 1 2 3 4 5 6 7 8 9 10 Very motivating
33. Higher teacher salaries based on the quality of your teaching instead of years of service.
Not motivating at all 1 2 3 4 5 6 7 8 9 10 Very motivating
34. A system in which teacher pensions would be mobile, that is, a teacher could take their pension with them to any other school or college in the country.
Not motivating at all 1 2 3 4 5 6 7 8 9 10 Very motivating
35. A system in which teachers could assume more responsibility for running the schools in which they teach. Teams of teachers could actually run whole schools.
Not motivating at all 1 2 3 4 5 6 7 8 9 10 Very motivating
36. Having the option of choosing higher starting and top salaries with a reduction in retirement benefits to a level offered by better private employers.
Not at all motivating 1 2 3 4 5 6 7 8 9 10 Very motivating
37. Have you chosen your career yet?
- Yes, I have chosen my career
 - No, I have not chosen my career
 - Don't know / Refused (DO NOT READ)

Now, I want you to assume that the changes for teachers we just discussed have been implemented. I am going to read to you these changes in the way teachers work and are compensated one more time. (READ CHANGES SLOWLY ALONG WITH RESPONDENTS)

- salaries beginning at \$45,000 and going up to \$95,000 on the regular salary schedule with benefits comparable to those offered by America's better employers;
- pay increases for accepting greater responsibility and/or teaching the hardest to teach students;
- pay tied to student performance using multiple criteria;
- higher top pay for working the whole year and taking major responsibility in a school;
- being able to create and run a school with your peers;
- mobile teacher pensions

38. How likely is it that these changes would influence you to choose a classroom teaching career?
- a. Very likely
 - b. Somewhat likely
 - c. Somewhat unlikely
 - d. Very unlikely
 - e. Don't know / Refused (DO NOT READ)

39. And why do you feel that way? (OPEN END)

Now just a few questions for demographic purposes

40. What year in school are you?
- a. Freshman
 - b. Sophomore
 - c. Junior
 - d. Senior
 - e. Other (Please specify) _____

41. What is your age?
- a. 18 to 20
 - b. 21 to 23
 - c. 24 to 26
 - d. Over 26

42. GENDER BY OBSERVATION?
- a. Male
 - b. Female

43. What is your chosen major?

44. How committed are you to your major?
- a. Very committed
 - b. Somewhat committed
 - c. Not very committed
 - d. Not committed at all

45. What is your SAT score?

Appendix Four

Talking Points for Teachers

Talking Points for Teachers November 2006

About the Teachers Interviewed:

1. Two separate groups of teachers were interviewed in this survey – those with five years or less of classroom experience and those with fifteen years or more experience.
2. A strong majority (80%) of those who completed this survey were women. Women were more likely to be found among those with five years or less experience (84% vs 76%); more men were found among teachers with fifteen or more years of experience (15% vs 24%).
3. The median age for those with five years or less experience was 30. The median age for those with fifteen years or more experience was 53.
4. One out of two teachers (50%) was currently teaching in an elementary school. Middle school teachers accounted for one out of five (20%) of the total sample. Three out of ten (27%) were high school teachers. A small number (3%) were teaching in charter schools or special ed programs.
5. A quarter of all teachers (25%) were teaching in schools where 75% or more of the student body were eligible for the free or reduced lunch program.
6. A large number of new teachers (44%) had worked full time in another field before taking up their teaching career. The comparable figure for older teachers was 16%.

Perceptions of a Teaching Career

7. Looking at the national perspective of the teaching profession today, views in both cohorts are evenly divided between those who feel the profession is going in the right direction (47%) and those who feel it has somehow gotten off track (47%).
 - a. Those who believe their profession is headed in the right direction mention the following: New and improved technology, better teaching tools, more research on teaching (16%); better educated, more qualified, more enthusiastic teachers (15%); positive changes in the national direction of education (15%); and, implementing standards based education (11%).
 - b. Those who believe the teaching profession has gotten off track express the following reasons: Too many tests, teaching to the tests (34%); the bureaucracy and politics of education (26%); education isn't meeting the needs of students who are progressing faster due to NCLB (12%); lack of parental involvement (7%); and, the inability to discipline effectively (6%).
 - c. Teachers with fifteen years or more of experience are more likely than younger teachers to mention the bureaucracy and politics of education as

a negative. They also mention more often better educated and qualified teachers and more technology and tools as a positive in education.

8. Despite the large number who feel the teaching profession has gotten off on the wrong track (47%), most teachers (83%) believe their personal rewards from teaching are meeting their expectations.
 - d. Those who disagree (17%) blame a) lack of support from administrators (27%); poorly motivated students (19%); too much pressure to raise student achievement (19%); and, low pay (18%).
9. All teachers were asked for their views on the “best things about being a teacher.” The answers of both younger and older teacher cohorts are similar but not identical.
 - e. For teachers with five years or less of experience, seeing children learn, grow, progress is mentioned as the “best” thing about teaching by nearly six out of ten (58%). Other positives about teaching for this cohort include: Working with, interacting with the kids (39%); Influencing, impacting students’ lives (27%); having a career that was personally rewarding, fulfilling, enjoyable, satisfying (7%); and, continuing to learn as part of their job (7%).
 - f. In the second cohort of teachers with fifteen years or more experience, most of the same “good” things about being a teacher reappear but the rank order is different. A majority of teachers in this cohort mention working with, interacting with the kids (51%) as their top positive mention. Running a close second in this cohort is seeing children learn, grow, progress with 45% mention. Other “good” things about teaching include: Influencing, impacting students’ lives (25%); having a career that was personally rewarding, fulfilling, and enjoyable (12%); and, having time off (8%).
10. On the flip side, the things which teachers in both cohorts find difficult about teaching include: Too many demands (paperwork, meetings, certification) leaving too little time to teach (32%); bureaucracy, politics, teaching to the tests (27%); lack of parental support, dealing with parents (22%); discipline, behavior and motivational problems (19%); and, lack of funding, supplies (10%). To this list, teachers with fifteen years or more experience add students are not ready to learn when they arrive in class (7%).

Attitudes Toward Teaching

11. The following table presents six statements reflecting different attitudes toward teaching. The percent agreement with each statement is shown for both teacher cohorts.

Attitude Statement	5 Years or Less Agree	15 Years or More Agree	All Agree
I don't see why teachers should not be paid as much as other professions requiring the same education	95%	91%	93%
I love teaching but I don't like the bureaucracy that goes along with it	89%	90%	89%
It is discouraging to work in a place where good teaching gets the same recognition as bad teaching	70%	72%	71%
I would love to be able to put a school together with a few close colleagues and show them all how it ought to be done (Significant .05 level)	50%	57%	54%
Some teachers in my school are just staying around only to get the best retirement pay possible (Significant .05 level)	52%	40%	46%
It is unfair that the best students get the best teachers	33%	31%	32%

The above table has been sorted on the percent agreement across both cohorts. Concerns over pay and the educational bureaucracy dominate the feelings of both teacher cohorts. Negative feelings about the bureaucracy are more intense among teachers with 15 years or more experience. Two statements showed significant differences between the younger and older cohorts of teachers. The older cohort expresses more support for starting their own school while the younger cohort sees more teachers just staying to obtain retirement benefits.

The Role of Teachers

- Both cohorts were asked their views on the role of teachers today and in the future. The following table presents the percent agreement with each of four statements.

The Role of Teachers	5 Years or Less Agree	15 Years or More Agree	All Agree
Skilled teachers make the most important difference in a students education	92%	92%	92%
In the future, teachers at all levels will be required to have stronger core competencies particularly in science, math and language	87%	82%	85%
To improve the preparation of all students, we need to employ teachers in elementary schools who specialize in math, science and languages	75%	67%	71%
To get the best and most skilled teachers into the classroom, teachers in the future must come from the top one third of college students (Significant .05 level)	36%	47%	42%

Agreement among both cohorts is widespread for two statements regarding the role of teachers; teachers make the difference in education and teachers in the future must have stronger core competencies in science, math and language. Feeling is mixed over whether or not teachers in the future must come from the top one third of college students. Teachers with fifteen years or more of experience are more likely to agree than less experienced teachers.

Changes to Attract Top Students into Teaching

13. Teachers where given a series of statements reflecting different changes that could be made in the teaching profession to attract top college students into teaching. For each, teachers in both cohorts rated how motivating it would be to cause top students to seriously consider a career in classroom teaching. The following table presents the mean scores on a 1 to 10 point scale. The data have been sorted by the results for all teachers.

Changes that Might Motivate Top Students into the Teaching Profession	Five years or less	Fifteen years or more	All
Top salaries of about \$95,000 per year recognizing that today, on average, teachers' salaries typically top out much lower.	8.7	8.9	8.8
A system in which teacher pensions would be mobile, that is, a teacher could take their pension with them to any other school or college in the country. (P<.10)	8.4	8.8	8.6
A starting salary of about \$45,000 per year recognizing that today, on average, teachers start at approximately \$32,000. (P<.10)	8.1	8.4	8.3
A teacher could earn more for accepting greater responsibilities and working more weeks in the year than regular teachers, up to \$110,000 per year.	7.1	7.4	7.3
Higher pay for certain types of teaching such as teaching in inner-city schools or teaching tough subjects like math and science.	7.1	6.9	7.0
A system in which teachers could assume more responsibility for running the schools in which they teach. Teams of teachers could actually run whole schools. (P<.05)	6.5	7.0	6.8
Higher teacher salaries based on the quality of your teaching instead of years of service. (P<.05)	6.4	5.6	6.0
Having the option of choosing higher starting and top salaries with a reduction in retirement benefits to a level offered by better private employers.	6.1	5.8	6.0
Pay that reflects how much your students learned, not on one test, but using multiple criteria for student performance. (P<.05)	5.2	4.7	5.0

- g. For teachers, the two most motivating factors for attracting top college graduates into classroom teaching are a) top salaries of about \$95,000 per year recognizing that today, on average, teachers' salaries typically top out much lower (Mean = 8.8; top two box = 67%) and b) a system in which teacher pensions would be mobile, that is, a teacher could take their pension with them to any other school or college in the country (Mean = 8.6; top two box = 62%). Interestingly, these are the same top two motivators chosen by top college students.
- h. Two other highly motivating changes as viewed by teachers are a) a starting salary of about \$45,000 per year recognizing that today, on average, teachers start at approximately \$32,000 (Mean = 8.3; top two box = 49%) and b) a teacher could earn more for accepting greater responsibilities and working more weeks in the year than regular teachers,

up to \$110,000 per year (Mean = 7.3; top two box = 36%).

- i. The least motivating change for both top students and teachers is pay that reflects how much your students learn, not based on one test, but using multiple criteria for student performance. (Mean = 5.0; top two box = 14%)
- j. Teacher cohorts differ significantly on the importance of several possible motivators. Newer teachers view pay that reflects how much students learned using multiple criteria for student performance. ($P < .05$) and higher teacher salaries based on the quality of teaching instead of years of service. ($P < .05$) more favorably than teachers in the profession fifteen years or more. More seasoned teachers believe a system in which teacher pensions would be mobile ($P < .10$) and a starting salary of about \$45,000 per year ($P < .10$) would be better motivators than teachers with five years of less experience.

14. When asked if they believed implementing performance based pay for teachers would attract more of the top third of college students into the teaching profession, the majority (57%) in both cohorts respond that it would have no effect on attracting top students. Thirty seven percent (37%) disagree and believe such action would motivate more top students to select a career in education.

Other Desired Changes in Education

15. Teachers were presented with seven possible changes in education and asked whether each was a good or a bad change. The following table presents the results for this series of questions.

Other Changes in Education	Five years or less	Fifteen years or more	All
Treat teachers the same as other professionals with similar educational background.	96%	96%	96%
Mentor new teachers with those most successful at producing outstanding student performance	96%	96%	96%
Set going market rates of compensation for teachers in shortage subjects such as science and math ($P < .05$)	88%	76%	82%
Retrain teachers who are not able to do the job expected of them; fire those who fail after retraining	78%	83%	81%
Provide cash incentives to the best teachers to teach the hardest to teach students	69%	66%	68%
Compensate teachers based on their actual classroom performance	63%	54%	58%
Eliminate seniority as a principle of teacher	60%	50%	54%

assignment (P,.05)			
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- k. Both teacher cohorts are in favor of equal treatment with other professionals, mentoring new teachers, setting market rates for teachers in shortage subjects and retraining teachers who aren't performing. Teachers with five years or less experience are more supportive of setting market rates for teachers in shortage subjects than more experienced teachers.
- l. Compensation based on performance and eliminating seniority as a principle of teacher assignment receives mixed reviews. Both are more favorably received by teachers with five years or less experience but still rank at the bottom of possible changes.

Views on Certification

- 16. One out of three (34%) experienced teachers believe that certification guarantees teachers have what it takes to be successful. Less experienced teachers aren't so sure – only 21% hold a similar view.
- 17. Strong majorities in both cohorts believe it would be good to a) base licensure on demonstrated teaching ability rather than on a set of education courses taken (69% among all teachers) and b) require elementary teachers to specialize in teaching math and science, or languages and social studies and to minor in one of these (57% among all teachers).

Views on Compensation

- 18. When asked their preference between keeping the current salary schedule and offering teachers higher salaries with slightly reduced benefits, a majority in both cohorts opt for keeping the current salary schedule unchanged (Teachers with five years or less 50%; Teachers with fifteen years or more 57%).
- 19. The following table presents the selections made by teachers of the best ways to determine teachers' salaries.

Which of the following ways is the best way to determine the salaries of teachers?	Five years or less	Fifteen years or more	All
Their education and formal qualifications	17%	23%	20%
Their years of experience	21%	22%	21%
How well they do their work	57%	43%	50%
Don't know (NOT READ)	6%	13%	9%

- a. A majority of teachers with five years or less experience believe the best way for determining salaries is how well a teacher does their work (57%). Teachers with more experience are not so sure (43%). With fifteen or more years of experience, teachers are more inclined to opt for educational background and formal qualifications as determinates of

compensation.

20. Teachers were probed for their views on additional financial incentives. They were asked if they favored or opposed a series of criteria for providing additional financial incentives. The following table presents the results for these questions.

Criteria for Additional Financial Incentives	Five years or less	Fifteen years or more	All
Work in tough neighborhoods with low performing schools	91%	84%	87%
Teach difficult classes with hard to reach students	85%	80%	82%
Consistently work harder, putting in more time and effort than others	83%	73%	77%
Consistently receive outstanding evaluations by their teaching peers	80%	69%	74%
Specialize in hard to fill subjects such as math and science	80%	68%	74%
Consistently receive outstanding evaluations by their principals	79%	57%	68%
Routinely produce kids who score higher than similar students on high quality achievement tests	64%	59%	62%

Support for additional compensation based on the above criteria is widespread. Consistently, teachers with five years or less experience in the field express more support for each criteria leading to additional compensation. The two most widely accepted criteria for additional compensation are a) working in tough neighborhoods in low performing schools and b) teaching difficult classes with hard to reach students.

21. Faced with favoring or opposing financial rewards in a hypothetical situation where some teachers in their school produce more academic progress in terms of improved reading levels, math skills, teacher evaluations and classroom tests when compared to similar students taught by other teachers, nearly two thirds of all teachers (64%) approve additional financial rewards. Seven out of ten teachers (70%) with five years or less experience would approve additional financial incentives in this situation.

Summary

22. Teachers are divided over the direction education is taking today but satisfied with their personal rewards from teaching.

23. The education bureaucracy and concerns over pay dominate the negative perceptions of the teaching profession.

24. Most teachers believe that educators in the future must be better prepared with core competencies in science, math and languages.

25. The three of the four principle drivers for attracting top students into a teaching career are the same for both teachers and top students:

Top salaries of about \$95,000 per year recognizing that today, on average, teachers' salaries typically top out much lower.

A system in which teacher pensions would be mobile, that is, a teacher could take their pension with them to any other school or college in the country.

A teacher could earn more for accepting greater responsibilities and working more weeks in the year than regular teachers, up to \$110,000 per year.

26. Performance based pay for teachers is not believed to help much in attracting top students into a teaching career.

27. A majority of young teachers favor a compensation system which takes into account performance in the classroom. Teachers with fifteen years or more experience prefer a compensation system tied to formal credentials and years of experience.

Appendix Five

Teachers Questionnaire

Teachers Questionnaire
October, 2006

1. From what you personally have observed, would you say that the teaching profession today is going in the right direction or has it somehow gotten off track?
- a. Right direction
 - b. Wrong track
 - c. Don't know / refused (DO NOT READ / SKIP TO Q3)

2. And why do you feel that way?

3. For you personally, are you getting the rewards from teaching you expected?
- a. Yes, I am getting the rewards I expected
 - b. No, I am not getting the rewards I expected (IF 'NO', ASK :)

4. (ASK IF 'NO' IN Q3) In your opinion, what went wrong? That is, which of the following is most to blame for you not getting the rewards you expected from teaching? (READ LIST SLOWLY)

- a. Lack of support from administrators
- b. Lack of support from parents
- c. Poorly motivated students
- d. Low pay
- e. Lack of advancement
- f. Too much pressure to raise student achievement
- g. Don't feel I am making a difference in students lives
- h. Don't know / refused (DO NOT READ)

5. In your opinion, what are the best things about being a teacher? What else? What else? (MULTIPLE ANSWERS ACCEPTED / PROBE FOR UP TO THREE RESPONSES)

6. And again in your opinion, what are the most difficult things about being a teacher? What else? What else? (MULTIPE ANSWERS ACCEPTED / PROBE FOR UP TO THREE RESPONSES)

7. Let me read you some statements others have made about teaching. Please tell me whether you agree or disagree with each statement. (IF AGREE / DISAGREE ASK:) Would that be strongly agree / disagree or just somewhat agree / disagree?
- a. It is discouraging to work in a place where good teaching gets the same recognition as bad teaching.
 - i. Agree strongly
 - ii. Agree somewhat
 - iii. Disagree somewhat
 - iv. Disagree strongly
 - v. Don't know / refused (DO NOT READ)

 - b. Some teachers in my school are just staying around only to get the best retirement pay possible.
 - i. Agree strongly
 - ii. Agree somewhat
 - iii. Disagree somewhat
 - iv. Disagree strongly
 - v. Don't know / refused (DO NOT READ)

 - c. I love teaching but I don't like the bureaucracy that goes along with it.
 - i. Agree strongly
 - ii. Agree somewhat
 - iii. Disagree somewhat
 - iv. Disagree strongly
 - v. Don't know / refused (DO NOT READ)

 - d. I would love to be able to put a school together with a few close colleagues and show them all how it ought to be done.
 - i. Agree strongly
 - ii. Agree somewhat
 - iii. Disagree somewhat
 - iv. Disagree strongly
 - v. Don't know / refused (DO NOT READ)

 - e. It is unfair that the best students get the best teachers.
 - i. Agree strongly
 - ii. Agree somewhat
 - iii. Disagree somewhat
 - iv. Disagree strongly
 - v. Don't know / refused (DO NOT READ)

- f. I don't see why teachers should not be paid as much as other professions requiring the same education.
 - i. Agree strongly
 - ii. Agree somewhat
 - iii. Disagree somewhat
 - iv. Disagree strongly
 - v. Don't know / refused (DO NOT READ)

- 8. In your state, does being fully certified guarantee that the typical teacher has what it takes to be a good teacher, does it only guarantee a minimum of skills, or does it guarantee very little?
 - a. Guarantees teacher has what it takes
 - b. Guarantees only a minimum of skills
 - c. Guarantees very little
 - d. Don't know / refused (DO NOT READ)

- 9. Here are some recommendations for changing the criteria for the certification of teachers. For each one, please tell me if it would be a good step or a bad step for the teaching profession. (IF GOOD / BAD ASK:) And would that be a very good / bad step or just somewhat of a good / bad step?
 - a. Require elementary teachers to specialize in teaching math and science, or languages and social studies and to minor in one of these.
 - i. A very good step
 - ii. Somewhat of a good step
 - iii. Somewhat of a bad step
 - iv. A very bad step
 - v. Don't know / refused (DO NOT READ)

 - b. Base licensure on demonstrated teaching ability rather than on a set of education courses taken.
 - i. A very good step
 - ii. Somewhat of a good step
 - iii. Somewhat of a bad step
 - iv. A very bad step
 - v. Don't know / refused (DO NOT READ)

There has been a lot of discussion about ways to attract the top college graduates into the teaching profession. I'm going to read you some of those suggestions for attracting skilled teachers.

I'd like you to rate each proposed change on a scale from 1-10 in terms of how likely this change or benefit would be to motivate college students in the top third of their classes to seriously consider a teaching career in elementary, junior or middle school or high school. 1 means it would not motivate at all to choose teaching as a career and 10 means it would be very motivating.

10. A starting salary of about \$45,000 per year recognizing that today, on average, teachers start at approximately \$32,000.
Not at all motivating 1 2 3 4 5 6 7 8 9 10 Very motivating DK / REF (11)

11. Top salaries of about \$95,000 per year recognizing that today, on average, teachers salaries typically top out much lower.
Not at all motivating 1 2 3 4 5 6 7 8 9 10 Very motivating DK / REF (11)

12. Higher pay for certain types of teaching such as teaching in inner-city schools or teaching tough subjects like math and science.
Not at all motivating 1 2 3 4 5 6 7 8 9 10 Very motivating DK / REF (11)

13. Pay that reflects how much your students learned, not on one test, but using multiple criteria for student performance.
Not at all motivating 1 2 3 4 5 6 7 8 9 10 Very motivating DK / REF (11)

14. A teacher could earn more for accepting greater responsibilities and working more weeks in the year than regular teachers, up to \$110,000 per year.
Not at all motivating 1 2 3 4 5 6 7 8 9 10 Very motivating DK / REF (11)

15. Higher teacher salaries based on the quality of your teaching instead of years of service.
Not at all motivating 1 2 3 4 5 6 7 8 9 10 Very motivating DK / REF (11)

16. A system in which teacher pensions would be mobile, that is, a teacher could take their pension with them to any other school or college in the country.
Not at all motivating 1 2 3 4 5 6 7 8 9 10 Very motivating DK / REF (11)

17. A system in which teachers could assume more responsibility for running the schools in which they teach. Teams of teachers could actually run whole schools.
Not at all motivating 1 2 3 4 5 6 7 8 9 10 Very motivating DK / REF (11)

18. Having the option of choosing higher starting and top salaries with a reduction in retirement benefits to a level offered by better private employers.
Not at all motivating 1 2 3 4 5 6 7 8 9 10 Very motivating DK / REF (11)

19. Let me read you some more statements others have made about teaching. Please tell me whether you agree or disagree with each statement. (IF AGREE / DISAGREE ASK) Would that be strongly agree / disagree or just somewhat agree / disagree?
- a. Skilled teachers make the most important difference in a students education.
 - i. Agree strongly
 - ii. Agree somewhat
 - iii. Disagree somewhat
 - iv. Disagree strongly
 - v. Don't know / refused (DO NOT READ)
 - b. To get the best and most skilled teachers into the classroom, teachers in the future must come from the top one third of college students.
 - i. Agree strongly
 - ii. Agree somewhat
 - iii. Disagree somewhat
 - iv. Disagree strongly
 - v. Don't know / refused (DO NOT READ)
 - c. In the future, teachers at all levels will be required to have stronger core competencies particularly in science, math and language.
 - i. Agree strongly
 - ii. Agree somewhat
 - iii. Disagree somewhat
 - iv. Disagree strongly
 - v. Don't know / refused (DO NOT READ)
 - d. To improve the preparation of all students, we need to employ teachers in elementary schools who specialize in math, science and languages.
 - i. Agree strongly
 - ii. Agree somewhat
 - iii. Disagree somewhat
 - iv. Disagree strongly
 - v. Don't know / refused (DO NOT READ)
20. Let me read you some changes in the teaching profession that others have mentioned. For each one, please tell me if this would be a good change or a bad one. (IF GOOD / BAD ASK:) Would that be a very good / bad change or just somewhat of a good / bad change?

- a. Treat teachers the same as other professionals with similar educational background.
 - i. A very good change
 - ii. Somewhat of a good change
 - iii. Somewhat of a bad change
 - iv. A very bad change
 - v. Don't know / refused (DO NOT READ)

- b. Set going market rates of compensation for teachers in shortage subjects such as science and math.
 - i. A very good change
 - ii. Somewhat of a good change
 - iii. Somewhat of a bad change
 - iv. A very bad change
 - v. Don't know / refused (DO NOT READ)

- c. Eliminate seniority as a principle of teacher assignment.
 - i. A very good change
 - ii. Somewhat of a good change
 - iii. Somewhat of a bad change
 - iv. A very bad change
 - v. Don't know / refused

- d. Compensate teachers based on their actual classroom performance.
 - i. A very good change
 - ii. Somewhat of a good change
 - iii. Somewhat of a bad change
 - iv. A very bad change
 - v. Don't know / refused (DO NOT READ)

- e. Retrain teachers who are not able to do the job expected of them; fire those who fail after retraining.
 - i. A very good change
 - ii. Somewhat of a good change
 - iii. Somewhat of a bad change
 - iv. A very bad change
 - v. Don't know / refused (DO NOT READ)

- f. Provide cash incentives to the best teachers to teach the hardest to teach students.
 - i. A very good change
 - ii. Somewhat of a good change
 - iii. Somewhat of a bad change
 - iv. A very bad change
 - v. Don't know / refused (DO NOT READ)

- g. Mentor new teachers with those most successful at producing outstanding student performance.
 - vi. A very good change
 - vii. Somewhat of a good change
 - viii. Somewhat of a bad change
 - ix. A very bad change
 - x. Don't know / refused (DO NOT READ)
21. Which of the following ways do you think would be best to improve the quality of teaching?
- a. Increase the salaries of all teachers
 - b. Reduce class size
 - c. Financially reward outstanding teachers
 - d. Don't know / refused (DO NOT READ)
22. Sometimes, teachers with seniority have more say over where they teach and end up working with kids who are easier to reach. Do you think that
- a. This is reasonable because veteran teachers have earned this benefit by putting in their time;
or
 - b. This is wrong because it leaves inexperienced teachers with the hardest to reach students.
 - c. Don't know / refused (DO NOT READ)
23. Which way do you think we should go? (READ OPTIONS SLOWLY)
- a. Keep the current salary schedule, pension and benefits.
 - b. Offer teachers the option of higher salaries but slightly lower benefits
 - c. Don't know / Refused
24. How interested are you in assuming complete responsibility for decisions over curriculum and instruction at your school?
- a. Very interested
 - b. Somewhat interested
 - c. Not too interested
 - d. Not at all interested
 - e. Don't know / refused (DO NOT READ)

25. Which of the following ways is the best way to determine the salaries of teachers:
- a. Their education and formal qualifications
 - b. Their years of experience
 - c. How well they do their work
 - d. Don't know / refused (DO NOT READ)
26. Please tell me how much you would favor or oppose providing additional financial incentives for teachers who:
- a. Consistently receive outstanding evaluations by their principals
 - i. Strongly favor
 - ii. Somewhat favor
 - iii. Somewhat oppose
 - iv. Strongly oppose
 - v. Don't know /refuse (DO NOT READ)
 - b. Consistently receive outstanding evaluations by the teaching peers
 - i. Strongly favor
 - ii. Somewhat favor
 - iii. Somewhat oppose
 - iv. Strongly oppose
 - v. Don't know /refuse (DO NOT READ)
 - c. Consistently work harder, putting in more time and effort than others
 - i. Strongly favor
 - ii. Somewhat favor
 - iii. Somewhat oppose
 - iv. Strongly oppose
 - v. Don't know /refuse (DO NOT READ)
 - d. Routinely produce kids who score higher than similar students on high quality achievement tests
 - i. Strongly favor
 - ii. Somewhat favor
 - iii. Somewhat oppose
 - iv. Strongly oppose
 - v. Don't know /refuse (DO NOT READ)
 - e. Specialize in hard to fill subjects such as math and science
 - i. Strongly favor
 - ii. Somewhat favor
 - iii. Somewhat oppose
 - iv. Strongly oppose
 - v. Don't know /refuse (DO NOT READ)

- f. Teach difficult classes with hard to reach students
 - i. Strongly favor
 - ii. Somewhat favor
 - iii. Somewhat oppose
 - iv. Strongly oppose
 - v. Don't know /refuse (DO NOT READ)

- g. Work in tough neighborhoods with low performing schools
 - i. Strongly favor
 - ii. Somewhat favor
 - iii. Somewhat oppose
 - iv. Strongly oppose
 - v. Don't know /refuse (DO NOT READ)

- 27. Suppose that in your school, some teachers make more academic progress in terms of improved reading levels, math skills, teacher evaluations and classroom tests when compared to similar students taught by other teachers. How much would you favor or oppose financially rewarding those teachers?
 - i. Strongly favor
 - ii. Somewhat favor
 - iii. Somewhat oppose
 - iv. Strongly oppose
 - v. Don't know /refuse (DO NOT READ)

- 28. Do you think that implementing performance based pay for teachers would attract more of the top third of college students into the teaching profession or not?
 - a. Would be likely to attract more of the top third
 - b. Would not have any effect on attracting more of the top third
 - c. Don't know / refused (DO NOT READ)

Now just few questions for demographic purposes.

D1. Gender (BY OBSERVATION)

- a. Male
- b. Female

D2. Is teaching your first career, or did you work full time in another field beforehand?

- a. First career
- b. Worked full time in another field beforehand

D3. Do you teach in ...

- a. An elementary school
- b. A middle or junior high school
- c. High school
- d. Something else

D4. Approximately what percentage of students at your school are eligible for the free or reduced lunch program?

- a. Under 25%
- b. 25% to 49%
- c. 50% to 74%
- d. 75% or more

D5. How old are you?

- a. 20 to 29
- b. 30 to 39
- c. 40 to 49
- d. 50 to 59
- e. 60 or older

D6. How many years have you been a teacher in the public schools?

- a. Less than five years
- b. Five to fifteen years
- c. Fifteen years or more

D7. Region of the country (FROM THE SAMPLE)

- a. Northeast
- b. Midwest
- c. South
- d. West

Criteria for Additional Financial Incentives	Five years or less	Fifteen years or more	All
Work in tough neighborhoods with low performing schools	91%	84%	87%
Teach difficult classes with hard to reach students	85%	80%	82%
Consistently work harder, putting in more time and effort than others	83%	73%	77%
Consistently receive outstanding evaluations by their teaching peers	80%	69%	74%
Specialize in hard to fill subjects such as math and science	80%	68%	74%
Consistently receive outstanding evaluations by their principals	79%	57%	68%
Routinely produce kids who score higher than similar students on high quality achievement tests	64%	59%	62%

Support for additional compensation based on the above criteria is widespread. Consistently, teachers with five years or less experience in the field express more support for each criteria leading to additional compensation. The two most widely accepted criteria for additional compensation are a) working in tough neighborhoods in low performing schools and b) teaching difficult classes with hard to reach students.

28. Faced with favoring or opposing financial rewards in a hypothetical situation where some teachers in their school produce more academic progress in terms of improved reading levels, math skills, teacher evaluations and classroom tests when compared to similar students taught by other teachers, nearly two thirds of all teachers (64%) approve additional financial rewards. Seven out of ten teachers (70%) with five years or less experience would approve additional financial incentives in this situation.

Summary

29. Teachers are divided over the direction education is taking today but satisfied with their personal rewards from teaching.

30. The education bureaucracy and concerns over pay dominate the negative perceptions of the teaching profession.

31. Most teachers believe that educators in the future must be better prepared with core competencies in science, math and languages.

32. The three of the four principle drivers for attracting top students into a teaching career are the same for both teachers and top students:

Top salaries of about \$95,000 per year recognizing that today, on average, teachers' salaries typically top out much lower.

A system in which teacher pensions would be mobile, that is, a teacher could take their pension with them to any other school or college in the country.

A teacher could earn more for accepting greater responsibilities and working more weeks in the year than regular teachers, up to \$110,000 per year.

33. Performance based pay for teachers is not believed to help much in attracting top students into a teaching career.
34. A majority of young teachers favor a compensation system which takes into account performance in the classroom. Teachers with fifteen years or more experience prefer a compensation system tied to formal credentials and years of experience.